

REFERENCES

- Abbott, B. M. 1973. Terminology of stromatoporoid shapes. *Journal of Paleontology* 47:805–806.
- Adachi, N., J. Liu, & Y. Ezaki. 2011. Early Ordovician stromatoporoid *Pulchrilamina spinosa* from South China: Significance and implications for reef development. In M. Aretz, S. Delcoulée, J. Denayer, & E. Poty, eds., Abstracts, 11th Symposium on Fossil Cnidaria and Sponges, Liège. Kölner Forum für Geologie und Paläontologie 19:6–7.
- Ager, D. V. 1963. Principles of Paleoecology. McGraw-Hill. New York. 371 p.
- Airaghi, C. 1907. Coralli dei calcari grigi del Veneto. Atti Congresso dei Naturalisti Italiani. Milan. p. 1–17, pl. VI.
- Aissaoui, D. M. 1985. Botryoidal aragonite and its diagenesis. *Sedimentology* 32:345–361.
- Akagi, S. 1958. On some Permian Porifera from Japan. Jubilee Publication in Commemoration of Prof. H. Fujimoto. Institute of Geology and Mineralogy. Tokyo. p. 66–73, 5 pl.
- Aleotti, G., G. Dieci, & F. Russo. 1986. Éponges Permiennes de la Vallée de Sosio (Sicile). Révision systématique des sphinctozoaires. *Annales de Paléontologie* 72(3):211–246, 1 fig., 8 pl.
- Alexander, E. M., & D. I. Gravestock. 1990. Sedimentary facies in the Sellick Hill Formation, Fleurieu Peninsula, South Australia. In J. B. Jago & P. S. Moore, eds., The Evolution of a Late Precambrian-Early Palaeozoic Rift Complex: The Adelaide Geosyncline. Geological Society of Australia, Special Publication 16:269–289, 12 fig.
- Algeo, T. J., & S. E. Scheckler. 1998. Terrestrial-marine teleconnections in the Devonian: Links between the evolution of land plants, weathering processes, and marine anoxic events. *Philosophical Transactions of the Royal Society, London* 353(B):113–130.
- Allman, G. J. 1888. Report on the Hydriida dredged by H.M.S. Challenger during the years 1873–76. Part II. The Tubulariae, Corymorphinae, Campanulariae, Sertulariae, and Thalamophora. Report on the Voyage of H.M.S. Challenger, Zoology 23(3), number 70:lxix + 90 p., 39 pl., 2 tables, map.
- Almazán, Emilio, Blanca Buitrón, Catalina Gómez-Espinosa, & Daniel Vachard. 2007. Moscovian chaetetid (boundstone) mounds in Sonora, Mexico. In E. Vennin, M. Aretz, F. Bouvain, & A. Munnecke, eds., Facies from Palaeozoic reefs and bioaccumulations. Mémoires du Muséum National d'Histoire Naturelle 195:269–271.
- Alloiteau, J. 1952. Embranchement des coelenterés. In J. Piveteau, ed., Traité de Paléontologie, vol. 1. Masson. Paris. p. 376–684.
- Álvaro, J. J., & Sébastien Clausen. 2008. Paleoenvironmental significance of Cambrian hiatal shell accumulations in an aborted intra-cratonic rift, Atlas Mountains, Morocco. In B. R. Pratt & C. Holmden, eds., Dynamics of Epeiric Seas. Geological Association of Canada, Special Paper 48:39–54, 7 fig.
- Álvaro, J. J., Olaf Elicki, Gerd Geyer, A. W. A. Rushton, & J. H. Shergold. 2003. Palaeogeographical controls on the Cambrian trilobite immigration and evolutionary patterns reported in the western Gondwana margin. *Palaeogeography, Palaeoclimatology, Palaeoecology* 195:5–35, 6 fig.
- Álvaro, J. J., Eric Monceret, Sylvie Monceret, Gérard Verraes, & Daniel Vizcaíno. 2010. Stratigraphic record and palaeogeographic context of the Cambrian Epoch 2 subtropical carbonate platforms and their basinal counterparts in SW Europe, West Gondwana. *Bulletin of Geosciences, Czech Geological Survey, Prague* 85:573–584, 4 fig.
- André, M. 1962. Acariens Thrombidions (adultes) de l'Angola (2ème note). Publicações Culturais, Companhia de Diamantes de Angola 60:57–112.
- Andri, Eugenio, & Franco Rossi. 1980. *Leiochaetetes furlensis* n. gen. n. sp. un nuovo chonetide del Passo del Furlo (Pesaro, Marche). *Bollettino della Società Paleontologica Italiana* 19(2):274–280.
- Andrichuk, J. 1958. Stratigraphy and facies analysis of Upper Devonian reefs in Leduc, Stettler and Redwater areas, Alberta. *Bulletin of the American Association of Petroleum Geologists* 42:1–93.
- de Angelis d'Ossat, G. 1905. I coralli dei calcare di Venassino (Isola di Capri). Atti Accademia delle Scienze Fisiche e Matematiche, Società R. di Napoli (series 2) 12:11 p.
- Aretz, Markus. 2001. The upper Viséan coral horizons of Royseux: Development of an unusual facies in the Belgium Early Carboniferous. In Yoichi Ezaki, Kei Mori, Tetsuo Sugiyama, & James E. Sorauf, eds., Proceedings of the 8th International Symposium of Fossil Cnidaria and Porifera, Bulletin of Tohoku University Museum 1:86–95, 7 fig.
- Aretz, Markus, & Hans-Georg Herbig. 2003a. Coral-rich bioconstructions in the Visean (Late Mississippian) of southern Wales (Gower Peninsula, UK). *Facies* 49:221–242.
- Aretz, Markus, & Hans-Georg Herbig. 2003b. Contribution of rugose corals to late Viséan and Serpukhovian bioconstructions in the Montagne Noire (southern France). In W. M. Ah, P. M. Harris, W. A. Morgan, & I. D. Somerville, eds., Permo-Carboniferous Carbonate Platforms and Reefs. SEPM (Society for Sedimentary Geology) Special Publication No. 78 and AAPG Memoir No. 83:119–132.
- Aretz, Markus, & John Nudds. 2007. Palaeoecology of the late Visean (Dinantian) coral-chaetetid biostrome at Little Asby Scar (Cumbria, Great Britain). In B. Hubmann & W. E. Piller, eds., Fossil Corals and Sponges. Proceedings of the 9th International Symposium on Fossil Cnidaria and Porifera. Österreichische Akademie der Wissenschaften Schriftenreihe Erdwissenschaftlichen Kommissionen 17:365–381, 5 fig., 2 pl.
- Armstrong, F. A. J. 1965. Silicon. In J. P. Riley & G. Skirrow, eds., Chemical Oceanography, vol. 1. Academic Press. London. p. 409–432.
- Astashkin, V. A., T. V. Pegel', L. N. Repina, G. V. Belyaeva, N. V. Esakova, A. Yu. Rozanov, A. Yu. Zhuravlev, D. V. Osadchaya, & N. N. Pakhomov. 1995.

- The Cambrian System of the foldbelts of Russia and Mongolia. Correlation chart and explanatory notes. International Union of Geological Sciences, Publication 32:ii + 132 p., 5 fig., 3 tables, chart.
- Astashkin, V. A., T. V. Pegel', L. N. Repina, A. Yu. Rozanov, Yu. Ya. Shabanov, A. Yu. Zhuravlev, S. S. Sukhov, & V. M. Sundukov. 1991. The Cambrian System on the Siberian Platform. Correlation chart and explanatory notes. International Union of Geological Sciences, Publication 27:133 p., 1 fig., 4 tables, chart.
- Ayling, A. L. 1980. Patterns of sexuality, asexual reproduction and recruitment in some subtidal marine demosponges. Biological Bulletin 158:271–282, 4 fig.
- Baarli, B. G., M. E. Johnson, & H. B. Keilen. 1992. Size and shape distribution of level-bottom tabulate corals and stromatoporoids (Silurian). Lethaia 25:269–282.
- Babcock, L. E., R. A. Robison, M. N. Rees, Peng Shanchi, & M. R. Saltzman. 2007. The Global Boundary Stratotype Section and Point (GSSP) of the Drumian Stage (Cambrian) in the Drum Mountains, Utah, USA. Episodes 30:85–95, 9 fig.
- Bailey, R. J. 2002. Discussion of Cleland, 2001. Geology 30:953–954.
- Bakalow, P. N. 1906. *Stromatorhiza*, eine Stromatoporoidea us dem oberen Rauracien des Schweizer Jura. Neues Jahrbuch für Mineralogie, Geologie und Paläontologie 1:13–15, pl. 2.
- Bakalow, P. N. 1910. Neikolko novi Triaski Stromatoporoidea [Some new Triassic Stromatoporoidea]. Jahrbuch der Universität Sofia 5:1–10, pl. 1–2. In Russian with German summary.
- Bakus, G. J. 1968. Sedimentation and benthic invertebrates of Fanning Island, Central Pacific. Marine Geology 6:45–51.
- Balogh, K., & S. Kovács. 1976. Sphinctozoa from the reef facies of the Wetterstein limestone of Alsóhegy-Mount (south Germericum, West Carpathians, northern Hungary). Acta Mineralogica-Petrographica 22(2):297–310, 2 fig., 5 pl.
- Balsam, W. L., & Steven Vogel. 1973. Water movement in archaeocyathids: Evidence and implications of passive flow in models. Journal of Paleontology 47:979–984, 4 fig.
- Bambach, R. J., A. H. Knoll, & J. J. Sepkoski Jr. 2002. Anatomical and ecological constraints on Phanerozoic marine diversity in the marine realm. Proceedings of the National Academy of Sciences 99:6854–6859.
- Bambach, R. J., A. H. Knoll, & S. C. Wang. 2004. Origination, extinction, and mass depletions of marine diversity. Paleobiology 30(4):522–542.
- Bargatzky, A. 1881a. Die Stromatoporen des rheinischen Devons. Verhandlungen des Naturhistorischen Vereins der Preussischen Rheinlande und Westfalen 38:233–304, 11 fig.
- Bargatzky, A. 1881b. *Stachyodes*, eine neue Stromatoporidae. Zeitschrift der Deutschen Geologischen Gesellschaft 33:688–691.
- Barnes, D. J. 1972. The structure and formation of growth-ridges in scleractinian coral skeletons. Proceedings of the Royal Society of London (B) 182:331–350.
- Barrier, Pascal, Helmut Zibrowius, Pierre Lozouet, Christian Montenat, Philippe Ott d'Estevou, Francisco Serrano, & Henri-Jean Soudet. 1991. Une faune de fond dur du bathyal supérieur dans le Miocène terminal des cordillères bétiques (Carboneras, SE Espagne). Mésogée 51:3–13, 4 fig.
- Barskov, I. S. 1984. Paleontological aspects of biomineralization. Proceedings of the 27th International Geological Congress, Moscow, vol. 2, Palaeontology. VNU Science Press, Utrecht. p. 1–12.
- Basahel, A. N., Ahmed Bahafzallah, Sayed Omara, & Ulrich Jux. 1984. Early Cambrian carbonate platform of the Arabian Shield. Neues Jahrbuch für Geologie und Paläontologie, Monatschafte 1984:113–128, 5 fig.
- Basile, L. L., R. J. Cuffey, & D. F. Konich. 1984. Sclerosponges, pharetronids and sphinctozoans (relict cryptic hard-bodied Porifera) in the modern reefs of Enewetak Atoll. Journal of Paleontology 58(3):636–650, 4 fig.
- Bassler, R. S. 1906. A study of the James types of Ordovician and Silurian Bryozoa. U. S. National Museum, Proceedings 30:1–66.
- Bassler, R. S. 1915. Bibliographic index of American Ordovician and Silurian fossils. United States National Museum Bulletin 92:viii + 718 (vol. 1), iv + 1521, 4 pl. (vol. 2).
- Bassler, R. S. 1950. Faunal lists and descriptions of Paleozoic corals. Geological Society of America Memoir 44:315.
- Bassler, R. S. 1953. Part G, Bryozoa. In R. C. Moore, ed., Treatise on Invertebrate Paleontology. The Geological Society of America & The University of Kansas Press, New York & Lawrence, Kansas. xxxi + 253 p., 175 fig.
- Bathurst, R. G. C. 1975. Carbonate sediments and their diagenesis. Developments in Sedimentology 12:xix + 620 p.
- Bayfield, H. W. 1845. On the junction of the transition and primary rocks of Canada and Labrador. Geological Society of London, Quarterly Journal 1:450–459.
- Beadle, S. C. 1988. Dasyclads, cyclocrinids and reciprocitulids: Comparative morphology and paleoecology. Lethaia 21:1–12, 5 fig.
- Beccarelli Bauck, L. 1986. Stylothalamien aus dem unterjurassischen Misone-Kalk der Südalpen, Italien. Palaeontographica (Abteilung A) 192(1–3):1–13, 1 fig., 3 pl., 1 table.
- Bechstädt, T., & R. Brandner. 1970. Das Anis zwischen St. Vigil und dem Höhensteinal (Pragser- und Olaner Dolomiten, Südtirol). Festband Geologisches Institut, 300-Jahr. Feier Universität, Innsbruck. p. 9–103, 4 fig., pl. 1–18.
- Becker, R. T., M. R. House, W. T. Kirchgasser, & P. E. Playford. 1991. Sedimentary and faunal changes across the Frasnian/Famennian boundary in the Canning Basin, Western Australia. Historical Biology 5:183–196.
- Bedford, R., & J. Bedford. 1936. Further notes on Cyathospongia (Archaeocyathi) and other organisms from the Lower Cambrian of Beltana, South Australia. Kyancutta Museum, Memoirs 3:21–26, fig. 88–105, pl. 21–26.

- Bedford, R., & J. Bedford. 1937. Further notes on Archaeos (Pleospongia) from the Lower Cambrian of South Australia. *Kyancutta Museum, Memoirs* 4:27–38, fig. 106–159, pl. 27–41.
- Bedford, R., & J. Bedford. 1939. Development and classification of Archaeos (Pleospongia). *Kyancutta Museum, Memoirs* 6:67–82, fig. 160–212, pl. 42–52.
- Bedford, R., & W. R. Bedford. 1934. New species of Archaeocyathinae and other organisms from the Lower Cambrian of Beltana, South Australia. *Kyancutta Museum, Memoirs* 1:1–7, fig. 1–36, pl. 1–6.
- Bedford, R., & W. R. Bedford. 1936. Further notes on Archaeocyathi (Cyathospongia) and other organisms from the Lower Cambrian of Beltana, South Australia. *Kyancutta Museum, Memoirs* 2:9–20, fig. 37–87, pl. 7–20.
- Belyaeva, G. V. 1969. Novye arkheotsiaty khrepta Dzhagdy (Dal'niy Vostok) [New archaeocyaths from the Dzhagdu Range (Far East)]. In I. T. Zhuravleva, ed., *Biostratigrafiya i Paleontologiya Nizhnego Kembriya Sibiri i Dal'nego Vostoka* [Lower Cambrian Biostratigraphy and Paleontology of Siberia and the Far East]. Nauka. Moscow. p. 86–98, 1 fig., pl. 34–38.
- Belyaeva, G. V. 1974. Tumulovye arkheotsiaty [Tumulose archaeocyaths]. In I. T. Zhuravleva & A. Yu. Rozanov, eds., *Biostratigrafiya i Paleontologiya Nizhnego Kembriya Evropy i Severnoy Azii* [Lower Cambrian Biostratigraphy and Paleontology of Europe and Northern Asia]. Nauka. Moscow. p. 113–123, pl. 3–5.
- Belyaeva, G. V. 1985. Eshche o kribritsiatakh [More on cribricyaths]. Institut Geologii i Geofiziki, Sibirskoe Otdelenie, Akademiya Nauk SSSR, Trudy 632:33–38, 1 fig., pl. 15–18.
- Belyaeva, G. V. 1987. Biogeografiya rannego kembriya Dal'nego Vostoka [Early Cambrian biogeography of the Far East]. In E. V. Krasnov, ed., *Evolvutsiya Geologicheskikh Protsessov Dal'nego Vostoka* [Evolution of Geological Processes of the Far East]. Dalnevostochnyy Nauchnyy Tsentr, Akademiya Nauk SSSR. Vladivostok. p. 92–109, 2 fig., 1 table.
- Belyaeva, G. V. 1988. Kembriy Vostoka SSSR. Stratigrafiya [Cambrian of the USSR East. Stratigraphy]. Nauka. Moscow. 136 p., 5 fig., 17 tables.
- Belyaeva, G. V. 1996. Novye taksony arkheotsiat iz Zabaykal'ya [New archaeocyathan taxa from Transbaikalia]. Paleontologicheskiy Zhurnal 1996(1):109–111, 1 fig.
- Belyaeva, G. V. 2000. Novye taksony sfinktozoa iz Permskikh rifov iugo-vostochnogo Kitaya [New taxa of Sphinctozoa from the Permian reefs of southeastern China]. Paleontologicheskiy Zhurnal 2000(2):41–46, 3 fig.
- Belyaeva, G. V., V. A. Luchinina, B. B. Nazarov, L. N. Repina, & L. P. Sobolev. 1975. Kembriyskaya fauna i flora khrepta Dzhagdy (Dal'niy Vostok) [Cambrian fauna and flora of the Dzhagdy Range (Far East)]. Institut Geologii i Geofiziki, Sibirskoe Otdelenie, Akademija Nauk SSSR, Trudy 226:208 p., 14 fig., 51 pl.
- Belyaeva, G. V., & Yuan Kexing. 1995. Novye taksony arkheotsiat iz nizhnego kembriya tsentral'nogo Kitaya [New archaeocyathan taxa from the Lower Cambrian of central China]. Paleontologicheskiy Zhurnal 1995(2):140–143, 1 fig.
- Belyaeva, G. V., & I. T. Zhuravleva. 1990. Stadiynost' v razvitiu cribr i svyaz' ikh s arkheotsiatami [Stages in the development of cribras and their connection with archaeocyaths]. Institut Geologii i Geofiziki, Sibirskoe Otdelenie, Akademija Nauk SSSR, Trudy 783:13–18, 3 fig., pl. 7–10.
- Benavides, L. M., & E. R. M. Druffel. 1986. Sclerosponge growth rate as determined by ^{210}Pb and ^{14}C chronologies. *Coral Reefs* 4:221–224.
- Bengtson, Stefan. 1986. Siliceous microfossils from the Upper Cambrian of Queensland. *Alcheringa* 10:195–216, 11 fig.
- Bengtson, Stefan, & Hou Xianguang. 2001. The integument of Cambrian chancelloriids. *Acta Palaeontologica Polonica* 46(1):1–22, 13 fig.
- Benton, M. J. 1986. More than one event in the late Triassic mass extinction. *Nature* 321:857–861, 3 fig.
- Benton, M. J. 1988. Mass extinction in the fossil record of reptiles: Paraphyly, patchiness and periodicity (?). In G. P. Larwood, ed., *Extinction and Survival in the Fossil Record*. Clarendon Press. Oxford. p. 269–294, 6 fig., 1 table.
- Benton, M. J. 1991. What really happened in the late Triassic? *Historical Biology* 5:263–278, 3 fig., 2 tables.
- Bergquist, P. R. 1978. Sponges. Hutchinson & Co. London. 268 p.
- Bergquist, P. R. 1980. The ordinal and subclass classification of Demospongidae: Appraisal of the present arrangement, and proposal of a new order. *New Zealand Journal of Zoology* 7:1–6.
- Bergquist, P. R. 1985. Poriferan relationship. In Simon Conway Morris, J. D. George, R. Gibson, & H. M. Platt, eds., *The Origins and Relationships of Lower Invertebrates*. Systematics Association, Special Volume 28. Clarendon Press. Oxford. p. 14–27, 2 fig.
- Bergström, Jan, & Per Ahlberg. 1981. Uppermost Lower Cambrian biostratigraphy in Scania, Sweden. *Geologiska Föreningens i Stockholm Förhandlingar* 103:193–214, 14 fig., 1 table.
- Bergström, S. M., X. Chen, J. C. Gutiérrez-Marco, & A. Dronov. 2009. The new chronostratigraphic classification of the Ordovician System and its relations to major regional series and stages and to $\delta^{13}\text{C}$ chemostratigraphy. *Lethaia* 42:97–107, 2 fig.
- Bergström, S. M., S. C. Finney, X. Chen, D. Goldman, & S. A. Leslie. 2006. Three new Ordovician global stage names. *Lethaia* 39:287–288, 1 fig.
- Bernecker, M. 1996. Upper Triassic reefs of the Oman Mountains: Data from the South Tethyan Margin. *Facies* 34:41–76, 11 fig., pl. 11–18.
- Bernecker, M., & O. Weidlich. 1994. Attempted reconstruction of Permian and Triassic skeletonization from reefbuilders (Oman, Turkey): Quantitative assessment with digital image analysis. In Baba Senowbari-Daryan & A. Dauer, eds., *Festschrift on the 60th Birthday of Erik Flügel*. Abhandlungen der Geologischen Bundesanstalt 50:31–56.
- Bertrand, M., M. Coen-Aubert, V. Dumoulin, A. Prétat, & F. Tourneur. 1993. Sedimentology and palaeoecology of upper Emsian and lower Eifelian strata

- in the Couvin and Villers-la-Tour areas (southern margin of Dinant Synclinorium, Belgium). Neues Jahrbuch für Geologie und Paläontologie, Abhandlungen 188:177–211.
- Beuck, L., M. Wissak, A. Munnecke, & A. Freiwald. 2008. A giant boring in a Silurian stromatoporoid analysed by computer tomography. *Acta Palaeontologica Polonica* 53(1):149–160.
- Bhargava, O. N., & U. K. Bassi. 1985. Upper Triassic coral knoll reefs: Middle Norian, Spiti-Kinnar, Himachal Himalaya, India. *Facies* 12:219–242, 4 fig., pl. 24–28.
- Bialek, Dawid, Paweł Raczyński, Przemysław Sztajner, & Dominik Zawadzki. 2007. Archeocjaty wapieni wojcieszowskich. *Przegląd Geologiczny* 55:1112–1116, 6 fig.
- Bian L. Z., Fang Y. T., & Huang Z. C. 1996. Late Ordovician reef types and characters in the border areas of Zhejiang and Jiangxi. In J. S. Fang, ed., *The ancient organic reefs of China and their relations to oil and gas*. Chinese Petroleum Institute. Beijing. p. 54–75. In Chinese.
- Bidder, G. P. 1898. The skeleton and classification of calcareous sponges. *Proceedings of the Royal Society, London* 64:61–76.
- Billings, Elkanah. 1857. Ordovician and Silurian rocks of North America. Report of Progress for the Years 1853–1856. Geological Survey of Canada. Toronto. p. 343–345.
- Billings, Elkanah. 1861. New Species of Lower Silurian Fossils: On Some New or Little Known Species of Lower Silurian Fossils from the Potsdam Group (Primordial Zone). Geological Survey of Canada. Montreal. 24 p., 25 fig.
- Billings, Elkanah. 1865. Paleozoic Fossils, vol. 1. Geological Survey of Canada. Dawson Brothers. Montreal. 426 p., 401 fig.
- Birenheide, Rudolph. 1895. Chaetida und tabulate Korallen des Devon. In W. Ziegler, ed., Leitfossilien, vol. 3. Borntraeger. Berlin. 249 p., 87 fig., 42 pl., 2 tables.
- Birkhead, P. K. 1976. Silurian stromatoporoids from Cheesmans Creek, with a survey of some stromatoporoids from the Hume Limestone Member, Yass, New South Wales. Records of Geological Survey of New South Wales 17(2):87–122, 5 fig., pl. 1–7.
- Birkhead, P. K. 1978. Some stromatoporoids from Bow-spring Limestone Member (Ludlovian) and Elmside Formation (Gedinnian), Yass Area, New South Wales. Records of Geological Survey of New South Wales 18(2):115–168, pl. 1–2, 1 table.
- Birkhead, P. K., & J. W. Murray. 1970. *Actinostroma papillosum* (Bargatzky, 1881), a stromatoporoid from the Swan Hills Member of the Waterways Formation (Upper Devonian) of Alberta. *Journal of Paleontology* 44:1067–1070.
- Bizzarini, Fabrizio. 1990. Inozoa (Porifera) dell Giurassico superiore dei dintorni di Valdobbiante (Prealpi Venete). Annali del Museo Civico Rovereto, Sezione: Archeologia, Storia, Scienze Naturali 6:83–109, 4 fig., 3 pl.
- Bizzarini, Fabrizio, & Giampietro Braga. 1978. Upper Triassic new genera and species of fair and questionable Bryozoa and Chaetida from the S. Cassiano Formation of the Dolomites (Eastern Alps). *Bollettino della Società Paleontologica Italiana* 17(1):28–48.
- Bizzarini, Fabrizio, & Giampietro Braga. 1988. Osservazioni su alcuni Chaetida delle Prealpi Veneto-Trentine. *Annali dei Musei civici di Rovereto Sezione: Archeologia, Storia Scienze Naturali* 42:137–158.
- Bizzarini, Fabrizio, Giampietro Braga, & A. A. Mastandrea. 1987. Ritrovamento di Inozoa (Porifera) nella formazione di Fonzaso (Giurassico Superiore, Prealpi Venete). *Annali del Museo Civico Rovereto, Sezione: Archeologia, Storia, Scienze Naturali* 3:133–142, 3 fig., 1 pl.
- Bizzarini, Fabrizio, & F. Russo. 1986. A new genus of Inozoa from S. Cassiano Formation (Dolomiti de Baries, Italy). *Memoire di Scienze Geologiche, Mémoire dell'Istituti di Geologia e Mineralogia della Università Padova* 38:129–135, 2 fig., 1 pl.
- Bjerstedt, T. W., & R. M. Feldmann. 1985. Stromatoporoid paleosynecology in the Lucas Dolostone (Middle Devonian) on Kelleys Island, Ohio. *Journal of Paleontology* 59:1033–1061.
- Blainville, H. M. D. de. 1830. Zoologie. Vers et Zoophytes. In F. Cuvier, ed., *Dictionnaire des Sciences naturelles*, vol. 60. E. G. Levraut. Paris & Strasbourg. p. 1–546.
- Blodgett, R. B., D. M. Rohr, & A. J. Boucot. 1990. Early and Middle Devonian gastropod biogeography of the Western hemisphere. In N. J. McMillan, A. F. Embry, & D. J. Glass, eds., *Devonian of the World*, vol. III. Canadian Society of Petroleum Geologists Memoir 14:281–294.
- Blomeier, Dierk, Christian Scheibner, & Holger Forke. 2009. Facies arrangement and cyclostratigraphic architecture of a shallow-marine, warm-water carbonate platform: The Late Carboniferous Ny Friesland Platform in eastern Spitsbergen (Pyefjellet Beds, Wordiekammen Formation, Gipsdal Group). *Facies* 55:291–324.
- Bodergat, Anne-Marie. 1975. *Ptychochaetetes (Varioparietes) resurgens* nov. sp. (Cnidaria, Chaetida) du Burdigalien du Bassin Rhodanien (Miocene, France). *Geobios* 8(4):291–301, 3 fig., pl. 26–28.
- Boehm, F., M. M. Joachimski, W.-C. Dullo, A. Eisenhauer, H. Lehnert, J. Reitner, & G. Worheide. 2000. Oxygen isotope fractionation in marine aragonite of coralline sponges. *Geochemica et Cosmochimica Acta* 64:1695–1703.
- Boehnke, Kunibert. 1915. Die Stromatoporen der nordischen Silurgeschiebe in Norddeutschland und Holland. *Palaeontographica A* 61:147–190, pl. 16–18.
- Bogoyavlenskaya, O. V. 1965a. Predstavitieli stromatopor iz Clathrodictyidae i Actinostromatidae v silure i devone Urala [Representatives of stromatoporoids Clathrodictyidae and Actinostromatidae from the Silurian and Devonian of the Urals]. *Paleontologicheskiy Zhurnal* 1965(1):39–43, pl. 1, 1 table.
- Bogoyavlenskaya, O. V. 1965b. O taksonomicheskem znachenii astroriz u stromatoporoidei [On the taxonomic significance of the astrorhizae in the stromatoporoids]. In B. S. Sokolov & V. N. Dubatolov, eds., *Tabuliatomorfnye korally devona i carbona SSSR. Trudy Vsesoiuznogo simpoziuma po izucheniiu iskopaemykh korallov, vypusk 2* [Tabulatormorph

- corals of the Devonian and Carboniferous of the USSR. Papers on First All-Union Symposium on fossil corals of the USSR, part 2]. Akademii Nauk Sibirskoe Otdelenie Institut Geologii i Geofiziki. Izdatel'stvo Nauka. Moscow. p. 105–112.
- Bogoyavlenskaya, O. V. 1965c. Rod *Tienodictyon* iz Devona Urala [The genus *Tienodictyon* from the Devonian of the Urals]. Paleontologicheskiy Zhurnal 1965(3):33–39, 1 fig., pl. 4.
- Bogoyavlenskaya, O. V. 1968. K morfologicheskoy terminologii stromatoporoidey [To the morphological terminology of stromatoporoids]. Paleontologicheskiy Zhurnal 1968(2):3–13, pl. I–II.
- Bogoyavlenskaya, O. V. 1969a. Revizija siluriiskikh aktinostromatid Podolii [Revision of Silurian actinostromatids of Podolia]. Paleontologicheskiy Zhurnal 1969(2):15–20, pl. III–IV.
- Bogoyavlenskaya, O. V. 1969b. K postroeniu klassifikatsii stromatoporoidei [On constructing the classification of the stromatoporoids]. Paleontologicheskiy Zhurnal 1969(4):12–27, 1 fig., pl. III–IV.
- Bogoyavlenskaya, O. V. 1971a. K revizii semeistva Idiostromatidae Nicholson [On the revision of the family Idiostromatidae Nicholson]. In A. B. Ivanovskii, ed., Rugozy i stromatoporoidei paleozoia SSSR [Paleozoic Rugosa and Stromatoporoids of the USSR]. Trudy Vsesouznogo simposiuma po izucheniiu isokopaemykh korallov [Transactions of the All-Union Symposium on Fossil Corals of the USSR], vol. 2. Akademii Nauk SSSR, Sibirskoe Otdelenie Institut Geologii i Geofiziki. Izdatel'stvo "Nauka." Moscow. p. 98–111.
- Bogoyavlenskaya, O. V. 1971b. Ordovikskie i siluriiskie labekhiidy Tuvy [The Ordovician and Silurian Labechiidae of Tuva]. Paleontologicheskiy Zhurnal 3:32–38, 2 fig., pl. 2.
- Bogoyavlenskaya, O. V. 1972a. Novye rody stromatoporoidei iz silura Tuvy [New genera of stromatoporoids from the Silurian of Tuva]. Paleontologicheskiy Zhurnal 1972(2):26–31.
- Bogoyavlenskaya, O. V. 1972b. Otriad Stromatoporoidea [Order Stromatoporoidea]. In A. N. Chodalevich, ed., Kishechnopolostnye i brachiopody zhivetskikh otlozhenii vostochnogo sklona Urala [Coelenterates and brachiopods of the Givetian deposits of the eastern slope of the Urals]. Ministerstvo Geologii SSSR [Ministry of Geology of the USSR]. Izdatel'stvo Nedra. Moscow. p. 24–43, 187–189, pl. 1–12.
- Bogoyavlenskaya, O. V. 1973a. Siluriiskie stromatoporoidei Urala [Silurian stromatoporoids from the Urals]. Izdatel'stvo Nauka. Moscow. 95 p., 9 fig., 26 pl., 3 tables.
- Bogoyavlenskaya, O. V. 1973b. Ordovikskie stromatoporoidei zapadnogo sklona Urala [Ordovician stromatoporoids of the western slope of the Urals]. Paleontologicheskiy Zhurnal 1973(4):18–24, 1 fig., pl. 3–4. English translation: Paleontological Journal 7(4):456–463, 1 fig., pl. 3–4.
- Bogoyavlenskaya, O. V. 1974. Printsipy sistematizatsii stromatoporoidei [Principles of systematization of stromatoporoids]. In B. S. Sokolov, ed., Drevnie Cnidaria (Ancient Cnidaria), vol. 1. Akademii Nauk SSSR, Sibirskoe Otdelenie, Instituta Geologii i Geofiziki, Trudy 201:20–27, 269, 270, 293–296.
- Bogoyavlenskaya, O. V. 1976. Stomatoporaty: Morfologija, sistematiceskoe polozhenie, klassifikatsiya i stratigraficheskoe znachenie. Avtoreferat dissertatsii na soiskanie uchenoi stepeni doctora geologo-mineralogicheskikh nauk. [Stromatoporates: Morphology, systematic position, classification and stratigraphic significance.] Dr. Sci. thesis. Moskovskii gosudarstvennyi universitet. Moscow. 30 p., 3 tables.
- Bogoyavlenskaya, O. V. 1977a. Novye ordovikskie stromatoporoidei Sibirskoi platformy [New Ordovician stromatoporoids of the Siberian Platform]. In V. P. Sapel'nikov & B. I. Chuvashov, eds., Materialy po paleontologii srednego paleozoia Urala i Sibiri [Materials on paleontology of the middle Paleozoic of the Urals and Siberia]. Instituta Geologii i Geochimii, Ural'skii Nauchnyi Tsentr, Akademii Nauk SSSR, Trudy 126:3–10, pl. 1–2.
- Bogoyavlenskaya, O. V. 1977b. Nekotorye stromatoporoidei iz rannedevonskikh otlozhenii vostochnogo sklona Urala [Some stromatoporoids from the Early Devonian deposits of the eastern slope of the Urals]. In G. N. Papulov & M. G. Breivel', eds., Novye materialy po paleontologii Urala [New contributions on the paleontology of the Urals]. Instituta Geologii i Geochimii, Ural'skii Nauchnyi Tsentr, Akademii Nauk SSSR, Trudy 128:13–30, pl. 1–5.
- Bogoyavlenskaya, O. V. 1977c. Novye stromatoporaty rannego srednego devona vostochnogo sklona Urala [New stromatoporates of Early and Middle Devonian from the eastern slope of Urals]. In G. A. Stukalina, ed., Novye vidy drevnikh rastenii i bespozvonochnykh SSSR, 4 [New species of ancient plants and invertebrates of the U.S.S.R., 4]. Izdatel'stvo "Nauka." Moscow. p. 14–18, 168–169, pl. 4–5.
- Bogoyavlenskaya, O. V. 1981. Rasprostranenie przhidols'kikh stromastoporat v nekotorykh raionakh SSSR [Distribution of Pridolian stromatoporates in some districts of the USSR]. In V. P. Sapel'nikova & B. I. Chuvashov, eds., Biostratigrafa i fauna srednego paleozoia Urala [Biostratigraphy and fauna of the Middle Paleozoic of the Urals]. Akademii Nauk SSSR, Ural'skii Nauchnyi Tsentr [Academy of Science USSR, Urals Scientific Center]. Sverdlovsk. p. 27–35.
- Bogoyavlenskaya, O. V. 1982a. Stromatoporaty pozdnenego devona-rannego karbona [Stromatoporates of the Late Devonian and Early Carboniferous]. Paleontologicheskiy Zhurnal 1982(1):33–38, pl. 4, 2 tables.
- Bogoyavlenskaya, O. V. 1982b. Ekologicheskie tipy stromatoporat siluriiskogo basseina podolii [Ecological types of stromatoporates in the Silurian basin of Podolia]. In O. A. Bemekhmina & I. T. Zhuravleva, eds., Sreda i zhizn' v geologicheskem proshchloe paleolandshafty i biofacies. [Environment and life in the geological past: Paleolandscape and biofacies]. Instituta geologii i geofiziki, Sibirskoe Otdelenie, Akademii Nauk SSSR, Trudy 510:115–122, 156, pl. 19–20.
- Bogoyavlenskaya, O. V. 1983. Atlas pozdnesiluriiskoi i rannedevonskoi fauny [Atlas of the Late Silurian and Early Devonian fauna]. In V. S. Tsyganko & V. A. Chernomykh, eds., Opornye razrezy pograničnykh

- otlozhenii silura i devona Pripolyarnogo Urala (putevoditel' polevogo seminara) [Key sections of Silurian-Devonian boundary beds in the subpolar Urals (Guidebook of the Field Seminar)]. Akademiya Nauk SSSR, Komi Filial, Institut Geologii. Syktyvkar. p. 83–85, 88, pl. 1–2.
- Bogoyavlenskaya, O. V. 1984. Stomatoporaty paleozoia: Morfologija, sistematicheskoe polozhenie, klassifikatsija i puti razvitiia [Paleozoic stromatoporates: Morphology, systematic position, classification and ways of development]. Akademija Nauk SSSR, Paleontologicheskiy Institut. Moscow. 92 p., 18 fig., 16 pl., 1 table.
- Bogoyavlenskaya, O. V. 1985. K poznaiiv prirody roda *Amphipora* (Stomatoporata) [On insight into the nature of the genus *Amphipora* (Stomatoporata)]. In B. S. Sokolov & I. T. Zhuravleva, eds., Problematiki prozdnego dokembriya i paleozoya [Problems of the late Precambrian and Paleozoic]. Akademija Nauk USSR. Sibirskoe Otdelenie, Institut Geologii i Geofiziki, Trudy [Academy of Sciences, USSR, Siberian Branch, Institute of Geology and Geophysics, Transactions] 632:62–73.
- Bogoyavlenskaya, O. V. 2001a. K kharakteristike rannepaleoziiskikh stromatoporat [On the character of Early Paleozoic stromatoporates]. Izvestija Ural'skoj gosudarstvennoj gornogeologicheskoi akademii (UGGGA), Serija geologija i geofizika 13:39–54, 4 fig.
- Bogoyavlenskaya, O. V. 2001b. Kharakteristika devona stromatoporoidei Russkoj platformy [Characterization of the Devonian stromatoporoids of the Russian platform]. Paleontologicheskiy Zhurnal 2001(4):16–23.
- Bogoyavlenskaya, O. V., & N. V. Dan'shina. 1984. Novye devonkiye subtsilindricheskiye stromatoporaty [New Devonian subcylindrical stromatoporates]. Paleontologicheskiy Zhurnal 1984(2):15–25.
- Bogoyavlenskaya, O. V., & V. G. Khromykh. 1985. Ukazatel'rodov i vidov stromatoporat [Catalogue of genera and species of stromatoporates]. Akademija Nauk SSSR, Sibirskoi Otdelenie, Trudy Institut Geologii i Geofiziki [Academy of Science USSR, Siberian Branch, Transactions of the Institute of Geology and Geophysics] 545:1–104, 16 pl.
- Bogoyavlenskaya, O. V., & E. Yu. Lobanov. 1990. K poznaniu drevneishikh stromatoporat [On knowledge of the earliest stromatoporates]. In B. S. Sokolov & I. T. Zhuravleva, eds., Iskopameye problematici SSSR [Fossil Problematica of the USSR]. Akademija Nauk SSSR, Sibirskoe Otdelenie, Trudy Instituta Geologii i Geofiziki 783:76–87, 152, 6 fig., pl. 27–28.
- Bogoyavlenskaya, O. V., N. P. Vassilyuk, & A. R. Glebov. 1990. Kharakteristika nekotorykh paleozoiskikh Labechiida: Stomatoporata [Characterization of some Paleozoic Labechiida: Stomatoporata]. In B. S. Sokolov & I. T. Zhuravleva, eds., Iskopameye problematici SSSR [Fossil Problematica of the USSR]. Akademija Nauk SSSR, Sibirskoe Otdelenie, Trudy Instituta Geologii i Geofiziki 783:69–76, 152, 7 fig., pl. 25–26.
- Bogoyavlenskaya, O. V., & F. Ye. Yanet. 1983. O geneticheskikh svyazyakh Stomatoporata i nekotorykh Anthozoa [On the genetic relationship between the Stomatoporata and certain Anthozoa]. Paleontologicheskiy Zhurnal 1983(4):18–28.
- Bogoyavlenskaya, O. V., & Yu. A. Yelkin. 2006. Rannepaleoziiskie stromatoporaty: Ochagi zarozhdeniya i rasseleniya [The early Paleozoic stromatoporates: The centers of origin and circulation]. Litosfera [Lithosphere] 2006 (4):184–195.
- Bogoyavlenskaya, O. V., & Yu. A. Yelkin. 2011. Klassifikatsiya paleozoiskikh i mezozoiskikh giroidnykh polipov i tsentry ikh vozniknoveniya [Classification of Paleozoic and Mesozoic Hydrozoa and the centers of their origin]. Litosfera [Lithosphere] 2:13–30.
- Böhm, F., M. M. Joachimski, W.-C. Dullo, A. Eisenhauer, H. Lehnert, J. Reitner, & G. Worheide. 2000. Oxygen isotope fractionation in marine aragonite of coralline sponges. Geochimica et Cosmochimica Acta 64:1695–1703.
- Böhm, F., M. M. Joachimski, H. Lehnert, G. Morgenroth, W. Kretschmer, J. Vacelet, & W.-C. Dullo. 1996. Carbon isotope records from extant Caribbean and South Pacific sponges: Evolution of $\delta^{13}\text{C}$ of surface water DIC. Earth and Planetary Science Letters 139:291–303.
- Boiko [Boyko], E. V. 1970a. Pervye svedeniia o pozdnetriasovykh stromatoporoideakh iugo-vostochnogo Pamira [First information on Late Triassic stromatoporoids from the south-eastern Pamirs]. Paleontologicheskiy Zhurnal 1970(2):43–46, pl. 4.
- Boiko [Boyko], E. V. 1970b. Tri novykh roda pozdnetriasovykh stromatoporoidei Yugo-Vostochnogo Pamira [Three genera of Late Triassic stromatoporoids of southeastern Pamirs]. Paleontologicheskiy Zhurnal 1970(4):46–51.
- Boiko [Boyko], E. V. 1979. Pozdnetriasovye Hydrozoa Yugo-Vostochnogo Pamira [Late Triassic Hydrozoa of the Southeastern Pamirs]. Akademija Nauk Tadzhiksko SSR, Institut Geologii [Tadzhik SSR, Academy of Science, Geological Institute]. Donish, Dushanbe. 113 p., 28 pl.
- Boiko [Boyko], E. V. 1981. O semeistve Verticillitidae Steinmann, 1882, ego sostave i sistematicheskom polozhenii [On the family Verticillitidae Steinmann, 1882, its composition and systematic position]. In B. S. Sokolov, ed., Problematiki fanerozoja [Phanerozoic problematica]. Instituta Geologii i Geofiziki Akademii Nauk SSSR, Sibirskoe Otdelenie, Trudy 481:74–82, 1 fig., 3 pl.
- Boiko [Boyko], E. V. 1984a. Nekotorye pozdnetriasovye isvestkoveye gubki yugo-vostochnogo Pamira [Some Late Triassic calcareous sponges from southeastern Pamirs]. In M. R. Dzhalikov, ed., Novye vidy iskopamey flory i fauny Tadzhikistana [New species of fossil fauna and flora of Tadzhikistan]. Donish, Dushanbe. p. 28–41, pl. 5–9.
- Boiko [Boyko], E. V. 1984b. Ranneiurskie stromatoporaty Yugo-Vostochnogo Pamira [Early Jurassic stromatoporates of the southeastern Pamirs]. In B. S. Sokolov, ed., Problematiki paleozoia i mesozoia [Paleozoic and Mesozoic problematica]. Akademija Nauk SSSR, Sibirskoe Otdelenie, Institut Geologii i Geofiziki, Trudy 597:58–66, 144, pl. 30–35.

- Bojko [Boyko], E. V. 1984c. Mikrostruktura kelloyeiskikh stromatoporat Pamira [Microstructure of Callovian stromatopores of Pamir]. In B. S. Sokolov, ed., Problematiki paleozoia i mesozoia [Paleozoic and Mesozoic problematica]. Akademii Nauk SSSR, Sibirskoe Otdelenie, Institut Geologii i Geofiziki, Trudy 597:67–72, pl. 36–40.
- Bojko [Boyko], E. V. 1986. Sfinktozoa iz pozdnemariavskikh organogennykh postroek yugo-voshochnogo [Sphinctozoans from Late Triassic reefs in southwestern Pamir]. In B. S. Sokolov, ed., Fanerozoyskie rify i korally SSSR [Phanerozoic Reefs and Corals of the USSR]. Trudy V vsesoyuznogo Simpoziuma po korallam i rifam, Dushanbe, 1983 [Transactions, 5th All Union Symposium on Corals and Reefs, Dushanbe, 1983]. Akademii Nauk USSR. Moscow. p. 3–11, 3 pl.
- Bojko [Boyko], E. V. 1989. Kelloyeiskie parastromatoporidy Tsentral'nogo i Yugo-Vostochnogo Pamira [Callovian parastromatoporids of the central and southeastern Pamirs]. In M. R. Dzhalirov, ed., Novye vidy fanerozoiskoi fauny i flory Tadzhikistana [New species of the Phanerozoic fauna and flora of Tajikistan]. Akademii Nauk Tadzhiksko SSR Institut Geologii, Tadzhikskoe Otdelenie Vsesoyuznogo Paleontologicheskogo Obschestva. Dushanbe. p. 48–61, 217–219, pl. 8–15.
- Bojko [Boyko], E. V. 1990. O miigoobrazie skeletij structur u cameriij gubok [On the diversity of skeletal structure of chambered poriferans]. Iscopiaemie problematiki SSSR, Akademie Nauk SSSR Siberskoe Otdelenie Instituta Geologii i Geofizika, Trudy 783(1990):119–129, pl. 37–47.
- Bojko [Boyko], E. V., G. V. Belyaeva, & I. T. Zhuravleva. 1991. Sfinktozoa fanerozooya territorii SSSR [Phanerozoic sphinctozoans from the territory of the USSR]. Siberian Department, Institute of Geology and Geophysics. Academy of Sciences of Tajikistan SSR, Institute of Geology. Moscow. 224 p., 36 fig., 64 pl.
- Bolívar, Ignacio. 1905. Notas sobre los Pirygamórfidos (Pyrgamorphidae). Boletín de la Real Sociedad Española de Historia Natural 5:278–289.
- Bol'shakova, L. N. 1969. O razvitiu nekotorykh aktinostromatid v silure Podolii [On the development of some actinostromatids in the Silurian of Podolia]. Paleontologicheskiy Zhurnal 1969(4):28–33.
- Bol'shakova, L. N. 1973. Stromatoporoidei silura i nizhnego devona Podolii [Silurian and Lower Devonian stromatoporoids of Podolia]. Akademii Nauk SSSR, Trudy Paleontologicheskogo instituta Akademii nauk SSSR 141:112 p., 36 fig., 20 pl., 1 table.
- Bol'shakova, L. N. 1993. O sovremennyykh analogakh stromatoporoidei [About ancient analogues of Stromatoporoidea]. In B. S. Sokolov & A. B. Ivanovskii, eds., Fauna i ekosistemy geologicheskogo proshloga [Fauna and Ecosystems in the Geological Past], Rossiiskaya Akademii Nauk, Otdelenie Geologii, Geophysiki i Gornykh Nauk, Paleontologicheskiy Institut [Russian Academy of Science, Geology, Geophysics and Mining Division, Paleontological Institute]. Moscow. p. 70–75, 112, 123–124.
- Bol'shakova, L. N., O. V. Bondarenko, Ch. Minzhin, L. M. Ulitina, & T. T. Sharkova. 2003. Paleontologija Mongoli. Korally i stromatoporoidei. Ordovik-devon [Paleontology of Mongolia. Corals and stromatoporoids. Ordovician-Devonian]. Nauka. Moscow. 285 p., 19 fig., 12 pl.
- Bol'shakova, L. N., & L. M. Ulitina. 1985. Stromatopora i biostratigrafija nizhnego paleozoia Mongoli [Stromatoporates and biostratigraphy of lower Paleozoic of Mongolia]. Sovmestnaia sovetskomo-mongolskaiia paleontologicheskaiia ekspeditsiia. Trudy 27:89 p., 1 fig., 24 pl., 2 tables.
- Bolton, T. E. 1981. Ordovician and Silurian biostratigraphy, Anticosti Island, Quebec. In P. J. Lesperance, ed., Field Meeting Anticosti-Gaspé, Quebec, 1981, vol. II: Stratigraphy and Paleontology. Université de Montréal. Montréal. p. 41–59, pl. 1–8.
- Bolton, T. E. 1988. Stromatoporoidea from the Ordovician rocks of central and eastern Canada. Contributions to Canadian Paleontology, Geological Survey of Canada, Bulletin 379:17–45.
- Bonneau, M., & G. Termier. 1975. Présence de Pharétrones dans le Jurassique supérieur des Monts Astéroussia (Crète Moyenne). Annales Géologiques des pays Helléniques (series 1) 16:434–440, pl. 42–43.
- Borchellini, Carole, Catherine Chombard, Michael Manuel, Eliane Alivon, Jean Vacelet, & Nicole Boury-Esnault. 2004. Molecular phylogeny of Demospongiae: Implications for Classification and Scenarios of Character Evolution. Molecular Phylogenetics and Evolution 32:823–837.
- Bordonaro, O. L. 1992. El Cambriko de Sudamerica. In J. G. Gutierrez Marco, J. Saavedra, & I. Rabano, eds., Paleozoico Inferior de Ibero-America. Universidad de Extremadura. Madrid. p. 69–84, 6 fig.
- Bornemann, J. G. 1883. Paleontologische aus dem Cambrischen Gebiete von Canalgrande in Sardinien: Deutsche Geologische Gesellschaft, Zeitschrift 5:270–274.
- Bornemann, J. G. 1884. Bericht über die Fortsetzung seiner Untersuchungen cambrischer Archaeocyathus: Formen und verwandter Organismen von der Insel Sardinien. Deutsche Geologische Gesellschaft, Zeitschrift 36:702–706.
- Bornemann, J. G. 1886. Die Versteinerungen des cambrischen Schichtensystems der Insel Sardinien nebst vergleichenden Untersuchungen über analoge Vorkommen aus andern Ländern. Erste Abteilung. III. Archaeocyathinae. Nova Acta Academiae Caesareae Leopoldino-Carolinae Germanicae Naturae Curiosorum 51(1):28–78, pl. 5–33.
- Bornemann, J. G. 1891a. Die Versteinerungen des cambrischen Schichtensystem der Insel Sardinien. Zweite Abteilung. Nachschrift, III. Archaeocyathinae. Nova Acta Academiae Caesareae Leopoldino-Carolinae Germanicae Naturae Curiosorum 56(1):495–500 (71–76), pl. 42–43.
- Bornemann, J. G. 1891b. Die Versteinerungen des cambrischen Schichtensystem der Insel Sardinien. Zweite Abteilung. Nova Acta Academiae Caesareae Leopoldino-Carolinae Germanicae Naturae Curiosorum 56(3):424–525 (1–101), pl. 35–40.
- Borodina, N. P. 1974. Arkheotsiatiy s reshetchatoy naružnoy stenkoj [Archaeocyaths with clathrate outer wall]. In I. T. Zhuravleva & A. Yu. Rozanov, eds.,

- Biostratigrafiya i Paleontologiya Nizhnego Kembriya Evropy i Severnoy Azii [Lower Cambrian Biostratigraphy and Paleontology of Europe and Northern Asia]. Nauka. Moscow. p. 138–166, 16 fig., pl. 8–18.
- Borodina, N. P., K. N. Konyushkov, D. V. Osadchaya, G. V. Belyaeva, & O. G. Okuneva. 1973. Raschlenenie sanashtykgol'skogo gorizonta nizhnego kembriya Sayano-Altayskoy skladchatoy oblasti i ego analogov v geosinklinal'nykh oblastyakh na territorii SSSR (po arkheotsiatam) [Subdivision of the Lower Cambrian Sanashtykgol Horizon of the Sayan Altay Foldbelt and its analogues in the geosynclinal regions in the territory of the USSR (based on archaeocyaths)]. Institut Geologii i Geofiziki, Sibirskoe Otdelenie, Akademiya Nauk SSSR, Trudy 49:100–119.
- Borojevic, R. 1979. Evolution des éponges Calcarea. In C. Lévi & N. Boury-Esnault, eds., Biologie des spongaires. Colloques internationaux du C.N.R.S. Paris. p. 527–530.
- Borojevic, R., N. Boury-Esnault, M. Manuel, & J. Vacelet. 2002. Order Baerida. In J. N. A. Hooper & R. W. M. van Soest, eds., Systema Porifera: A Guide to the Classification of Sponges, vol. 2. Kluwer Academic/Plenum Publishers. New York, Boston, Dordrecht, London, & Moscow. p. 1193–1199.
- Borojevic, R., N. Boury-Esnault, & J. Vacelet. 1990. A revision of the supraspecific classification of the subclass Calcinea (Porifera, Class Calcarea). Bulletin du Muséum National d'Histoire Naturelle, Paris 12(2):243–276.
- Borojevic, R., N. Boury-Esnault, & J. Vacelet. 2000. A revision of the supraspecific classification of the subclass Calcaronea (Porifera, class Calcarea). Zoosystema 22(2):203–263.
- Bory de Saint-Vincent, J. B. G. M. 1826. Essai d'une classification des animaux microscopiques. Mme Veuve Agasse. Paris. xi + 104 p.
- Boucot, A. J. 1975. Evolution and Extinction Rate Controls. Elsevier. Amsterdam. p. i–xv, 1–427.
- Boucot, A. J. 1990. Silurian and pre-Upper Devonian bio-events. In Otto Walliser & E. G. Kauffman, eds., Abrupt Changes in the Global Biota. Springer-Verlag. Berlin. p. 125–132.
- Boucot, A. J., & J. G. Johnson. 1973. Silurian brachiopods. In A. Hallam, ed., Atlas of Palaeobiogeography. Elsevier. Amsterdam, London, New York. p. 59–65.
- Bourque, P.-A., & G. Amyot. 1989. Stromatoporoid-coral reefs of the Upper West Point Reef Complex, late Silurian, Gaspe Peninsula, Quebec. In H. H. J. Geldsetzer, N. P. James, & G. E. Tebbutt, eds., Reefs, Canada and adjacent areas. Memoir of the Canadian Society of Petroleum Geologists 13:251–257.
- Bourque, P.-A., & H. Gignac. 1983. Sponge-constructed stromatactis mud mounds, Silurian of Gaspé, Québec. Journal of Sedimentary Petrology 53:521–532.
- Bourque, P.-A., & H. Gignac. 1986. Sponge-constructed stromatactis mud mounds, Silurian of Gaspé, Québec: Reply. Journal of Sedimentary Petrology 56:461–463.
- Bourque, P.-A., & L. Raymond. 1989. Non-skeletal bioherms of the lower reef complex of the West Point Formation, Late Silurian, Gaspé Peninsula, Québec. In H. H. J. Geldsetzer, N. P. James, & G. E. Tebbutt, eds., Reefs, Canada and adjacent areas. Memoirs of the Canadian Society of Petroleum Geologists 13:258–262.
- Boury-Esnault, Nicole. 2002. Order Chondrosida Boury-Esnault & Lopes, 1985. Family Chondriliidae Gray, 1872. In J. N. A. Hooper & R. W. M. van Soest, eds., Systema Porifera: A Guide to the Classification of Sponges, vol. 1. Kluwer Academic/Plenum Publishers. New York, Boston, Dordrecht, London, & Moscow. p. 291.
- Boury-Esnault, Nicole. 2006. Systematics and evolution of Demospongiae. Canadian Journal of Zoology 84(2):205–224.
- Boury-Esnault, Nicole, & L. De Vos, C. Donadey, & Jean Vacelet. 1990. Ultrastructure of Choanosome and Sponge Classification. In K. Rützler, ed., New Perspectives in Sponge Biology. Smithsonian Institution Press. Washington, D.C. p. 237–251, 24 fig., 3 tables.
- Boury-Esnault, Nicole, & M. T. Lopes. 1985. Les Démosponges littorales de l'Archipel des Açores. Annales de l'Institut océanographique 61(2):149–225.
- Boury-Esnault, Nicole, & Klaus Rützler. 1997. Thesaurus of Sponge Morphology. Smithsonian Contributions to Zoology, Number 596:i–iv, 1–55.
- Boury-Esnault, Nicole, & M. Van Beveren. 1982. Les Démosponges du plateau continental de Kerguelen-Hearld. Comité National Français des Recherches Antarctiques 52:1–175.
- Bowerbank, J. S. 1864. A monograph of the British Spongidae, vol. 1. Ray Society. London. 290 p., 37 pl.
- Boyajian, G. E., & M. LaBarbera. 1987. Biomechanical analysis of passive flow of stromatoporoids: Morphologic, paleoecologic and systematic implications. Lethaia 20:223–229, 4 fig.
- Boyarinov, A. S. 1962. O rodakh *Szczecathus* Vol. i *Lucyathus* Vol. [On the genera *Szczecathus* Vol. and *Lucyathus* Vol.]. In L. N. Kraevskiy & A. R. Anan'ev, eds., Novye Dannye po Paleontologii i Stratigrafi Zapadnoy Sibiri [New Data on the Paleontology and Stratigraphy of Western Siberia]. Materialy po Geologii Zapadnoy Sibiri 63. Tomskiy Universitet. Tomsk. p. 14–15.
- Bradner, Rainer, & Werner Resch. 1981. Reef development in the Middle Triassic (Ladinian and Cordevolian) of the Northern Limestone Alps near Innsbruck, Austria. Society of Economic Paleontologists and Mineralogists (Special Publication) 30:203–231, 27 fig.
- Brand, U. 1989a. Aragonite-calcite transformation based on Pennsylvanian molluscs. Geological Society of America Bulletin 101:377–390.
- Brand, U. 1989b. Global climatic changes during the Devonian-Mississippian: Stable isotope biogeochemistry of brachiopods. Palaeogeography, Palaeoclimatology, Palaeoecology 75:311–329.
- Brangulis, A., A. Murnieks, A. Nalge, & A. Friedrihsone. 1986. Sredne-pribaltiyskiy fatsial'nyy profil' venda i kembriya [Middle Baltic facies profile of the Vendian and Cambrian]. In E. A. Pirrus, ed., Fatsii i Stratigrafiya Venda i Kembriya Zapada Vostochno-Evropeyskoy Platformy [Facies and Stratigraphy

- of the Vendian and Cambrian of the western East European Platform]. Akademiya Nauk Estonskoy SSR. Tallinn. p. 24–33, 1 fig.
- Brasier, M. D. 1976. Early Cambrian intergrowths of archaeocyathids, *Renalcis*, and pseudostromatolites from South Australia. *Palaeontology* 19:223–245, 6 fig., pl. 35–37.
- Brasier, M. D., R. M. Corfield, L. A. Derry, A. Yu. Rozanov, & A. Yu. Zhuravlev. 1994. Multiple $\delta^{13}\text{C}$ excursions spanning the Cambrian explosion to the Botomian crisis in Siberia. *Geology* 22:455–458, 2 fig.
- Bratton, J. F., W. B. N. Berry, & J. R. Morrow. 1999. Anoxia pre-dates Frasnian-Famennian boundary mass extinction in the Great Basin, USA. *Palaeogeography, Palaeoclimatology, Palaeoecology* 154:275–292.
- Braun, R., S. Oetken, P. Königshof, L. Körner, & A. Wehrmann. 1994. Development and biofacies of reef-influenced carbonates (Central Lahn Syncline, Rheinisches Schiefergebirge). *Courier Forschungsinstitut Senckenberg* 169:351–386.
- Brenchley, P. J. 1989. The Late Ordovician Extinction. In S. K. Donovan, ed., *Mass Extinction: Processes and evidence*. Columbia University Press. New York. p. 104–132, fig. 6.1–6.5.
- Brenchley, P. J. 2004. End Ordovician Glaciation, Chapter 9. In B. D. Webby, Florentin Paris, M. L. Droser, & I. G. Percival, eds., *The Great Ordovician Biodiversification Event*. Columbia University Press. New York. p. 81–83.
- Brett, C. E. 1991. Organism-sediment relationships in Silurian marine environments. *Special Papers in Palaeontology* 44:301–344.
- Brice, D., F. Bigey, B. Mistiaen, J. Poncet, & J.-C. Rohart. 1977. Les organismes constructeurs (Algues, Stromatopores, Rugueux, Tabulés, Bryozoaires) dans le Dévonien de Ferques (Boulonnais-France). Associations: Répartition stratigraphique. *Mémoires du B.R.G.M. Paris* 89:136–151.
- Brice, D., B. Mistiaen, & J.-C. Rohart. 1999. New data on distribution of brachiopods, rugose corals and stromatoporoids in the Upper Devonian of central and eastern Iran. Paleobiogeographic implications. *Annales Société Géologique du Nord* (new series) 7:21–32.
- Broadhead, Thomas W. 1975. Biostratigraphy and paleoecology of the Floyd Shale, Upper Mississippian, northwest Georgia. Unpublished Master's thesis. University of Texas at Austin. 250 p.
- Broadhurst, F. M. 1966. Growth forms of stromatoporoids in the Silurian of southern Norway. *Norsk Geologisk Tidsskrift* 46:401–404.
- Brock, G. A., M. J. Engelbretsen, J. B. Jago, P. D. Kruse, J. R. Laurie, J. H. Shergold, G. R. Shi, & J. E. Sorauf. 2000. Palaeobiogeographic affinities of Australian Cambrian faunas. Association of Australasian Palaeontologists, Memoir 23:1–61, 19 fig., 8 tables.
- Broecker, Wallace. S. 1974. *Chemical Oceanography*. Harcourt Brace Jovanovich, Inc. New York. 214 p.
- Broglio Lorica, C., D. Masetti, S. Forastteri, & E. Travisan. 1991. Comunità a Poriferi nei calcari Grigi delle vette Feltrine (Gurassico inferiore, Prealpi Bellunesi). *Annali dell'Università di Ferrara (Nuova Serie) Sezione Scienze della Terra* 3(4):51–81.
- Broili, Ferdinand. 1915. *Archaeocyathinae*. In K. von Zittel, *Grundzüge der Paläontologie*, 4th ed. Oldenbourg. München, Berlin. p. 121.
- Bromley, Richard G., & Claus Heinberg. 2006. Attachment Strategies of Organisms on Hard Substrates: A Palaeontological View. *Palaeogeography, Palaeoclimatology, Palaeoecology* 232:429–453.
- Bronn, H. G. 1825. *System der urweltlichen Pflanzenthiere durch Diagnose, Analyse und Abbildung der Geschelchter erläutert*. J.C.B. Mohr. Heidelberg. iv + 47 p., 7 pl.
- Brood, K. 1970. The systematic position of *Neuropora*, *Neuroporella* and *Spinopora*. *Stockholm Contributions in Geology* 23(2):65–71, pl. 1–2.
- Brood, Kristian. 1972. Campanian stromatoporoids from the Upper Cretaceous of southern Sweden. *Geologiska Föreningens i Stockholm Förhandlingar* 94:393–409.
- Brook, George. 1893. The genus *Madrepora*. In Catalogue of Madreporian Corals, British Museum (Natural History) 1. British Museum (Natural History). London. vii + 212 p., 36 pl.
- Brosius, Liz. 2006. Windows to the Past: A Guidebook to Common Invertebrate Fossils of Kansas. Kansas Geological Survey Educational Series 16:56 p., 66 fig.
- Brunton, F. R., & P. Copper. 1994. Palaeoecologic, temporal and spatial analysis of Early Silurian reefs of the Chicotte Formation, Anticosti Island, Quebec, Canada. *Facies* 31:57–80.
- Brunton, F. R., & O. A. Dixon. 1994. Siliceous-sponge microbe associations and their recurrence through the Phanerozoic as reef mound constructors. *Palaios* 9:370–387.
- Brydone, R. M. 1912. The stratigraphy of the Chalk of Hants, with map and palaeontological notes. Dulau and Co., Ltd. London. 116 p.
- Buggisch, W. 1991. The global Frasnian/Famennian Kellwasser event. *Geologische Rundschau* 80:49–72.
- Bukry, David. 1978. Cenozoic coccolith, silicoflagellate, and diatom stratigraphy, Deep-Sea Drilling Project Leg 44. In W. E. Benson & R. E. Sheridan, eds., *Initial Reports of Deep-sea Drilling Project*, vol. 44. U.S. Government Printing Office. Washington, D.C. p. 807–864.
- Burchette, T. P. 1981. European Devonian reefs: A review of current concepts and models. In D. F. Toomey, ed., *European Fossil Reef Models*. SEPM (Society for Sedimentary Geology) Special Publication 3:85–142.
- Burne, R. V., & L. S. Moore. 1987. Microbialites: Organosedimentary deposits of benthic microbial communities. *Palaios* 2:241–254, 10 fig.
- Burton, M. 1949. Notes on the ecology of sponges. *British Science News* 2:83–85.
- Byra, Hana. 1983. Revision der von Cl. Schlüter (1880–1889) beschriebenen Chaetetida und Tabulata aus dem Rheinischen Devon. *Courier Forschungsinstitut Senckenberg* 59:1–78.
- Cameron, D., & Paul Copper. 1994. Paleoecology of giant Late Ordovician cylindrical sponges from Anticosti Island, eastern Canada. In R. W. M. van Soest,

- Th. M. G. van Kempen, & J. C. Braekmann, eds., *Sponges in Time and Space*. Balkema. Rotterdam. p. 13–21, 4 fig.
- Camoin, Gilbert, Françoise Debrenne, & Anna Gandin. 1989. Premières images des communautés microbiennes dans les écosystèmes cambriens. Académie des Sciences, Paris, Comptes Rendus (série II) 308:1451–1458, 2 pl.
- Campbell, K. S. W., D. J. Holloway, & W. D. Smith. 1974. A new receptaculitid genus, *Hexabactron*, and the relationships of the Receptaculitaceae. Palaeontographica (Abteilung A) 146:52–77, 12 fig., pl. 12–17.
- Candelas, G. C., & G. A. Candelas. 1963. Notes on the seasonal distribution of the sponge *Hymeniacidon heliophila* at Beaufort, North Carolina. Ecology 44:595–597.
- Carpenter, W. B., & H. B. Brady. 1870. Description of *Parkeria* and *Lofthusia*, two gigantic types of arenaceous Foraminiferida. Royal Society of London Philosophical Transactions 158:721–754, pl. 72–80.
- Carrera, M. G., & J. K. Rigby. 1999. Biogeography of Ordovician sponges. Journal of Paleontology 73(1):26–37, 4 fig.
- Carrera, M. G., & J. K. Rigby. 2004. Sponges. In B. D. Webby, F. Paris, M. L. Droser, & I. G. Percival, eds., *The Great Ordovician Biodiversification Event*. Columbia University Press. New York. p. 102–111, fig. 12.1–12.4.
- Carter, H. J. 1877. On the close relationship of *Hydractinia*, *Parkeria*, and *Stromatopora*; with descriptions of new species of the former, both Recent and fossil. Annals and Magazine of Natural History (series 4) 19:44–76, pl. 8.
- Carter, H. J. 1880. On *Stromatopora dartingtoniensis* n. sp. with the tabulation in the larger branches of the astrorhiza. Annals and Magazine of Natural History (series 5) 6:339–347.
- Carter, H. J. 1888. On two new genera allied to *Lofthusia*, from the Karakoram Pass and the Cambridge Greensand respectively. Annals and Magazine of Natural History (series 6) 1:172–184, pl. 13.
- Cawood, P. A. 2005. Terra Australis Orogen: Rodinia breakup and development of the Pacific and Iapetus margins of Gondwana during the Neoproterozoic and Paleozoic. Earth-Science Reviews 69:249–279, 9 fig.
- Cecca, Fabrizio. 2002. Palaeobiogeography of Marine Fossil Invertebrates: Concepts and Methods. Taylor & Francis. London. 273 p.
- Chatterton, B. D. E., Paul Copper, O. A. Dixon, & Stacey Gibbs. 2008. Spicules in Silurian tabulate corals from Canada and implications for their affinities. Palaeontology 51:173–198.
- Chen Dai-Zhoa, & M. E. Tucker. 2004. Paleokarst and its implication for the extinction event at the Frasnian-Famennian boundary (Guilin, China). Journal of the Geological Society of London 161(6):895–898.
- Chen Nanshen, Yang Xuzhen, Liu Dehan, Xiao Xuejun, Fan Delian, & Wang Lianfang. 1982. Lower Cambrian black argillaceous rocks series in South China and its associated stratiform deposits. Mineral Deposits 1:39–51, 2 fig., 1 pl., 9 tables.
- Chen Xu, & Rong Jia-yu. 1992. Ordovician plate tectonics of China and its neighbouring regions. In B. D. Webby & J. L. Laurie, eds., *Global Perspectives on Ordovician Geology*. Rotterdam. Balkema. p. 177–291.
- Chen Xu, Rong Jia-yu, Wang Xiao-feng, Wang Zhi-hao, Zhang Yuan-dong, & Zhan Ren-bin. 1995. Correlation of the Ordovician rocks of China (Charts and Explanatory Notes). International Union of Geological Sciences, Publication 31:1–104, 8 fig., 2 tables, chart (in three sheets).
- Chen Xu, Zhou Z.-Y., Lin H.-L., & Wang Z.-Z. 1992. Notes on Early Palaeozoic Plate Activities in Xinjiang. In Zhou Z.-Y. & Chen P.-J., eds., *Biostratigraphy and Geological Evolution of Tarim*. Science Press. Beijing. p. 163–172.
- Chen Xu, Zhou Z.-Y., Rong Jia-yu, & Li J. 2001. Ordovician series and stages in Chinese stratigraphy: Steps toward a global usage. Alcheringa 25:131–141.
- Chernysheva, S. V. 1960. *Tollicyathus*: Novyy rod arkheotsiat [*Tollicyathus*: A new genus of archaeocyaths]. Sibirskiy Nauchno-Issledovatel'skiy Institut Geologii, Geofiziki i Mineral'nogo Syr'ya, Trudy 8:77–78, pl. 4.
- Choi D. K., & Lee D.-J. 1998. Ordovician stratigraphy and paleontology of the Taebaegsan region, Korea. Guidebook for IGCP 410 Field Meeting to Korea. Seoul. 63 p., 19 fig.
- Chombard, Catherine, Nicole Boury-Esnault, Annie Tillier, & Jean Vacelet. 1997. Polyphyly of “Sclerosponges” (Porifera, Demospongiae) supported by 28S Ribosomal Sequences. Biological Bulletin 193:359–367.
- Chudinova, I. I. 1959. O nakhodke konulyarii v nizhnem kembrii Zapadnykh Sayan [On the find of a conulariid in the Lower Cambrian of West Sayan]. Paleontologicheskiy Zhurnal 1959(2):53–55, 2 fig., pl. 1.
- Claeys, P., F. T. Kyte, A. Herbosch, & J. G. Casier. 1996. Geochemistry of the Frasnian-Famennian boundary in Belgium: Mass extinction, anoxic oceans and microtektite layer but not much iridium. In G. Ryder, D. Fastovsky, & S. Gartner, eds., *The Cretaceous-Tertiary Event and other Catastrophes in Earth History*. Geological Society of America Special Paper 307:491–504.
- Clark, G. R. 1976. Shell growth in the marine environment: Approaches to the problem of marginal calcification. American Zoologist 16:617–626.
- Clark, G. R. 2005. Organic matrix in the Porifera and Cnidaria: Deja vu through a temporal microscope. Geological Society of America, Abstracts with Programs 37(7):366.
- Clarke, A. 1993. Temperature and extinction in the sea: A physiologist's view. Paleobiology 19:499–518.
- Clarke, J. M. 1897. A sphinctozoan calcisponge from the Upper Carboniferous of eastern Nebraska. American Geologist 20:387–392, pl. 23.
- Clausen, C. W. 1982. *Wienbergia*, a new genus for *Barroisia faxensis* (Porifera, Demospongia) from the Middle Danian of Denmark. Bulletin of the Geological Society of Denmark 30:111–115, 11 fig.
- Cleland, C. E. 2001. Historical science, experimental science and the scientific method. Geology 29:987–990.

- Coates, A. G., & J. B. C. Jackson. 1985. Morphological themes in the evolution of clonal and aplanous marine invertebrates. In J. B. C. Jackson, L. W. Buss, & R. E. Cook, eds., *Population Biology and Evolution of Clonal Organisms*. Yale University Press, New Haven, p. 67–106.
- Coates, A. G., & J. B. C. Jackson. 1987. Clonal growth, algal symbiosis, and reef formation by corals. *Paleobiology* 13:363–378.
- Coates, A. G., & W. A. Oliver. 1973. Coloniality in zoantharian corals. In R. S. Boardman, A. H. Cheetham, & W. A. Oliver, eds., *Animal Colonies, Development and Function through Time*. Dowden, Hutchinson, & Ross, Stroudsburg, Pennsylvania, p. 3–27.
- Cockbain, A. E. 1984. Stromatoporoids from the Devonian reef complexes, Canning Basin, Western Australia. *Bulletin of the Geological Survey of Western Australia* 129:1–108, 1–28 pl.
- Cockbain, A. E. 1985. Devonian stromatoporoids from the Carnarvon Basin, Western Australia. Special Publication, South Australian Department of Mines and Energy 5:29–33.
- Cockbain, A. E. 1989. Distribution of Frasnian and Famennian stromatoporoids. *Memoirs of the Association of Australasian Paleontologists* 8:339–345.
- Cocks, L. R. M., & R. A. Fortey. 1998. The Lower Palaeozoic margins of Baltica. *GFF* 120(2):173–179.
- Cocks, L. R. M., R. A. Fortey, & C. P. Lee. 2005. A review of Lower and Middle Palaeozoic biostratigraphy in west peninsular Malaysia and southern Thailand in its context within the Sibumasu Terrane. *Journal of Asian Earth Sciences* 24:703–717.
- Cocks, L. R. M., & T. H. Torsvik. 2002. Earth geography from 500 to 400 million years ago: A faunal and palaeomagnetic review. *Journal of the Geological Society, London* 159:631–644.
- Cocks, L. R. M., & T. H. Torsvik. 2007. Siberia, the wandering northern terrane, and its changing geography through the Palaeozoic. *Earth-Science Reviews* 82:29–74, 15 fig., 1 table.
- Cohen, A. L., & T. A. McConaughey. 2003. A geochemical perspective on coral mineralization. In P. M. Dove, S. Weiner, & J. J. De Yoreo, eds., *Biomineralization: Reviews in Mineralogy and Geochemistry* 54:151–187.
- Cohen, K. M., S. C. Finney, P. L. Gibbard, & J.-X. Fan. 2013. The ICS International Chronostratigraphic Chart. *Episodes* 36(3):199–204.
- Conaghan, P. J., E. W. Mountjoy, G. D. Edgecombe, J. A. Talent, & D. E. Owen. 1976. Nubrigyn algal reefs (Devonian), eastern Australia: Allochthonous blocks and megabreccias. *Geological Society of America Bulletin* 87:515–530.
- Coney, P. J., D. L. Jones, & J. W. H. Monger. 1980. Cordilleran suspect terranes. *Nature* 288:329–333, 1 fig.
- Conil, R. 1961. Les Gîtes à stromatopores du Strunien de la Belgique. *Mémoire de l'Institut Géologique de l'Université de Louvain* 22:340–369.
- Connolly, W. M., L. L. Lambert, & R. J. Stanton Jr. 1989. Paleoenvironment of Lower and Middle Pennsylvanian (Middle Carboniferous) *Chaetetes* in North America. *Facies* 20:139–168.
- Connolly, W. M., & R. J. Stanton Jr. 1983. Sedimentation and paleoenvironment of Morrowan strata in the Hueco Mountains, West Texas. In S. J. Meader-Roberts, ed., *Geology of the Sierra Diablo and southern Hueco Mountains. Society of Economic Paleontologists and Mineralogists Permian Basin. Midland, Texas*, p. 36–64.
- Connolly, W. M., & R. J. Stanton Jr. 1986. Lower Pennsylvanian (Morrowan) sedimentation in the Orogenic Basin. In J. L. Ahlen & M. E. Hansen, eds., *Southwest section of American Association of Petroleum Geologists, Transactions and Guidebook of 1986 Convention, Ruidoso, New Mexico. New Mexico Bureau of Mines and Mineral Resources. Socorro, New Mexico*, p. 129–142.
- Constantz, B. R. 1986. Coral skeleton construction: A physicochemically dominated process. *Palaeos* 1:152–157.
- Conway Morris, S., & M. Chen. 1990. *Blastulospongia polystreta* n. sp., an enigmatic organism from the Lower Cambrian of Hubei, China. *Journal of Paleontology* 64(1):26–30, 4 fig.
- Cook, A. G. 1999. Stromatoporoid palaeoecology and systematics from the Middle Devonian Fanning River Group, north Queensland. *Memoirs of the Queensland Museum* 43:463–551.
- Cook, A. G. 2002. Stromatoporoidea. In J. N. A. Hooper & R. W. M. Van Soest, eds., *Systema Porifera: A Guide to the Classification of Sponges*, vol. 1. Kluwer Academic/Plenum Publishing, New York, Boston, Dordrecht, London, & Moscow, p. 69–70.
- Cook, A. G., & M. Wade. 1997. Symbiotic stromatoporoid-nautiloid association, Middle Devonian, north Queensland. *Memoirs of the Queensland Museum* 42:81–89.
- Cook, H. E., P. N. McDaniel, E. W. Mountjoy, & L. C. Pray. 1972. Allochthonous carbonate debris flows at Devonian bank ("reef") margins, Alberta, Canada. *Bulletin of Canadian Petroleum Geology* 20(3):439–497, 11 fig., 8 pl.
- Cook, P. J. 1988. *Palaeogeographic Atlas of Australia*, vol. 1, Cambrian. Australian Government Publishing Service, Canberra. 9 p., 16 charts.
- Cook, S. de C., & P. R. Bergquist. 2002. Order Dictyoceratida Minchin, 1900. In J. N. A. Hooper & R. W. M. van Soest, eds., *Systema Porifera: A Guide to the Classification of Sponges*, vol. 1. Kluwer Academic/Plenum Publishers, New York, Boston, Dordrecht, London, & Moscow, p. 1021.
- Cookenboo, H. O., M. J. Orchard, & D. K. Daoud. 1998. Remnants of Paleozoic cover on the Archean Canadian Shield: Limestone xenoliths from kimberlite in the central Slave craton. *Geology* 26:391–394.
- Cooper, G. A., A. R. V. Arellano, J. H. Johnson, V. J. Okulitch, Alexander Stoyanow, & Christina Lochman. 1952. Cambrian stratigraphy and paleontology near Caborca, northwestern Sonora, Mexico. *Smithsonian Miscellaneous Collections* 119(1):vi + 184 p., 7 fig., 31 pl.
- Cooper, R. A. 1999. The Ordovician time scale: Calibration of graptolite and conodont zones. In P. Kraft & O. Fatka, eds., *Quo vadis Ordovician?* Short

- Papers on the 8th International Symposium on the Ordovician System. *Acta Universitatis Carolinae, Geologica* 43(1–2):1–4.
- Copper, Paul. 1977. Paleolatitudes in the Devonian of Brazil and the Frasnian–Famennian mass extinction. *Palaeogeography, Palaeoclimatology, Palaeoecology*, 21:165–207.
- Copper, Paul. 1986. Frasnian–Famennian mass extinction and cold water oceans. *Geology* 14:835–839.
- Copper, Paul. 1988. Ecological succession in reef ecosystems: Is it real? *Palaios* 3:136–152.
- Copper, Paul. 1994. Ancient reef ecosystem expansion and collapse. *Coral Reefs* 13:3–12.
- Copper, Paul. 2001. Evolution, radiations, and extinctions in Proterozoic to mid-Paleozoic reefs. In G. D. Stanley Jr., ed., *The History and Sedimentology of Ancient Reef Systems*. Topics in Geobiology, vol. 17. Kluwer Academic/Plenum Publishers. New York. p. 89–119, 6 fig.
- Copper, Paul. 2002. Silurian and Devonian reefs: 80 million years of global greenhouse between two ice ages. In Wolfgang Kiessling, Erik Flügel, & Jan Golonka, eds., *Phanerozoic Reef Patterns*. SEPM (Society for Sedimentary Geology) Special Publication 72:181–283, 15 fig.
- Copper, Paul, & Y. Plusquellec. 1993. Ultrastructure of the walls, tabulae and “polyps” in Early Silurian *Favosites* from Anticosti Island, Canada. *Courier Forschungsinstitut Senckenberg* 164:301–308.
- Copper, Paul, C. W. Stock, and Jisuo Jin. 2013. *Quasialucena*, a new Hirnantian (Late Ordovician) aulacceratid stromatoporoid genus from Anticosti Island, Canada. *Journal of Paleontology* 87(4):664–676, 8 fig.
- Cornet, P. 1975. Morphogenèse, caractères écologiques, et distribution des stromatoporoidés Devoniens au bord du Sud du Bassin de Dinant (Belgique). Thèse de Doctorat (inédite), Université Catholique de Louvain. 195 p.
- Corriero, G., L. S. Liaci, D. Ruggiero, & M. Pansini. 2000. The sponge community of a semi-submerged Mediterranean cave. *Marine Ecology* 21(1):85–96.
- Cossman, M. 1909. Rectifications de nomenclature. *Revue Critique de Paléozoologie* 13:67.
- Courjault-Radé, Pierre, Françoise Debrenne, & Anna Gandin. 1992. Palaeogeographic and geodynamic evolution of the Gondwana continental margins during the Cambrian. *Terra Nova* 4:657–667, 7 fig.
- Cowen, Richard. 1983. Algal symbiosis and its recognition in the fossil record. In M. J. S. Teves & P. L. McCall, eds., *Biotic Interactions in Recent and Fossil Benthic Communities*. Plenum Press. New York. p. 431–478.
- Cowen, Richard. 1988. The role of algal symbiosis in reefs through time. *Palaios* 3:221–227, 2 fig.
- Cremer, Holger. 1995. Spicule pseudomorphs in Upper Triassic (Norian) chaetetid sponges from the western Taurids (Antalya-Region, SW Turkey). *Geobios* 28:163–174.
- Crook, K. A. W. 1955. *Mazaphyllum*, a new cystiphyllid coral from the Silurian of New South Wales. *Journal of Paleontology* 29:1052–1056, 3 fig.
- Crow, C. J., S. Brande, M. E. Turner, C. W. Stock, & D. J. Benson. 2001. Random sampling of carbonate mounds: An example from the Upper Ordovician of Alabama. *Sedimentary Geology* 145:173–187.
- Crowell, J. C. 1999. Pre-Mesozoic ice ages: Their bearing on understanding the climate system. *Geological Society of America Memoir* 192:106 p.
- Cuffey, R. J., L. L. Basile, & A. L. Lisenbee. 1979. A bryozoan-like chaetetid (possible sclerosponge) from Jurassic–Cretaceous limestone near Orhaneli, northwestern Turkey. *Geobios* 12(3):473–479, 1 fig., 1 pl.
- Cuffey, R. J., & J. F. Taylor. 1989. Altoona bryozoan-coral-stromatoporoid reef, uppermost Silurian, Pennsylvania. In H. H. J. Geldsetzer, N. P. James, & G. E. Tebbutt, eds., *Reefs, Canada and Adjacent Area*. Canadian Society of Petroleum Geologists Memoir 13:296–298.
- Cuif, J.-P. 1973. Histologie de quelques Sphinctozaires (Porifères) Triassiques. *Geobios* 6(2):115–125, 4 fig., pl. 8–10.
- Cuif, J.-P. 1974. Rôle des sclérosponges dans la faune récifale du Trias des Dolomites (Italie du Nord). *Geobios* 7(2):139–153, 5 fig., pl. 29–31.
- Cuif, J.-P. 1979. Caractères morphologiques et microstructuraux de trois sclérosponges Triassiques association avec les Chaetetida. In Claude Lévi & Nicole Boury-Esnault, eds., *Biologie des Spongaires. Colloques Internationaux du Centre National de la Recherche Scientifique* 291:475–481, 3 fig., 1 pl.
- Cuif, J.-P., Françoise Debrenne, J. G. Lafuste, & Jean Vacelet. 1979. Comparaison de la microstructure du squelette carbonaté nonspiculaire d'éponges actuelles et fossiles. In Claude Levi & Nicole Boury-Esnault, eds., *Biologie des Spongaires. Colloques Internationaux du Centre National de la Recherche Scientifique* 291:459–465, 2 pl.
- Cuif, J.-P., & Fatima Ezzoubair. 1991. Diversité des céraporellides Triassiques. *Geobios* 24(3):257–266, 2 pl.
- Cuif, J.-P., Pierre Feuillee, J.-C. Fischer, & André Pascal. 1973. Présence d'astrorhizes chez les Chaetetida mésozoïques. *Comptes Rendus de l'Académie des Sciences, Paris (series D)* 277:2473–2476, 1 pl.
- Cuif, J.-P., & J.-C. Fischer. 1974. Étude systématique sur les Chaetetida du Trias de Turquie. *Annales de Paléontologie (Invertébrés)* 60(1):3–14.
- Cuif, J.-P., & Pascale Gautret. 1987. Comparaison des modalités de diagenèse du squelette de spongaires carbonatés dans le Trias de Turquie et le Permien de Tunisie. *Geobios* 20(6):757–773.
- Cuif, J.-P., & Pascale Gautret. 1991. Taxonomic value of microstructural features in calcified tissue from Recent and fossil Demospongiae and Calcarea. In Joachim Reitner & Helmut Keupp, eds., *Fossil and Recent Sponges*. Springer-Verlag. Berlin & Heidelberg. p. 159–169, fig. 1–3.
- Cuif, J.-P., & Pascale Gautret. 1993. Microstructural features of fibrous tissue in the skeletons of some chaetetid sponges. In P. Oekentorp-Küster, ed., *Proceedings of the VI International Symposium on Fossil Cnidaria and Porifera*, Munster Cnidar-

- ian Symposium, vol. 1. Courier Forschungsinstitut Senckenberg 164:309–315.
- Cuif, J.-P., P. Gautret, G. F. Lahi, A. A. Mastandrea, B. Pradier, & F. Russo. 1990. Recherche sur la fluorescence uv du squelette aspiculaire chez les Démosponges calcitiques Triasiques. *Geobios* 23(1):21–31, 4 fig., 2 pl.
- Culver, S. J., J. E. Repetski, John Pojeta Jr., & David Hunt. 1996. Early and Middle(?) Cambrian metazoan and protistan fossils from West Africa. *Journal of Paleontology* 70(1–6, 5 fig.
- Cumings, E. R. 1912. Development and systematic position of the monticuliporoids. *Geological Society of America Bulletin* 23:357–370.
- Curtis, A. S. G. 1979. Individuality and graft rejection in sponges, or a cellular basis for individuality in sponges. In G. Larwood & B. R. Rosen, eds., *Biology and Systematics of Colonial Organisms*. Systematics Association Special Volume 11:39–47.
- Dalziel, I. W. D., L. H. Dalla Salda, & L. M. Gahagan. 1994. Paleozoic Laurentia-Gondwana interaction and the origin of the Appalachian-Andean system. *Geological Society of America Bulletin* 106:243–252, 4 fig., 1 table.
- Da Silva, A.-C., S. Kershaw, & F. Boulvain. 2011a. Sedimentology and stromatoporoid palaeoecology of Frasnian (Upper Devonian) carbonate mounds in southern Belgium. *Lethaia* 44:255–274.
- Da Silva, A.-C., S. Kershaw, & F. Boulvain. 2011b. Stromatoporoid palaeoecology in the Frasnian (Upper Devonian) Belgian Platform, and its applications in interpretation of carbonate platform environments. *Palaeontology* 54:883–905.
- Da Silva, A.-C., S. Kershaw, F. Boulvain, & J. Reitner. 2011c. Long expected!—First record of demosponge-type spicules in a Devonian stromatoporoid (Frasnian, Belgium). *Kölner Forum für Geologie und Palaontologie* 19: 11th Symposium on Fossil Cnidaria and Porifera, Liege, August 19–29, Abstracts. p. 32–33.
- Da Silva, A.-C., S. Kershaw, F. Boulvain, B. L. M. Hubert, B. Mistiaen, A. Reynolds, & J. Reitner. 2014. Indigenous demosponge spicules in a late Devonian stromatoporoid basal skeleton, Frasnian, Belgium. *Lethaia* 47(3):365–375.
- Dassow, M. von. 2006. Influences of flow and feeding on colony organization in a bryozoan. *Integrative and Comparative Biology* 45(60):1090.
- Datsenko, V. A., I. T. Zhuravleva, N. P. Lazarenko, Yu. N. Popov, & N. E. Chernysheva. 1968. Biostatigrafiya i fauna kembrijskikh otlozhenii severozapada Sibirskoy Platformy [Biostratigraphy and fauna of the Cambrian deposits of the northwestern Siberian Platform]. Nauchno-Issledovatel'skii Institut Geologii Arktiki, Trudy 155:213 p., 23 pl.; Atlas: 47 fig., 13 tables.
- Dauphin, Yannick, Pascale Gautret, & J.-P. Cuif. 1996. Diagenetic changes in the chemical composition of Triassic biogenic aragonites in sponges, corals and cephalopods from the lower Norian of Lycian Tarus (Turkey). *Bulletin de la Société Géologique de France* 167(2):247–256.
- Davies, G. R. 1971. A Permian hydrozoan mound, Yukon Territory. *Canadian Journal of Earth Sciences* 8(8):973–988.
- Davies, G. R., & W. W. Nassichuk. 1973. The hydrozoan? *Palaeoaplysina* from the Upper Paleozoic of Ellesmere Island. *Journal of Paleontology* 47:251–265.
- Davies, G. R., & W. W. Nassichuk. 1986. Ancient reefs in the High Arctic. *Geos* 15:1–5.
- Dawson, J. W. 1879. On the microscopic structure of Stromatoporidae and on Palaeozoic fossils mineralized with silicates in illustrations of *Eozoon*. *Quarterly Journal, Geological Society of London* 35:48–67.
- Day, J., & M. T. Whalen. 2002. Timing of Middle and Upper Devonian sea level events and carbonate platforms (Miette and Ancient Wall) development in western Alberta. *Geological Society of America, Abstracts with Programs* 34(6):15.
- Dean, M. T., A. W. Owen, & C. J. Dooris. 2008. Palaeoecology of the *Chaetetes*-Band: A numerical approach. *Annual Meeting Abstracts*. The Palaeontological Association Newsletter 69:50–51.
- Debrenne, Françoise. 1958. Sur quelques Archaeocyatha du Jebel Taïssa (Anti-Atlas occidental). Service des Mines et de Carte Géologique du Maroc, Notes et Mémoires 16(143):59–67, 2 fig., 3 pl.
- Debrenne, Françoise. 1959a. Un nouveau genre d'Archaeocyatha du Cambrien marocain. Société Géologique de France, Comptes Rendus Sommaires des Séances 1959(1):14–15, 1 fig.
- Debrenne, Françoise. 1959b. Archaeocyatha des lentilles calcaires de Tazemmourt (Anti-Atlas). Service des Mines et de Carte Géologique du Maroc, Notes et Mémoires 18(147):7–26, 5 pl.
- Debrenne, Françoise. 1960. Deux nouveaux genres d'Archaeocyathidés du Cambrien marocain. Société Géologique de France, Comptes Rendus Sommaires des Séances 1960(5):118, 2 fig.
- Debrenne, Françoise. 1961. Nouvelles données sur la faune d'Archaeocyatha du Jebel Taïssa (Anti-Atlas occidental). Service des Mines et de Carte Géologique du Maroc, Notes et Mémoires 20(152):7–37, 6 pl.
- Debrenne, Françoise. 1963a. Archaeocyatha du Maroc. Genres et espèces-types des collections étudiées de 1958 à 1962. Service des Mines et de Carte Géologique du Maroc, Notes et Mémoires 23(172):21–23.
- Debrenne, Françoise. 1963b. Archaeocyatha d'Espagne. Etude des collections allemandes. In F. Debrenne & F. Lotze, eds., *Die Archaeocyatha des spanischen Kambriums*. Akademie der Wissenschaften und der Literatur, Mainz, Abhandlungen der Mathematisch-Naturwissenschaftlichen Klasse 1963(2):123–143, 5 pl.
- Debrenne, Françoise. 1964. Archaeocyatha: Contribution à l'étude des faunes cambriennes du Maroc, de Sardaigne et de France. Service des Mines et de Carte Géologique du Maroc, Notes et Mémoires 179: vol. 1, 265 p., 69 fig., 26 tables; vol. 2, 52 pl.
- Debrenne, Françoise. 1965. *Halyocyathus*, nouveau genre d'Archéocyathe du Cambrien marocain.

- Société Géologique de France, Comptes Rendus Sommaires des Séances 1965(4):143–144, 2 fig.
- Debrenne, Françoise. 1969a. Lower Cambrian Archaeocyatha from the Ajax Mine, Beltana, South Australia. British Museum (Natural History), Bulletin, Geology 17(7):295–376, 15 fig., 18 pl.
- Debrenne, Françoise. 1969b. Archaeocyatha. Questions de nomenclature. Société Géologique de France, Comptes Rendus Sommaires des Séances 1969(7):262–263.
- Debrenne, Françoise. 1970a. A revision of Australian genera of Archaeocyatha. Royal Society of South Australia, Transactions 94:21–48, 2 pl., 1 table.
- Debrenne, Françoise. 1970b. *Coscinocyathus* Bornemann, 1884 (Archaeocyatha): Proposed designation of a type-species under the plenary powers. Z.N.(S.) 1924. Bulletin of Zoological Nomenclature 27:207–208.
- Debrenne, Françoise. 1971. Nouvelles données sur la faune d'Archéocyathes de Sardaigne. Société Géologique de France, Comptes Rendus Sommaires des Séances 1971(34):193–194, 3 fig.
- Debrenne, Françoise. 1972. Nouvelle faune d'Archéocyathes de Sardaigne. Annales de Paléontologie (Invertébrés) 58:169–188, 1 fig., 5 pl., 2 tables.
- Debrenne, Françoise. 1973. Modifications de la porosité primaire de la muraille externe chez les archéocyathes réguliers. Annales de Paléontologie (Invertébrés) 59:3–24, 9 fig., 4 pl.
- Debrenne, Françoise. 1974a. Les archéocyathes irréguliers d'Ajax Mine (Cambrien inférieur, Australie du Sud). Bulletin du Muséum National d'Histoire Naturelle (série 3) 195:185–258, 39 fig., 3 tables.
- Debrenne, Françoise. 1974b. Anatomie et systématique des archéocyathes réguliers sans plancher d'Ajax Mine (Cambrien inférieur, Australie du Sud). Géobios 7:91–138, 3 fig., pl. 19–28.
- Debrenne, Françoise. 1974c. K revizii roda *Paranacyathus* Bedford R. et W. R., 1937 [On the revision of the genus *Paranacyathus* Bedford R. et W. R., 1937]. In I. T. Zhuravleva & A. Yu. Rozanov, eds., Biostratigrafiya i Paleontologiya Nizhnego Kembriya Evropy i Severnoy Azii [Lower Cambrian Biostratigraphy and Paleontology of Europe and Northern Asia]. Nauka. Moscow. p. 167–178, 2 fig., pl. 19–22.
- Debrenne, Françoise. 1975. Archaeocyatha provenant de blocs erratiques des Tillites de Dwyka (Afrique du Sud). Annals of the South African Museum 67:331–361, 11 fig., 1 table.
- Debrenne, Françoise. 1977a. Archéocyathes du Jbel Irhoud (Jebilet-Maroc). Société Géologique et Minéralogique de Bretagne, Bulletin (série C) 7:93–136, 8 fig., 14 pl., 3 tables.
- Debrenne, Françoise. 1977b. *Diplocyathellus* new name for the archaeocyathid *Diplocyathus* Debrenne, 1974, not Allman, 1888. Journal of Paleontology 51:1222.
- Debrenne, Françoise. 1983. Archaeocyathids: Morphology and affinity. In T. W. Broadhead, ed., Sponges and Spongiomorphs: Notes for a Short Course, Organized by J. K. Rigby and C. W. Stearn. University of Tennessee Department of Geological Sciences, Studies in Geology 7:178–190, 6 fig.
- Debrenne, Françoise. 1987. Archaeocyatha from Mexico in the Smithsonian Institution. New data from recent collectings. Géobios 20:267–273, 1 pl.
- Debrenne, Françoise. 1991. Morphogenèse et systématique des Archaeocyatha (spongaires, Cambrien inférieur). Géobios 13:217–222, 3 fig.
- Debrenne, Françoise. 1992. Diversification of Archaeocyatha. In J. H. Lipps & P. W. Singer, eds., Origin and Early Evolution of the Metazoa. Plenum Press. New York. p. 425–443, 6 fig., 4 tables.
- Debrenne, Françoise. 1996. Bornemann and the archaeocyath world. Terra Nostra, Vortrage, Tagung der Paläontologischen Gesellschaft 66:35.
- Debrenne, Françoise, & Pierre Courjault-Radé. 1994. Répartition paléogéographique des archéocyathes et délimitation des zones intertropicales au Cambrien inférieur. Société Géologique de France, Bulletin 165:459–467, 4 fig., 1 pl.
- Debrenne, Françoise, & Max Debrenne. 1995. Archaeocyaths of the Lower Cambrian of Morocco. Berlingeria Special Issue 2:121–145, 3 fig., 4 pl., 4 tables.
- Debrenne, Françoise, Max Debrenne, & A. Yu. Rozanov. 1976. On the simultaneous presence of synapticulae and tabulae in regular archaeocyathids. Géobios 9:101–105, 1 pl.
- Debrenne, Françoise, & Anna Gandin. 1985. La formation de Gonnese (Cambrian, SW Sardaigne): Biostratigraphie, paléogeographie, paléoécologie des archéocyathes. Société Géologique de France, Bulletin 8:531–540, 2 fig., 2 pl.
- Debrenne, Françoise, Anna Gandin, & Max Debrenne. 1993. Calcaires à archéocyathes du Membre da la Vallée de Matoppa (Formation de Nebida), Cambrien inférieur du sud-ouest de la Sardaigne (Italie). Annales de Paléontologie (Vertébrés-Invertébrés) 79:77–118, 4 fig., 6 pl., 1 table.
- Debrenne, Françoise, Anna Gandin, & R. A. Gangloff. 1990. Analyse sédimentologique et paléontologie de calcaires organogènes du Cambrien inférieur de Battle Mountain (Nevada, U.S.A.). Annales de Paléontologie (Vertébrés-Invertébrés) 76:73–119, 5 fig., 3 pl., 12 tables.
- Debrenne, Françoise, Anna Gandin, & G. L. Pillola. 1989. Biostratigraphy and depositional setting of Punta Manna Member type-section (Nebida Formation, Lower Cambrian, SW Sardinia, Italy). Rivista Italiana di Paleontologia e Stratigrafia 94:483–514, 6 fig., pl. 52–56.
- Debrenne, Françoise, Anna Gandin, & S. M. Rowland. 1989. Lower Cambrian bioconstructions in northwestern Mexico (Sonora). Depositional setting, paleoecology and systematics of archaeocyaths. Géobios 22:137–195, 13 fig., 12 pl.
- Debrenne, Françoise, Anna Gandin, & Andrey Zhuravlev. 1991. Palaeoecological and sedimentological remarks on some Lower Cambrian sediments of the Yangtze platform (China). Société Géologique de France, Bulletin 162:575–583, 6 fig., 3 pl.
- Debrenne, Françoise, R. A. Gangloff, & A. Yu. Zhuravlev. 1990. Archaeocyatha from the Krol-Tal succession (Lesser Himalaya): An invalid record. Geological Magazine 127:361–362, 1 fig.

- Debrenne, Françoise, & D. I. Gravestock. 1990. Archaeocyatha from the Sellick Hill Formation and Fork Tree Limestone on Fleurieu Peninsula, South Australia. In J. B. Jago & P. J. Moore, eds., The Evolution of a Late Precambrian-Early Palaeozoic Rift Complex: the Adelaide Geosyncline. Geological Society of Australia, Special Publication 16:290–309, 9 fig.
- Debrenne, Françoise, & N. P. James. 1981. Reef-associated archaeocyathans from the Lower Cambrian of Labrador and Newfoundland. *Palaeontology* 24:343–378, 6 fig., pl. 48–55.
- Debrenne, Françoise, & Jiang Zhiwen. 1989. Archaeocyathan fauna from the Lower Cambrian of Yunnan (China). Société Géologique de France, Bulletin 5:819–828, 3 fig., 2 pl.
- Debrenne, Françoise, & P. D. Kruse. 1986. Shackleton Limestone archaeocyaths. *Alcheringa* 10:235–278, 35 fig., 4 tables.
- Debrenne, Françoise, & P. D. Kruse. 1989. Cambrian Antarctic archaeocyaths. In J. A. Crame, ed., Origins and Evolution of the Antarctic Biota. Geological Society Special Publication 47:15–28, 5 fig., 1 table.
- Debrenne, Françoise, P. D. Kruse, & Zhang Sengui. 1991. An Asian compound archaeocyath. *Alcheringa* 15:285–291, 5 fig.
- Debrenne, Françoise, & J. G. Lafuste. 1972. Microstructure de squelette de quelques Sphinctozaires (exemples pris dans le Permien du Jebel Tebagha et le Crétacé d'Angleterre). *Bulletin de la Société Géologique de France* 14(7):325–330, 9 fig., pl. 8–10.
- Debrenne, Françoise, & J. G. Lafuste. 1979. *Buschmannia roeringi* (Kaever & Richter, 1976), a so-called archaeocyatha, and the problem of the Precambrian or Cambrian age of the Nama System (S.W. Africa). *Geological Magazine* 116:143–144, 2 pl.
- Debrenne, Françoise, J. G. Lafuste, & A. Yu. Zhuravlev. 1990. Coralomorphes et spongiomorphes à l'aube du Cambrien. *Bulletin du Muséum National d'Histoire Naturelle* (4e série, section C, Sciences de la Terre) 12(1):17–39.
- Debrenne, Françoise, I. D. Maidanskaya, & A. Yu. Zhuravlev. 1999. Faunal migrations of archaeocyaths and Early Cambrian plate dynamics. Société Géologique de France, Bulletin 170:189–194, 3 fig.
- Debrenne, Françoise, & Joachim Reitner. 2001. Sponges, cnidarians, and ctenophores. In A. Yu. Zhuravlev & R. Riding, eds., The Ecology of the Cambrian Radiation. Columbia University Press. New York. p. 301–325, 7 fig.
- Debrenne, Françoise, & A. Yu. Rozanov. 1972. O kol'tsevykh strukturakh naruzhnykh stenok arkheot-siat [On annular structures in archaeocyathan outer walls]. In I. T. Zhuravleva, ed., Problemy Biostratigrafii i Paleontologii Nizhnego Kembriya Sibiri [Problems of Lower Cambrian Biostratigraphy and Paleontology of Siberia]. Nauka. Moscow. p. 235–237, pl. 42–44.
- Debrenne, Françoise, & A. Yu. Rozanov. 1978. Associations et interactions organiques chez les archéocyathes (Cambrien inférieur). Société Géologique de France, Comptes Rendus Sommaires des Séances 1978(5):235–237, 6 fig.
- Debrenne, Françoise, & A. Yu. Rozanov. 1983. Paleo-geographic and stratigraphic distribution of regular Archaeocyatha (Lower Cambrian fossils). *Géobios* 16:727–736, 1 table.
- Debrenne, Françoise, & A. Yu. Rozanov. 1985. O rode *Dokidocyathus* Taylor [On the genus *Dokidocyathus* Taylor]. *Paleontologicheskiy Zhurnal* 1985(3):111–112, 1 fig.
- Debrenne, Françoise, A. Yu. Rozanov, & G. F. Webers. 1984. Upper Cambrian Archaeocyatha from Antarctica. *Geological Magazine* 121:291–299, 6 fig.
- Debrenne, Françoise, A. Yu. Rozanov, & A. Yu. Zhuravlev. 1990. Regular Archaeocyaths. Éditions du Centre National de la Recherche Scientifique, Cahiers de Paléontologie. Paris. 218 p., 68 fig., 32 pl., 9 tables.
- Debrenne, Françoise, Henri Termier, & Geneviève Termier. 1970. Radiocyatha. Une nouvelle classe d'organismes primitifs du Cambrien inférieur. Société Géologique de France, Bulletin 12:120–125, pl. 4–6.
- Debrenne, Françoise, Henri Termier, & Geneviève Termier. 1971. Sur de nouveaux représentants de la classe des Radiocyatha. Essai sur l'évolution des métazoaires primitifs. Société Géologique de France, Bulletin 13:439–444, pl. 29–30, 2 tables.
- Debrenne, Françoise, & Jean Vacelet. 1984. Archaeocyatha: Is the sponge model consistent with their structural organisation? *Palaeontographica Americana* 54:358–369, 2 pl., 3 tables.
- Debrenne, Françoise, & Yu. I. Voronin. 1971. Znachenie poristosti peregorodok dlya klassifikatsii ajacicyathids [The significance of septal porosity for the classification of ajacicyathids]. *Paleontologicheskiy Zhurnal* 1971(3):26–31, 2 fig., 1 pl.
- Debrenne, Françoise, & Rachel Wood. 1990. A new Cambrian sphinctozoan sponge from North America, its relationship to archaeocyaths and the nature of early sphinctozoans. *Geological Magazine* 127:435–443, 5 fig., 1 table.
- Debrenne, Françoise, & A. Yu. Zhuravlev. 1990. New irregular archaeocyath taxa. *Géobios* 23:299–305, 1 pl.
- Debrenne, Françoise, & A. Yu. Zhuravlev. 1992a. Les calicules, structure intervallaire chaetétide chez les archéocyathes irréguliers. *Géobios* 25:595–598, 1 fig., 1 pl.
- Debrenne, F., & A. Yu. Zhuravlev. 1992b. Irregular archaeocyaths. Morphology, Ontogeny, Systematics, Biostratigraphy, Palaeoecology. *Cahiers de Paléontologie*. Editions du C.N.R.S. Paris. p. 1–212, 52 fig., 38 pl., 9 tables.
- Debrenne, F., & A. Yu. Zhuravlev. 1994. Archaeocyathan affinities: How deep can we go into the systematic affiliation of an extinct group? In R. W. M. van Soest, T. M. G. Van Kempen, & J. C. Braekman, eds., Sponges in Time and Space. A. A. Balkema. Rotterdam. p. 3–12, fig. 1–6.
- Debrenne, Françoise, & A. Yu. Zhuravlev. 1996. Archaeocyatha, palaeoecology: A Cambrian sessile fauna. In A. Cherchi, ed., Autecology of Selected Fossil Organisms: Achievements and Problems. Societa Paleontologia Italiana, Bollettino, Special Volume 3:77–85, 3 fig., 1 pl.

- Debrenne, Françoise, & A. Yu. Zhuravlev. 1997. Cambrian food web: A brief review. *Géobios* 20:181–188, 1 table.
- Debrenne, Françoise, & A. Yu. Zhuravlev. 2000. New Cambrian archaeocyath taxa. *Géobios* 33:49–50.
- Debrenne, Françoise, A. Yu. Zhuravlev, & D. I. Gravestock. 1993. Etheridge collection: Systematic revision of some of the first archaeocyaths discovered in Australia. *Alcheringa* 17:179–183, 4 fig., 1 table.
- Debrenne, Françoise, A. Yu. Zhuravlev, & P. D. Kruse. 2002. Class Archaeocyatha Bornemann, 1884. Bibliography of Class Archaeocyatha. In J. N. A. Hooper & R. W. M. van Soest, eds., *Systema Porifera. A Guide to the Classification of Sponges*, vol. 2. Kluwer Academic/Plenum Publishers. New York, Boston, Dordrecht, London, & Moscow. p. 1539–1699, 75 fig.
- Debrenne, Françoise, A. Yu. Zhuravlev, & P. D. Kruse. 2003. *Erbocyathus* Zhuravleva, 1955 (Archaeocyatha): Proposed conservation. *Bulletin of Zoological Nomenclature* 60:12–15.
- Debrenne, F., A. Yu. Zhuravlev, & P. D. Kruse. 2012a. Part E, Revised, Volume, Chapter 18A: General features of the Archaeocyatha. *Treatise Online* 38:1–102, 34 fig.
- Debrenne, F., A. Yu. Zhuravlev, & P. D. Kruse. 2012b. Part E, Revised, Volume, Chapter 19: Systematic Descriptions: Archaeocyatha. *Treatise Online* 50:1–186, 134 fig.
- Debrenne, F., A. Yu. Zhuravlev, & P. D. Kruse. 2012c. Part E, Revised, Volume, Chapter 20C: Archaeocyatha and Cribriocyatha *nomin nuda*: Taxa not Archaeocyatha, Radiocyatha, or Cribriocyatha. *Treatise Online* 56:1–4.
- Debrenne, Françoise, A. Yu. Zhuravlev, & A. Yu. Rozanov. 1988. Novye rody pravil'nykh dnishchevykh i odnokamernykh arkheotsiat iz nizhnego kembriya Sibiri [New genera of regular tabulate and single-chambered archaeocyaths from the Lower Cambrian of Siberia]. *Paleontologicheskiy Zhurnal* 1988(4):97–99, 1 fig.
- Debrenne, Françoise, A. Yu. Zhuravlev, & A. Yu. Rozanov. 1989. Pravil'nye arkheotsaty [Regular archaeocyaths]. *Paleontologicheskiy Institut, Akademiya Nauk SSSR, Trudy* 233:199 p., 70 fig., 32 pl., 7 tables.
- Debrenne, Françoise, I. T. Zhuravleva, & A. Yu. Rozanov. 1973. Grebenchatye dnishcha u arkheotsiat i ikh sistematicheskoe znachenie [Pectinate tabulae in archaeocyaths and their systematic significance]. In I. T. Zhuravleva, ed., *Problemy Paleontologii i Biostratigrafi Nizhnego Kembriya Sibiri i Dal'nego Vostoka* [Problems of Lower Cambrian Paleontology and Biostratigraphy of Siberia and the Far East]. Nauka. Novosibirsk. p. 33–38, 6 fig.
- Defrance, M. J. L. 1829. *Verticillites*. In F. G. Levrault, ed., *Dictionnaire des Sciences Naturelles*, vol. 58. F. G. Levrault. Paris. p. 5–6.
- de Goeij, J. M., H. van den Berg, M. M. van Oostveen, E. H. G. Epping, & F. C. van Duyt. 2008. Major bulk dissolved organic carbon (DOC) removal by encrusting coral reef cavity sponges. *Marine Ecology Progress Series* 357:139–151.
- Dehorne, Yvonne. 1915. Sur un Actinostromaridé du Cénomanien. *Comptes Rendus des Séances de l'Académie des Sciences, Paris* 161:733–735.
- Dehorne, Yvonne. 1916. Sur un stromatopore millépoïde du Portlandien. *Comptes Rendus des Séances de l'Académie des Sciences, Paris* 162:430–433.
- Dehorne, Yvonne. 1917a. Sur un Stromatopore nouveau du Lusitanien de Cezimbra (Portugal). *Comptes rendus hebdomadaires des Séances de l'Académie des Sciences, Paris* 164:117–119.
- Dehorne, Yvonne. 1917b. Sur la présence du genre *Stromatoporella* Nicholson dans le Sénonien des environs de Martigues (Bouches-du-Rhône). *Comptes rendus hebdomadaires des Séances de l'Académie des Sciences, Paris* 165:67–70.
- Dehorne, Yvonne. 1918. Sur les analogies de la forme branchue chez les Polypiers constructeurs des récifs actuels avec celle des Stromatopores des terrains secondaires. *Comptes Rendus des Séances de l'Académie des Sciences, Paris* 166:219–222.
- Dehorne, Yvonne. 1920. Les Stromatoporoïdés des terrains secondaires. Mémoire pour servir à l'Explication de la Carte géologique détaillé de la France. Ministère des Travaux Publics. Paris. 170 p., 17 pl.
- De Koninck, L. 1863. Description of some fossils from India. *Quarterly Journal of the Geological Society of London* 19:1–19, 8 pl.
- Delage, J., & E. Héraud. 1901. *Traité de Zoologie concrète*, tome II, partie 2. Les Coelenterés. Schleicher Fr. Ed. Paris. 848 p.
- Delematte, M., G. Termier, & H. Termier. 1986. Les spongiaires de l'Aptien supérieur de Haute-Savoie (Zone Delphino-Helvétique, Alpes occidentales françaises). *Revue de Paléobiology* 5(2):311–324, 4 fig., 4 pl.
- Denayer, J. 2010. Upper Visean (Mississippian) rugose corals of the microbial-sponge-bryozoan bioherm from Kongul Yayla (Taurides, s. Turkey). *The Palaeontological Association Newsletter* 75:46.
- Dendy, Arthur. 1905. Report on the sponges collected by Professor Herdman, at Ceylon in 1902. In W. A. Herdman, ed., *Report to the Government of Ceylon on the Pearl Oyster Fisheries of the Gulf of Manaar*, part 3, supplement 18. Royal Society of London. London. p. 57–246, pl. I–XVI.
- Dendy, A., & R. W. Row. 1913. The classification and phylogeny of the calcareous sponges, with a reference list of all the described species, systematically arranged. *Proceedings of the Zoological Society, London* 47:704–813, 1 fig.
- Deng Z.-Q. 1981. Upper Permian sponges from Laibin of Guangxi. *Acta Paleontologica Sinica* 20(5):418–427, 4 pl. In Chinese with English summary.
- Deng Z.-Q. 1982a. Palaeozoic and Mesozoic sponges from Southwest China. In *Stratigraphy and Palaeontology in W. Sichuan and E. Xizang, China*, Part 2. Sichuan Renmin Chuban She. Chengdu. p. 245–258, 6 pl. In Chinese with English summary.
- Deng Z.-Q. 1982b. Note on some sponges and hydroids. *Acta Paleontologica Sinica* 21(6):709–714, 1 pl. In Chinese with English summary.
- Deng Z.-Q. 1982c. Late Palaeozoic and Mesozoic fossil sponges of Xizang. Series of the Scientific Expedi-

- tion to the Qinghai-Xizang Plateau, Palaeontology of Xizang, Part 4. Nanjing Institute of Geology and Paleontology, Chinese Academy of Sciences. Nanjing. p. 189–194, 1 pl. In Chinese with English summary.
- Deng Z.-Q. 1982d. Mesozoic Chaetetida from Xizang (Tibet). Series of the Scientific Expedition to the Qinghai-Xizang Plateau, Palaeontology of Xizang. Palaeontology of Xizang, Part 4. Science Press. Beijing. p. 195–202, 2 pl. In Chinese with English abstract.
- Deng Z.-Q. 1990. New materials on Permian sponges. *Acta Palaeontologica Sinica* 29(3):315–320, 1 pl. In Chinese with English summary.
- Deninger, Karl. 1906. Einige neue Tabulaten und Hydrozoen aus mesozoischen Ablagerungen. Neues Jahrbuch für Mineralogie, Geologie und Paläontologie (B) 21:61–70, pl. 5–7.
- Descamps, M., & D. Wintrebret. 1966. Révue et diagnose préliminaire de quelques Pyrgomorphidae et Acriidae de Madagascar (Orth. Aridoidea). *Bulletin de la Société Entomologique de France* 71:24–34.
- Desrochers, A., & P.-A. Bourque. 1989. Lower Silurian biostromes and bioherms of southern Gaspé, Quebec Appalachians. In H. H. J. Geldsetzer, N. P. James, & G. E. Tebbutt, eds., Reefs, Canada and adjacent areas. Memoir of the Canadian Society of Petroleum Geologists 13:299–303.
- Desrochers, A., & N. P. James. 1989. Middle Ordovician (Chazyan) bioherms and biostromes of the Mingan Islands, Quebec. In H. H. J. Geldsetzer, N. P. James, & G. E. Tebbutt, eds., Reefs, Canada and adjacent areas. Memoir of the Canadian Society of Petroleum Geologists 13:183–191.
- Dettman, D. L., & K. Lohmann. 1995. Microsampling carbonates for stable isotope and minor element analysis: Physical separation of samples on a 20 µm scale. *Journal of Sedimentary Research* A65:566–569.
- De Vos, L., K. Rützler, N. Boury-Esnault, C. Donaday, & J. Vacelet. 1991. Atlas of sponge morphology. Smithsonian Institution Press. Washington, D.C. 117 p.
- DeVries, D. A. 1955. Paleoecology and paleontology of a *Chaetetes* biostrome in Madison County, Iowa. Unpublished Ph.D. dissertation. University of Wisconsin. Madison. 69 p.
- Dieci, Giovanni, A. Antonacci, & R. Zardini. 1968. Le spugne cassiane (Trias medio-superiore) della regione dolomitica attorno a Cortina d'Ampezzo. *Bollettino della Società Paleontologica Italiana* 7(2):94–155, 10 fig., pl. 18–33.
- Dieci, Giovanni, A. Russo, & F. Russo. 1974a. Nota preliminare sulla microstruttura di spugne aragonitiche del Trias medio-superiore. *Bollettino della Società Paleontologica Italiana* 13:99–107, pl. 32–37.
- Dieci, Giovanni, A. Russo, & F. Russo. 1974b. Revisione del genere *Leispongia* d'Orbigny (*Sclerospongia triassica*). *Bollettino della Società Paleontologica Italiana* 13(1–2):135–146, pl. 51–53.
- Dieci, Giovanni, Antônio Russo, Franco Russo, & Maria S. Marchi. 1977. Occurrence of spicules in Triassic chaetetids and ceratoporellids. *Bollettino della Società Paleontologica Italiana* 16(2):229–238.
- Dietrich, W. O. 1919. Über die sogenannte Tabulaten des Jura und der Kreide, insbesondere die Gattung *Acantharia* Qu. *Zentralblatt für Mineralogie, Geologie und Paläontologie* 1919:208–218, 2 fig.
- Dixon, O. A., T. E. Bolton, & P. Copper. 1986. *Ellisites*, an Upper Ordovician heliolitid coral intermediate between coccoserids and proporids. *Palaeontology* 29:391–413, 4 fig., pl. 30–34.
- Döderlein, L. 1892. Über *Petrostroma schulzei*, n.g., n. sp. der Kalkschwämmen. *Verhandlungen der Deutschen Zoologischen Gesellschaft* in Heidelberg 2:143–145.
- Döderlein, L. 1897. Über die Lithonina, eine neue Gruppe von Kalkschwämmen. *Zoologisches Jahrbücher, Abteilung für Systematik, Geographie und Biologie der Thiere* 10(1):15–32, pl. 2–6.
- Döderlein, L. 1898. Über die Lithonina, eine neue Gruppe von Kalkschwämmen. *Zoologische Jahrbücher* 10:15–32.
- Dolphin, D. R., & J. E. Klovan. 1970. Stratigraphy and paleoecology of the Upper Devonian carbonate bank, Saskatchewan River crossing, Alberta. *Bulletin of Canadian Petroleum Geology* 18(3):289–331, 13 fig., 6 pl., 4 tables.
- Dong De-yuan. 1964. Stromatoporoids from the Early Carboniferous of Kwangsi and Kueichow. *Acta Palaeontologica Sinica* 12:280–299, pl. 1–6. In Chinese with English abstract.
- Dong D.-Y. 1981. Upper Jurassic stromatoporoids from northern Xizang. Series of the Scientific Expedition to the Qinghai-Xizang Plateau, Paleontology of Xizang, Book III. Nanjing Institute of Geology and Paleontology. Nanjing. p. 115–126, pl. 1–4. In Chinese.
- Dong De-yuan. 1982. Lower Ordovician stromatoporoids of northern Anhui. *Acta Palaeontologica Sinica* 21:577–583, 3 pl. In Chinese with English abstract.
- Dong De-yuan. 1983. Type and microstructure of the pillars in stromatoporoids. *Bulletin of the Nanjing Institute of Geology and Paleontology, Academia Sinica* 6:285–296. In Chinese with English summary.
- Dong Deyuan. 1984. Silurian and Lower Devonian stromatoporoids from Darhan Mumungan Joint Banner, Inner Mongolia. In Li Wen-guo, Rong Jia-yu, & Dong Deyuan, eds., Silurian and Devonian rocks and faunas of the Bateaobao area in Darhan Mumungan Joint Banner, Inner Mongolia. The Peoples' Publishing House of Inner Mongolia. p. 57–77, 10 pl. In Chinese with English abstract.
- Dong De-yuan. 1987. Stromatoporoidea. Science Press. Beijing. 182 p. In Chinese.
- Dong Deyuan. 1988. On the classification of Paleozoic stromatoporoids. *Acta Micropalaeontologica Sinica* 5:25–39. In Chinese with English summary.
- Dong De-yuan. 1991. Middle and Upper Devonian stromatoporoids from southern Qinghai and their paleoecological significance. In Devonian to Triassic Stratigraphy and Paleontology in Yushu Region, Qinghai Province, vol. 2. Nanjing University Press. Nanjing. p. 65–86. In Chinese.
- Dong De-yuan. 2001. Stromatoporoids of China. Science Press. Beijing. iv + 423 p., 29 fig., 175 pl. In Chinese with English abstract, p. 373–383.

- Dong De-yuan, & Wang Bao-yu. 1984. Paleozoic stromatoporoids from Xinjiang and their stratigraphic significance. Bulletin of the Nanjing Institute of Geology & Palaeontology, Academia Sinica 7(6):237–286, pl. 1–24. In Chinese with English abstract.
- Dong De-yuan, & Wang Cheng-yuan. 1982. Paleozoic stromatoporoids of eastern Yunnan. Bulletin of Nanjing Institute of Geology and Paleontology, Academica Sinica 4:1–40. In Chinese with English summary.
- Dong De-yuan, & Wang Mingzhou. 1983. New materials of the Upper Jurassic stromatoporoids in the Ando county of north Xizang. Acta Palaeontologica Sinica 22:413–428, pl. 1–4. In Chinese with English abstract.
- Dong De-yuan, & Yang Jing-zhi. 1978. Lower Silurian stromatoporoids from Northeastern Guizhou. Acta Palaeontologica Sinica 17(4):421–436, 6 pl. In Chinese with English abstract.
- Doronov, V. I., A. Gazdzicki, & G. K. Melnikova. 1982. Die triadiischen Riffe in südöstlichen Pamir. Facies 6:107–128, 2 fig., pl. 14–16, 1 table.
- Droser, M. L., D. J. Bottjer, P. M. Sheehan, & G. R. McGhee. 2000. Decoupling of taxonomic and ecologic severity of Phanerozoic marine mass extinction. Geology 28:675–678.
- Dullo, W.-C. 1980. Paläontologie, Fazies, und Geochemie des Dachstein-Kalk (Ober-Trias) in südwestlichen Gesäuse, Steiermark, Österreich. Facies 2:55–122, 10 fig., pl. 9–13, 6 tables.
- Dullo, W.-C. 2005. Coral growth and reef growth: A brief review. Facies 51:33–48.
- Dullo, W.-C., & R. Lein. 1980. Das Karn von Launsforf in Kärnten: Die Schwammfauna der Leckkogelschichten. Verhandlungen der geologischen Bundesanstalt Wien, Jahrgang 1981(2):25–61, 5 fig., 4 pl.
- Duncan, H. M. 1965. Mississippian chaetetid from Kentucky. In Geological Survey Research 1965. United States Geological Survey, Professional Paper 525A:A122.
- Duncan, H. M. 1966. Mississippian occurrence of *Chaetetes*. In Geological Survey Research 1966. United States Geological Survey, Professional Paper 550A:A112.
- Duncan, P. M. 1872. Third Report on the British Fossil Corals. Report of 41st Meeting of British Association for the Advancement of Science, Edinburgh 1871:116–137.
- Duncan, P. M. 1876. Notices of some deep-sea and littoral corals from the Atlantic Ocean, Caribbean, Indian, New-Zealand, Persian Gulf, and Japanese &c. seas. Zoological Society, London, Proceedings 44:428–442, pl. 38–41.
- Duncan, P. M., & James Thomson. 1867. On *Cycloctathus*, a new genus of the Cyathophyllidae with remarks on the genus *Aulophyllum*. Geological Society, London, Proceedings 170:1. Also published in Geological Magazine 4:416–417.
- Dunikowski, E. von. 1883. Die Pharetronen aus dem Cenoman von Essen und die systematische Stellung der Pharetronen. Paleontographica 29:283–323, pl. 37–40 (1–4).
- Dustan, P., & W. K. Sacco. 1982. The sclerosponges of Chalet Charibe Reef. Discovery 16:13–17.
- Dyatlova, I. N., & R. F. Sycheva. 1999. Novye dannye po biostratigrafi po nizhnego kembriya Vostochnogo Sayana [New data on Lower Cambrian biostratigraphy of East Sayan]. Stratigrafiya Geologicheskaya Korrelyatsiya 7(4):3–13, 4 fig.
- Dybowski, W. N. 1877. Die Chaetitiden der ostbaltischen Silur-Formation. Russisch-Kaiserliche Mineralogische Gesellschaft zu St. Petersburg Verhandlungen (series 2) 14(1878):1–134.
- Dzik, Jerzy. 1994. Evolution of “small shelly fossils” assemblages. Acta Palaeontologica Polonica 39(3):247–313, 37 fig.
- Ebel, G. 2000. Contrasting evolutionary flexibility in sister groups: Disparity and diversity in Mesozoic atelostomate echinoderms. Paleobiology 26:56–79.
- Edinger, E. N., P. Copper, M. J. Risk, & W. Atmojo. 2002. Oceanography and reefs of Recent and Paleozoic tropical seas. Facies 47:127–150.
- Edwards, H. M., & J. Haime. 1848. Recherches sur les Polypiers, Premier Mémoire: Observations sur la structure et le développement des Polypiers en général. Annales des Sciences Naturelles (Paris), 3ième série, Zoologie 9:37–89, pl. 4–6.
- Edwards, H. M., & J. Haime. 1851. Monographie des polypiers fossiles des terraines paleozoïques. Première Partie. Distribution Méthodique de la classe des polypes, tome 5. Archives du Muséum d’Histoire naturelle, Paris. Gide et J. Baudry, éditeurs. Paris. 502 p., 20 pl.
- Edwards, H. M., & J. Haime. 1855. A Monograph of British Fossil Corals, part 5: Corals from the Silurian Formation. Palaeontographical Society. London. p. 245–299, pl. 57–72.
- Eichwald, C. E. von. 1829. Zoologia Specialis quam Expositis Animalibus tum Vivis, tum Fossilibus Potissimum Rossiae in Universum, et Poloniae, in Specie, in Usu, Lectureum, vol. 1. J. Zawalski. Vilna. vi + 314 p., 5 pl.
- Elias, R. J. 1982. Paleoecology and biostratinomy of solitary rugose corals in the Stony Mountain Formation (Upper Ordovician), Stony Mountain, Manitoba. Canadian Journal of Earth Sciences 19:1582–1598.
- Elicki, Olaf. 1995. Lower Cambrian faunas from Germany: Ages and relations. In G. Geyer & E. Landig, eds., Morocco ’95: The Lower-Middle Cambrian standard of western Gondwana. Beringeria Special Issue 2:165–167, 3 fig.
- Elliott, G. F. 1963. Problematical microfossils from the Cretaceous and Paleocene of the Middle East. Paleontology 6(2):293–300.
- Elrick, M. 1996. Sequence stratigraphy and platform evolution of Lower-Middle Devonian carbonates, eastern Great Basin. Bulletin of The Geological Society of America 108:392–416.
- Embry, A. F., & J. E. Klovan. 1971. A Late Devonian reef tract on north-eastern Banks Island,

- N.W.T. Bulletin of Canadian Petroleum Geology 19:730–781.
- Emmerich, A., V. Zamparelli, T. Bechstädt, & R. Zühlke. 2005. The reefal margin and slope of a Middle Triassic carbonate platform: The Latemar (Dolomites, Italy). *Facies* 50:573–614, 28 fig., 2 tables.
- Engeser, T. S. 1986. Nomenklatorische Notiz zur Gattung *Dictyocoelia* Ott 1967 (“Sphinctozoa,” Porifera). Neues Jahrbuch für Geologie und Paläontologie, Monatshefte 1986(10):587–590.
- Engeser, T. S., & T. Appold. 1988. A new occurrence of the “sphinctozoan” sponge *Cassianothalamia zardinii* Reitner, 1987 (Demospongiae, Porifera) from the Leckkogel Beds (Late Carnian) of Pölling near Launsdorf (Carinthia, Austria). Mitteilungen aus dem Geologisch-Paläontologischen Institut der Universität Hamburg 67:73–87, 2 fig., 2 pl.
- Engeser, Theo S., Marc Floquet, & Joachim Reitner. 1986. Acanthochaetidae (Hadromerida, Demospongiae) from the Coniacian of Vera de Bidasa (Basque Pyrénées, northern Spain). *Geobios* 19(6):849–854, 1 pl.
- Engeser, T. S., & H. H. Neumann. 1986. Ein neuer verticillitider “Sphinctozoe” (Demospongiae, Porifera) aus dem Campan der Krappfeld-Gosau (Kärnten, Österreich). Mitteilungen aus dem Geologischen-Paläontologischen Institut der Universität Hamburg 61:149–159, 1 fig., 1 pl.
- Engeser, Theo S., & Paul D. Taylor. 1989. Supposed Triassic bryozoans in the Klipstein Collection from the Italian Dolomites redescribed as calcified demosponges. *Bulletin of the British Museum Natural History (Geology)* 45(1):39–55, 9 fig.
- Erwin, D. H. 1993. The Great Paleozoic Crisis: Life and Death in the Permian. Columbia University Press. New York. 327 p.
- Erwin, D. H. 2006. Extinction: How Life on Earth Nearly Ended 250 Million Years Ago. Princeton University Press. Princeton. 296 p.
- Erwin, D. H., S. A. Bowring, & Jin Yugan. 2002. End-Permian mass extinctions: A review. Geological Society of America, Special Paper 356:363–383, 2 fig.
- Erwin, D. H., & M. L. Droser. 1993. Elvis taxa. *Palaios* 8:623–624.
- Erwin, P. M., & R. W. Thacker. 2006. Incidence and importance of photosynthetic symbionts in shallow-water sponge communities. *Integrative and Comparative Biology* 45(6):992.
- Étallon, M. A. 1859. Études paléontologiques sur le Haut-Jura, Rayonnées du Corallien. Part III. Mémoires de la Société Jurassienne d’Émulation du Département de Doubs 3:401–553.
- Etheridge, Robert, Jr. 1890. On some Australian species of the family Archaeocathinae. Royal Society of South Australia, Transactions 13:10–22, pl. 2–3.
- Etheridge, Robert, Jr. 1895. On the occurrence of a stromatoporoid, allied to *Labechia* and *Rosenella*, in the Siluro-Devonian rocks of N. S. Wales. Records of the Geological Survey of New South Wales 4(3):134–140, pl. 14–16.
- Etheridge, Robert, Jr. 1899. On the corals of the Tamworth District, chiefly from the Moore Creek and Woolomol Limestones. *Records of the Geological Survey of New South Wales* 6:151–182.
- Fabre, Cécile, & Bernard Lauthuiliere. 2007. Relationships between growth-bands and paleoenvironmental proxies Sr/Ca and Mg/Ca in hypercalcified sponge: A micro-laser induced breakdown spectroscopy approach. *Spectrochimica Acta (part B)* 62:1537–1545.
- Fagerstrom, J. A. 1961. The fauna of the Middle Devonian Formosa reef limestone of southwestern Ontario. *Journal of Paleontology* 35:1–48.
- Fagerstrom, J. A. 1977. The stromatoporoid genus *Stictostroma* Parks, 1936: Its type species, type specimens and type locality. *Journal of Paleontology* 51:416–419.
- Fagerstrom, J. A. 1978. Modes of evolution and their chronostratigraphic significance: Evidence from Devonian stromatoporoids in the Michigan Basin. *Paleobiology* 4:381–393.
- Fagerstrom, J. A. 1982. Stromatoporoids of the Detroit River Group and Adjacent Rocks (Devonian) in the vicinity of the Michigan Basin. *Geological Survey of Canada, Bulletin* 339:vii + 81 p., 33 fig., 8 pl., 9 tables.
- Fagerstrom, J. A. 1983. Diversity, speciation, endemism and extinction in Devonian reef and level-bottom communities, eastern North America. *Coral Reefs* 2:65–70.
- Fagerstrom, J. A. 1984. The ecology and paleoecology of the Sclerospongiae and Sphinctozoa (*sensu stricto*): A review. *Palaeontographica Americana* 54:370–381, 4 fig.
- Fagerstrom, J. A. 1987. The Evolution of Reef Communities. John Wiley & Sons. New York. 600 p.
- Fagerstrom, J. A., & M. A. Bradshaw. 2002. Early Devonian reefs at Reefton, New Zealand: Guilds, origin, and paleogeographic significance. *Lethaia* 35:35–50.
- Fagerstrom, J. A., & K. M. L. Saxena. 1973. Intercostal variation in a Devonian stromatoporoid. *Lethaia* 6:155–162.
- Fagerstrom, J. A., & O. Weidlich. 1999a. The origin of the Upper Capitan-Massive Limestone (Permian), Guadalupe Mountains, New Mexico-Texas: Is it a reef? *Geological Society of America Bulletin* 111(2):159–176, 18 fig.
- Fagerstrom, J. A., & O. Weidlich. 1999b. Strengths and weaknesses of the reef guild concept and quantitative data: Application to the Upper Capitan-Massive community (Permian), Guadalupe Mountains, New Mexico-Texas. *Facies* 40:131–156, 6 fig., pl. 14–16, 5 tables.
- Fagerstrom, J. A., & R. R. West. 2011. Roles of clone-clone interactions in building reef frameworks: Principles and examples. *Facies* 57:375–394, doi: 10.1007/s10347-010-0251-z.
- Fagerstrom, J. A., R. R. West, S. Kershaw, & P. Cossey. 2000. Spatial competition among clonal organisms in extant and selected Paleozoic reef communities. *Facies* 42:1–24.
- Fan J., J. K. Rigby, & Jingwen Q. 1990. The Permian reefs of South China and comparisons with the Permian Reef Complex of the Guadalupe

- Mountains, West Texas and New Mexico. Brigham Young University Geology Studies 36:15–55, 16 fig., 11 pl.
- Fan Jiasong, J. K. Rigby, & Zhang Wei. 1991. “Hydrozoa” from the Middle and Upper Permian reefs of south China. *Journal of Paleontology* 65(1):45–68, 17 fig.
- Fan J., Wang Yu-Mao, & Wu Ya-sheng. 2002. Calcisponges and hydrozoans from Permian reefs in western Guangxi (China). *Acta Palaeontologica Sinica* 41(3):334–348, 2 fig., pl. 1–4. In Chinese with English summary.
- Fan Jiasong, & Zhang Wei. 1985. Sphinctozoans from Late Permian reefs of Lichuan, West Hubei, China. *Facies* 13:1–44, 6 fig., pl. 1–8.
- Fan Jiasong, Zhang Wei, Qi Jingwen, & Wang Jiongchang. 1987. On the main feature of Lower Permian reefs in Guangnan County, SE Yunnan Province and their frame-building organisms sphinctozoans. *Scientia Geologica Sinica* 1:50–60, 7 fig., 3 pl.
- Faul, Henry. 1943. Growth-rate of a Devonian reef coral (*Prismatophyllum*). *American Journal of Science* 241:579–582.
- Feist, R. 1991. The late Devonian trilobite crisis. *Historical Biology* 5:197–214.
- Feldman, R. M., R. E. Chapman, & J. T. Hannibal, eds. 1989. *Paleotechniques*. Paleontological Society, Special Publication 4:358 p.
- Felix, J. 1907. Eine neue Korallengattung aus dem dalmatinischen Mesozoicum. *Sitzungsberichte der Naturforschenden Gesellschaft zu Leipzig, Dreiunddreissigster Jahrgang* 1906:3–10.
- Fell, P. E. 1993. Porifera. In K. G. Adiyodi & Rita G. Adiyodi, eds., *Reproductive Biology of Invertebrates. Asexual Propagation and Reproductive Strategies, Porifera through Mollusca*, vol. 6, part A. John Wiley & Sons. Chichester, UK. p. 1–44.
- Fenninger, Alois, & G. Flajs. 1974. Zur Microstruktur rezenter und fossiler Hydrozoa. *Biomineralisation* 7:69–99, 4 fig., 10 pl.
- Fenninger, Alois, Erik Flügel, & E. Hötzl. 1963. Bericht über paläontologische-mikrofaziale Untersuchungen an ostalpinen Plassenkalken. *Anzeiger der Österreichischen Akademie der Wissenschaften, Mathematisch-Naturwissenschaftliche Klasse* 17:234–327.
- Fenninger, Alois, & H. Hötzl. 1965. Die Hydrozoa und Tabulozoa der Tressenstein- und Plassenkalke (Ober-Jura). Mitteilungen des Museums für Bergbau, Geologie und Technik am Landesmuseum “Joanneum,” Graz 27:61 p., 8 pl.
- Finks, R. M. 1960. Late Paleozoic sponge fauna of the Texas region: The siliceous sponges. *American Museum of Natural History Bulletin* 120(1):1–160, 77 fig., pl. 1–50.
- Finks, R. M. 1970. The evolution and ecologic history of sponges during Palaeozoic times. In W. G. Fry, ed., *The Biology of the Porifera. Symposia of the Zoological Society of London* 25:3–22.
- Finks, R. M. 1971. Sponge zonation in the west Texas Permian. *Smithsonian Miscellaneous Contributions, Paleontology* 3:285–300, 3 fig.
- Finks, R. M. 1983. Pharetronida: Inozoa and Sphinctozoia. In T. W. Broadhead, ed., *Sponges and Spongiomorphs. Notes for a Short Course*. University of Tennessee, Department of Geological Sciences, Studies in Geology 7. University of Tennessee. Knoxville. p. 55–69, 4 fig.
- Finks, R. M. 1986. “Spicules” in *Thamnopora*. *Fossil Cnidaria* 15(1.2):22.
- Finks, R. M. 1990. Late Paleozoic pharetronid radiation in the Texas region. In K. Rützler, ed., *New Perspectives in Sponge Biology*. Smithsonian Institution Press. Washington, D.C. p. 17–24, 6 fig.
- Finks, R. M. 1995. Some new genera of Paleozoic calcareous sponges. *University of Kansas Paleontological Contributions (new series)* 6:1–9, 11 fig.
- Finks, R. M. 1997. New name for a Permian calcareous sponge and some related corrections. *Journal of Paleontology* 71:352.
- Finks, R. M. 2003a. Functional morphology and adaptation. In R. L. Kaesler, ed., *Treatise on Invertebrate Paleontology*. Part E, Porifera (revised), vol. 2. The Geological Society of America & The University of Kansas Paleontological Institute. Boulder, Colorado, & Lawrence, Kansas. p. 211–222.
- Finks, R. M. 2003b. Evolution and ecologic history of sponges during Paleozoic times. In R. L. Kaesler, ed., *Treatise on Invertebrate Paleontology*. Part E, Porifera (revised), vol. 2. Geological Society of America & The University of Kansas Paleontological Institute. Boulder, Colorado, & Lawrence, Kansas. p. 261–274.
- Finks, R. M. 2010a. Hypercalcified demosponges and the end-Permian extinction. *Global and Planetary Change* 73:141–148.
- Finks, R. M. 2010b. The sponge family Guadalupiidae in the Texas Permian. *Journal of Paleontology* 84(5):821–847.
- Finks, R. M., K. Hollocher, & K. J. Thies. 2011. A major Eocene sponge fauna (Castle Hayne Formation, North Carolina). *Journal of the North Carolina Academy of Science* 127:39–175.
- Finks, R. M., R. E. H. Reid, & J. Keith Rigby. 2003. Introduction to the Porifera. In R. L. Kaesler, ed., *Treatise on Invertebrate Paleontology*, Part E, Revised, Porifera, vol. 2. The Geological Society of America & The University of Kansas. Boulder, Colorado & Lawrence, Kansas. xxvii + 349 p., 135 fig., 10 tables.
- Finks, R. M., R. E. H. Reid, & J. Keith Rigby. 2004. Porifera (Demospongia, Hexactinellida, Heteractinida, Calcarea). In R. L. Kaesler, ed., *Treatise on Invertebrate Paleontology*, Part E, Porifera (revised), vol. 3. The Geological Society of America & The University of Kansas Paleontological Institute. Boulder, Colorado, & Lawrence, Kansas. xxxi + 872 p., 506 fig., 1 table.
- Finks, R. M., & J. Keith Rigby. 2004a. Paleozoic demosponges. In R. L. Kaesler, ed., *Treatise on Invertebrate Paleontology*. Part E, Porifera (revised), vol. 3. The Geological Society of America & The University of Kansas Paleontological Institute. Boulder, Colorado, & Lawrence, Kansas. p. 9–173, fig. 1–126.

- Finks, R. M., & J. Keith Rigby. 2004b. Paleozoic hexactinellid sponges. In R. L. Kaesler, ed., Treatise on Invertebrate Paleontology. Part E, Porifera (revised), vol. 3. The Geological Society of America & The University of Kansas Paleontological Institute. Boulder, Colorado, & Lawrence, Kansas. p. 319–448, fig. 200–295.
- Finks, R. M., & J. Keith Rigby. 2004c. Heteractinida. In R. L. Kaesler ed., Treatise on Invertebrate Paleontology, Part E, Porifera (revised), vol. 3. The Geological Society of America & The University of Kansas Paleontological Institute. Boulder, Colorado, & Lawrence, Kansas. p. 557–583, fig. 365–383.
- Finks, R. M., & J. Keith Rigby. 2004d. Hypercalcified sponges. In R. L. Kaesler, ed., Treatise on Invertebrate Paleontology, Part E, Porifera (revised), vol. 3. The Geological Society of America & The University of Kansas Paleontological Institute. Boulder, Colorado, & Lawrence, Kansas. p. 585–764, fig. 384–504.
- Finnegan, S., K. Bergman, J. M. Eiler, D. S. Jones, D. A. Fike, I. Eisenman, N. C. Hughes, A. K. Tripati, & W. W. Fischer. 2011. The magnitude and duration of Late Ordovician–Early Silurian glaciation. *Science* 331:903–906.
- Fischbuch, N. R. 1962. Stromatoporoid zones of the Kaybob Reef, Alberta. *Journal of the Alberta Society of Petroleum Geologists* 10:62–72.
- Fischbuch, N. R. 1968. Stratigraphy, Devonian Swan Hills reef complexes of central Alberta. *Bulletin of Canadian Petroleum Geology* 16:446–587.
- Fischbuch, N. R. 1970. *Amphipora* and *Euryamphipora* (Stromatoporoidea) from the Devonian of western Canada. *Palaeontology* 13:64–75.
- Fischer, A. G. 1962. Fossilien aus Riffkalken der alpinen Trias: *Cheiilosporites* Wöhner, eine Foraminifere? *Paläontologische Zeitschrift* 36:118–124, pl. 13–14.
- Fischer, A. G. 1984. The two Phanerozoic supercycles. In W. A. Berggren & J. A. van Couvering, eds., *Catastrophes and Earth History: The New Uniformitarianism*. Princeton University Press. Princeton, New Jersey. p. 129–150.
- Fischer, Jean-Claude. 1970. Révision et essai de classification des Chaetetida (Cnidaria) post-Paléozoïques. *Annales de Paléontologie (Invertébrés)* 56(2):151–220.
- Fischer, Rudolf, Carlos Galli Oliver, & Joachim Reitner. 1989. Skeletal structure, growth, and paleoecology of the patch reef-building polychaete worm *Diplochaetetes mexicanus* Wilson, 1986 from the Oligocene of Baja California (Mexico). *Geobios* 22(5):761–775, 2 fig., 4 pl.
- Fischer von Waldheim [de Waldheim], G. F. 1830. *Oryctographie du Gouvernement de Moscou*, 1st edit. A. Semen. Moscow. ix + 28 p., pl. A–G, i–xlv, i–xvi.
- Fischer von Waldheim [de Waldheim], G. F. 1837. *Oryctographie du Gouvernement de Moscou*, 2nd edit. Auguste Semen. Moscow. v + 202 p. + xv–xvii, pl. A–G, i–lvii.
- Fisher, D. W. 1968. *Geology of the Pittsburgh and Rouses Point, New York–Vermont, Quadrangles*. New York State Museum and Science Service. Map and Chart Series 10:i–vi, 1–51, 37 fig., 2 pl. (map & cross sections).
- Flajs, G. 1977. Die Ultrastrukturendes Kalkalgenkellets. *Palaearctigraphica* (Abteilung B) 160:69–128, 16 fig., 17 pl., 1 table.
- Fleming, John. 1828a. *Spongidae*. In *A Study of British Animals, Exhibiting the Descriptive Characters and Systematical Arrangement of the Genera and Species of Quadrupeds, Birds, Reptiles, Fishes, Mollusca, and Radiata of the United Kingdom; including the Indigenous, and Extirpated, and Extinct Kinds, together with Periodical and Occasional Visitants*. Bell and Bradfute. Edinburgh. p. 518–527.
- Fleming, John. 1828b. *A Study of British Animals*. Bell and Bradfute. Edinburgh. xxiii + 565 p.
- Flerova, N. A. 1969. Klasse Hydrozoa, Gruppa Stromatoporoidea [Class Hydrozoa, Group Stromatoporoidea]. In E. A. Modzalevskaya, ed., *Polevoi atlas Siluriiskoi devonskoi i rannekamennouglonoi fauny Dal'nego Vostoka* [Field atlas of Silurian, Devonian and Early Carboniferous faunas of the eastern Far East]. Ministerstvo Geologii SSSR, Vsesouznyi Nauchno Issledovatel'skii Geologicheskii Institut (VSEGEI). Dal'nevostochnoe Geologicheskoe Upravlenie. Moscow. p. 25–27.
- Flügel, Erik. 1958. *Pseudoactinodictyon* n. gen. und *Actinodictyon* Parks (Stromatoporoidea). *Senckenbergiana Lethaea* 39(3/4):135–151, 1 fig., pl. 1–2, 3 tables.
- Flügel, Erik. 1959. Die Gattung *Actinostroma* Nicholson und ihre Arten (Stromatoporoidea). *Annalen Naturhistorisches Museum in Wien* 63:90–273, pl. 6–7, 27 tables.
- Flügel, Erik. 1960. *Cassianostroma* n. gen., die erste Hydrozoae aus den Cassianer-Schichten (Ober-Ladin) der Südalpen. *Neues Jahrbuch für Geologie und Paläontologie, Monatshefte* 1960:49–59, 5 fig.
- Flügel, Erik. 1961a. Bryozoen aus den Zlambach-Schichten (Rhat) des Salzkammergutes, Österreich. *Österreich Akademie der Wissenschaften, Mathematisch-Naturwissenschaftliche Klasse, Abhandlungen* 170:265–272.
- Flügel, Erik. 1961b. Gattungsliste der fossilen Hydrozoen. *Neues Jahrbuch für Geologie und Paläontologie, Abhandlungen* 113(1):68–94.
- Flügel, Erik. 1962. Der Biostratigraphische Wert der Stromatoporen im Silur und Devon in Sonder-Abdruck aus dem Symposiums-Band der 2. Internationalen Arbeitstagung über die Silur/Devon-Grenze und die Stratigraphie von Silur und Devon, Bonn-Bruxelles, 1960. Schweizerbart'sche Verlagsbuchhandlung. Stuttgart. p. 80–86.
- Flügel, Erik. 1963. Revision der triadischen bryozoen und tabulaten. *Sitzungsberichte-Oesterreichische Akademie der Wissenschaften, Mathematisch-Naturwissenschaftliche Klasse, Abteilung I* (1) 172:225–252.
- Flügel, Erik. 1969. Stromatoporen aus dem Silur des Östlichen Iran. *Neues Jahrbuch für Geologie und Paläontologie Monatshefte* 1969(4):209–219, 6 fig.
- Flügel, Erik. 1975. Fossile Hydrozoen: Kenntnisstand und Probleme. *Paläontologische Zeitschrift* 49(4):369–406.

- Flügel, Erik. 1981. Paleoecology and facies of Upper Triassic reefs in the northern calcareous Alps. In D. F. Toomey, ed., European fossil reef models. Society of Economic Paleontologists and Mineralogists, Special Publication 30:291–359, 26 fig.
- Flügel, Erik. 2003. Triassic reef patterns. In Wolfgang Kiessling, Erik Flügel, & Jan Golonka, eds., Phanerozoic Reef Patterns. Society of Economic Paleontologists and Mineralogists, Special Publication 72:391–463, 22 fig., 3 tables.
- Flügel, Erik, P. Di Stefano, & Baba Senowbari-Daryan. 1991. Microfacies and depositional structure of the allochthonous carbonate base-of-slope deposits: The Late Permian Pietra de Salomone Megablock, Sosio Valley (Western Sicily). Facies 25:147–186, 9 fig., pl. 36–48, 5 tables.
- Flügel, Erik, & E. Flügel-Kahler. 1968. Stromatoporoida (Hydrozoa palaeozoica). Fossilium Catalogus I: Animalia. Dr. W. Junk. The Hague. Part 1, vol. 115, p. 1–416; Part 2, vol. 116, p. 417–681.
- Flügel, Erik, & E. Flügel-Kahler. 1992. Phanerozoic reef evolution: Basic questions and database. Facies 26:167–277.
- Flügel, Erik, & Wolfgang Kiessling. 2002. Patterns of Phanerozoic reef crisis. In Wolfgang Kiessling, Erik Flügel, & Jan Golonka, eds., Phanerozoic Reef Patterns. SEPM (Society for Sedimentary Geology) Special Publication 72:691–733, 13 fig.
- Flügel, Erik, V. Kochansky-Devide, & A. Ramovs. 1984. A Middle Permian calcisponge/algal/cement reef: Straz near Bled, Slovenia. Facies 10:179–256, 7 fig., pl. 24–42.
- Flügel, Erik, R. Lein, & Baba Senowbari-Daryan. 1978. Kalkschwämme, Hydrozoen, Algen und Mikroproblematika aus den Cidarisschichten (Karn, Obertrias) der Mürztaler Alpen (Steiermark) und des Gosaukammes (Oberösterreich). Mitteilungen der Gesellschaft der Geologie und Bergbaustudenten in Österreich 25:153–195, 5 fig., pl. 24–29, 1 table.
- Flügel, Erik, & J. Reinhardt. 1989. Uppermost Permian reefs in Skyros (Greece) and Sichuan (China): Implications for the Late Permian extinction event. Palaios 4:502–518, 13 fig., 2 pl.
- Flügel, Erik, & Baba Senowbari-Daryan. 2001. Triassic Reefs of the Tethys. In G. D. Stanley Jr., ed., The History and Sedimentology of Ancient Reef Systems. Topics in Geobiology, vol. 17. Kluwer Academic/Plenum Publishers. New York. p. 217–249, 3 fig.
- Flügel, Erik, & I. B. Singh. 2003. Stromatoporoid-grade and other sponge fossils from the Upper Krol Formation of the Lesser Himalaya (India): Implications for the biotic evolution around the Precambrian-Cambrian boundary interval. Facies 49:351–372, 2 fig., pl. 61–66, 1 table.
- Flügel, Erik, & Eberhard Sy. 1959. Die Hydrozoen der Trias. Neues Jahrbuch für Geologie und Paläontologie, Abhandlungen 109(1):108 p., 3 pl.
- Flügel, Erik, F. Velledits, Baba Senowbari-Daryan, & Peter Riedel. 1991–1992. Rifforganismen aus “Wettersteinkalken” (Karn?) des Bükk-Gebirges, Ungarn. Geologisch-paläontologische Mitteilungen, Universität Innsbruck 18:35–62, 5 fig., 9 pl.
- Flügel, H. W. 1973. *Peroniella baloghi*, a new Inozoa from the Upper Permian of the Bükk-Mountains (Hungary). Acta Mineralogica-Petrographica Szeged 21(1):49–53, 1 pl.
- Foerste, A. F. 1909. Preliminary notes on Cincinnati and Lexington fossils. Bulletin of the Science Laboratories of Denison University 14:289–334, pl. 7–11.
- Fois, E., & M. Gaetani. 1981. The northern margin of the Civetta Buildup. Evolution during the Ladinian and the Carnian. Rivista Italiana di Paleontologia e Stratigrafia 86:469–542, 18 fig., pl. 49–56.
- Fois, E., & M. Gaetani. 1984. The recovery of reef-building communities and the role of cnidarians in carbonate sequences of the Middle Triassic (Anisian) in the Italian Dolomites. Paleontographica Americana 54:191–200, 9 fig.
- Fomichev, V. D. 1953. Korally Rugosa i Stratigrafiya Sredne-i Verkhne-kam-menougl'nykh i Permskikh Otlozheniy Donetskogo Basseyna [Rugose Corals and Stratigraphy of Middle and Upper Carboniferous and Permian Deposits of the Donets Basin]. Vsesoyuzniy Nauchno-Issledovatel'skiy Geologicheskij Institut, Trudy, Gosudarstvennoe Izdatel'stvo Geologicheskoy Literatury. Moscow. 622 p., 44 pl., atlas.
- Fomin, Yu. M. 1963. O nakhodke arkheotsiatopodovnykh organizmov v srednedevonskikh otlozheniyakh vostochnogo sklona yuzhnogo Urala [On the discovery of archaeocyath-like organisms in Middle Devonian deposits of the eastern slope of the southern Urals]. Paleontologicheskiy Zhurnal 1963(2):17–19, 2 fig.
- Fonin, V. D. 1960. O novom semeystve kembriyskikh metatsiatid: Prismocystidae Fonin, fam. n. [On a new family of Cambrian metacyathides: Prismocystidae Fonin, fam. n.]. Akademiya Nauk SSSR, Doklady 135:725–727, 1 fig.
- Fonin, V. D. 1963. K poznaniyu tenial'nykh arkheotsiat Altai-Sayanskoy skladchatoy oblasti [Contribution to knowledge of taenial archaeocyaths from the Altay-Sayan fold region]. Paleontologicheskiy Zhurnal 1963(4):14–29, 8 fig., pl. 3.
- Fonin, V. D. 1981. Nekotorye itogi izucheniya dictional'nykh arkheotsiat [Some results of the study of dictyonal archaeocyaths]. Moskovskoe Obshchestvo Ispytatelei Prirody, Byulleten', seriya geologicheskaya 56(5):116.
- Fonin, V. D. 1983. Novye nepravil'nye arkheotsiaty iz nizhnemembriyskikh otlozheniy severo-zapadnoy Mongoliy [New irregular archaeocyaths from the Lower Cambrian deposits of northwestern Mongolia]. Sovmestnaya Sovetskno-Mongolskaya Paleontologicheskaya Ekspeditsiya, Trudy 20:11–14, pl. 2.
- Fonin, V. D. 1985. Tenial'nye arkheotsiaty Altai-Sayanskoy skladchatoy oblasti [Taenial archaeocyaths of the Altay-Sayan fold region]. Paleontologicheskiy Institut, Akademiya Nauk SSSR, Trudy 209:144 p., 24 fig., 32 pl., 2 tables.
- Fonin, V. D. 1990. Prizmotsiatidy nizhnego kembriya Tuvy [Prismocystids of the Lower Cambrian of Tuva]. Institu Geologii i Geofiziki, Sibirskoe Otdelenie, Akademiya Nauk SSSR, Trudy 765:147–158, 4 fig., pl. 19–23.

- Foote, Mike. 1997. The evolution of morphological diversity. *Annual Review of Ecology and Systematics* 28:129–152.
- Ford, S. W. 1873a. On some new species of fossils from the Primordial or Potsdam Group of Rensselaer county, N.Y. (Lower Potsdam). *American Journal of Science and Arts* (series 3) 5:211–215, 3 fig.
- Ford, S. W. 1873b. Remarks on the distribution of fossils in the Lower Potsdam rocks at Troy, N.Y., with a description of four new species. *American Journal of Science and Arts* (series 3) 6:134–140, 2 fig.
- Ford, S. W. 1878. Descriptions of two new species of Primordial fossils. *American Journal of Science and Arts* (series 3) 15:124–127, 1 fig.
- Fortey, R. A., & L. R. M. Cocks. 2003. Palaeontological evidence bearing on global Ordovician-Silurian continental reconstructions. *Earth-Science Reviews* 61:245–307.
- Fortey, R. A., & L. R. M. Cocks. 2005. Late Ordovician global warming: The Boda event. *Geology* 33:405–408.
- Fortey, R. A., D. A. T. Harper, J. K. Ingham, A. W. Owen, M. A. Parkes, A. W. A. Rushton, & N. H. Woodcock. 2000. A revised correlation of Ordovician rocks in the British Isles. *The Geological Society of London Special Report* 24:i–iii, 83 p.
- Fortey, R. A., D. A. T. Harper, J. K. Ingham, A. W. Owen, & A. W. A. Rushton. 1995. A revision of the Ordovician series and stages from the historical area. *Geological Magazine* 132:15–30.
- Fosså, J. H., P. B. Mortensen, & D. M. Furevik. 2002. The deep-water coral *Lophelia pertusa* in Norwegian waters: Distribution and fishery impacts. *Hydrobiologia* 471:1–12.
- Frakes, L. A., J. E. Francis, & J. I. Syktus. 1992. Climate Modes of the Phanerozoic. Cambridge University Press. Cambridge. 274 p.
- Frech, F. 1886. Die Cyathophylliden und Zaphrentiden des deutschen Mitteldevon, eingeleitet durch den Versuch einer Gliederung desselben. *Palaeontologisches Abhandlungen* 3(3):115–234 (1–120), 23 fig., 2 tables, table 13–20 (1–8).
- Frech, F. 1890. Die Korallen der Trias. *Palaeontographica* 37:1–116, 21 pl.
- Fredericks, Georgiy. 1925. Ussuriskiy verkhniy paleozoy. II. Permskie brachiopody s mysya Kaluzina [Ussuri Upper Paleozoic. II. Permian brachiopods of Cape Kaluzin]. Materialy po Geologii i Poleznyim Iskopaemym Dal'nego Vostoka 40:1–30, 4 pl.
- de Freitas, T. A. 1987. A Silurian sphinctozoan sponge from east-central Cornwallis Island, Canadian Arctic. *Canadian Journal of Earth Sciences* 24:840–844, 3 fig.
- de Freitas, T. A., O. A. Dixon, & U. Mayr. 1993. Silurian pinnacle reefs of the Canadian Arctic. *Palaios* 8:172–182.
- Friakova, O., A. Galle, J. Hladil, & J. Kalvoda. 1985. A lower Famennian fauna from the top of the reef limestones at Mokrá (Moravia, Czechoslovakia). *Newsletters on Stratigraphy* 15(1):43–56.
- Fritz, M. A., & R. H. Waines. 1956. Stromatoporoids from the Upper Abitibi River Limestone. *Proceedings of the Geological Association of Canada* 9:87–126.
- Fritz, W. H., M. P. Cecile, B. S. Norford, D. Morrow, & H. H. J. Geldsetzer. 1991. Cambrian to Middle Devonian assemblages. In H. Gabrielse & C. J. Yorath, eds., *Geology of Canada 4. Geology of the Cordilleran Orogen in Canada*. Geological Survey of Canada. Ottawa. p. 151–218, 49 fig.
- Frohlich, H., & D. Barthel. 1997. Silica uptake of the marine sponge *Halichondria panicea* in Keil Bight. *Marine Biology* 128:115–125.
- Fromentel, M. E. de. 1860a. Catalogue raisonné des Spongiaires de l'étage Néocomien. *Bulletin de la Société des Sciences historiques et naturelles de l'Yonne* (series 4) 14:1–19, pl. 1–4.
- Fromentel, M. E. de. 1860b. Introduction à l'étude des éponges fossiles. *Société Linnaéenne de Normandie, Mémoires*, Caen 11:1–50.
- Fromentel, M. E. de. 1861. Introduction à l'étude des polypiers fossiles. F. Savy. Paris. 357 p.
- Fry, W. G. 1979. Taxonomy, the individual and the sponge. In G. Larwood & B. R. Rosen, eds., *Biology and Systematics of Colonial Organisms. Systematics Association, Special Volume 11*. Academic Press. London. p. 49–80, 15 fig.
- Frykman, P. 1986. Diagenesis of Silurian bioherms in the Klintberg Formation, Gotland, Sweden. In J. H. Schroeder & G. H. Purser, eds., *Reef Diagenesis*. Springer-Verlag. Berlin. p. 399–423.
- Fuchtbauer, H., & Lawrence A. Hardie. 1976. Experimentally determined homogeneous distribution coefficients for precipitated magnesian calcites: Application to marine carbonate cements. *Geological Society of America Abstracts with Programs* 8:877.
- Fuchtbauer, H., & Lawrence A. Hardie. 1980. Comparison of experimental and natural magnesian calcites. *International Society of Sedimentologists Meeting Abstracts*. Bochum. p. 167–169.
- Fürsich, F. T., & J. Wendt. 1977. Biostratinomy and palaeoecology of the Cassian Formation (Triassic) of the Southern Alps. *Palaeogeography, Palaeoclimatology, Palaeoecology* 22:257–323.
- Gabilly, Jean, & J. G. Lafuste. 1957. *Palaeomillepora liasica* nov. gen. nov. sp., Hydrozoaire nouveau du Liass de Vendée. *Compte Rendu Sommaire et Bulletin de la Société Géologique de France* (series 6) 7:355–360, pl. 24b.
- Galle, A., O. Friakova, J. Hladil, J. Kalvoda, & V. Zukalova. 1988. Biostratigraphy of the Middle and Upper Devonian carbonates of Moravia and Czechoslovakia. In N. J. McMillan, A. F. Embry, & D. J. Glass, eds., *Devonian System of the World*, vol. III. Canadian Society of Petroleum Geologists. Calgary. p. 633–645.
- Gallissian, M. F., & J. Vacelet. 1990. Fertilization and nutrition of the oocyte in the calcified sponge *Petrosbiona massiliiana*. In K. Rützler, ed., *New Perspectives in Sponge Biology*. Smithsonian Institution Press. Washington, D.C. p. 175–181.
- Gallissian, M. F., & J. Vacelet. 1992. Ultrastructure of the oocyte and embryo of the calcified sponge, *Petrosbiona massiliiana* (Porifera, Calcarea). *Zoomorphology* 112:133–141.
- Galloway, J. J. 1957. Structure and classification of the Stromatoporoidea. *Bulletins of American Paleontology* 37(164):345–480, pl. 31–37.

- Galloway, J. J. 1960. Devonian stromatoporoids from the Lower Mackenzie Valley. *Journal of Paleontology* 34:620–636.
- Galloway, J. J., & G. M. Ehlers. 1960. Some Middle Devonian stromatoporoids from Michigan and southwestern Ontario. *University of Michigan, Contributions from the Museum of Paleontology* 15(4):39–120.
- Galloway, J. J., & Joseph St. Jean Jr. 1955. The type of the stromatoporoid species *Stromatocerium rugosum* Hall. *American Museum Novitates* 1728:1–12, 7 fig.
- Galloway, J. J., & Joseph St. Jean Jr. 1957. Middle Devonian Stromatoporoidea of Indiana, Kentucky and Ohio. *Bulletins of American Paleontology* 37:25–308.
- Galloway, J. J., & Joseph St. Jean Jr. 1961. Ordovician Stromatoporoidea of North America. *Bulletins of American Paleontology* 43(194):5–119, pl. 1–13.
- Gandin, Anna, & Françoise Debrenne. 1984. Lower Cambrian bioconstructions in southwestern Sardinia (Italy). *Géobios, Mémoire spécial* 8:231–240, 1 fig., 1 pl., 1 table.
- Gandin, Anna, & Françoise Debrenne. 2010. Distribution of archaeocyath-calcimicrobial bioconstructions on the Early Cambrian shelves. *Palaeoworld* 19:222–241, 12 fig., 1 table.
- Gandin, Anna, Françoise Debrenne, & Max Debrenne. 2007. Anatomy of the Early Cambrian 'La Sentinella' reef complex, Serra Scoris, SW Sardinia, Italy. In J. J. Álvaro, Markus Aretz, Frédéric Boulvain, Axel Munnecke, Daniel Vachard, & Emmanuelle Vennin, eds., *Palaeozoic Reefs and Bioaccumulations: Climatic and Evolutionary Controls*. Geological Society, London, Special Publications 275: 29–50, 16 fig., 1 table.
- Gandin, Anna, Nello Minzoni, & Pierre Courjault-Radé. 1987. Shelf to basin transition in the Cambrian-Lower Ordovician of Sardinia (Italy). *Geologische Rundschau* 76:827–836, 2 fig.
- Gangloff, R. A. 1990. An unusual archaeocyath assemblage from Alaska, tectonic and paleogeographic implications for the Lower Cambrian of western North America. In L. N. Repina & A. Yu. Zhuravlev, eds., *Tretiy Mezhdunarodnyy Simpozium po Kembriyskoy Sisteme, 1–9 avgusta 1990 g.*, SSSR, g. Novosibirsk. Tezisy Dokladov [Third International Symposium on the Cambrian System, 1–9 August 1990, Novosibirsk, USSR. Abstracts]. Institut Geologii i Geofiziki, Sibirske Otdelenie, Akademiya Nauk SSSR. Novosibirsk, p. 97.
- Gao, J., & P. Copper. 1997. Growth rates of middle Paleozoic corals and sponges, Early Silurian of eastern Canada. *Proceedings of the 8th Coral Reef Symposium* 2:1651–1656.
- García-Bellido, D. C. 2002. Poríferos fósiles del Paleozoico de la Península Ibérica. Unpublished Ph.D. dissertation. Complutense University of Madrid. Madrid. 327 p.
- García-Bellido, D. C., & J. K. Rigby. 2004. Devonian and Carboniferous sponges from Spain. *Journal of Paleontology* 78(3):431–445, 15 fig.
- García-Bellido, D. C., & Sergio Rodríguez. 2005. Palaeobiogeographical relationships of poriferan and coral assemblages during the late Carboniferous and the closure of the western Palaeotethys Sea-Panthalassan Ocean connection. *Palaeogeography, Palaeoclimatology, Palaeoecology* 219:321–331, 2 fig., 4 tables, doi: 10.1016/j.palaeo.2005.01.004.
- García-Bellido, D. C., Baba Senowbari-Daryan, & J. K. Rigby. 2004. *Cystothalamia vandegraaffi* new species and other sphinctozoan sponges from the Upper Carboniferous of Spain. *Journal of Paleontology* 78(6):1037–1055, 15 fig.
- Garwood, E. J. 1914. Some new rock-building organisms from the Lower Carboniferous beds of Westmorland. *Geological Magazine (Decade VI)*, vol. 1 (issue 6):265–271, pl. 21. doi:10.1017/S0016756800196955.
- Gautret, Pascale. 1985. Organisation de la phase minérale chez *Vaceletia crypta* (Vacelet) démosponge, sphinctozoaire actuelle. Comparaison avec de formes aragonitiques du Trias de Turquie. *Geobios* 18(5):553–562, 2 fig., 4 pl.
- Gautret, Pascale. 1986. Utilisation taxonomique des caractères microstructuraux du squelette aspiculaire des Spongaires: Etude du mode de formation des microstructures attribuées au type sphérolitique. *Annales de Paléontologie* 72:75–110.
- Gautret, Pascale. 1987. Diagenetic and original non-fibrous microstructures within Recent and Triassic hypercalcified sponges. *Revue de Paleobiologie* 6(1):81–88.
- Gautret, Pascale., & J. P. Cuif. 1989. Microstructure granulaire calcique de trois sphinctozoaires du Trias supérieur des Dolomites et de Turquie. *Annales de Paléontologie (Vert.-Invert.)* 75(4):171–186, 3 pl., 1 table.
- Gautret, Pascale, Y. Dauphin, & J.-P. Cuif. 1994. Une application taxonomique de la microanalyse des éléments mineur dans les tissus aragonitiques fibreux de constructeurs triassique (Démosponges et Scléractiniaries). *Annales de Paléontologie* 80(2):89–106.
- Gautret, Pascale, F. Ezzoubair, & J.-P. Cuif. 1992. Recherche sur les affinités des Spongiomorphidae Frech, 1890. 1: Caractéristiques microstructurales et minéralogiques de *Spongiomorpha acyclica* Frech, 1890. *Geobios* 25(3):345–355.
- Gautret, Pascale, & Frederic Marin. 1993. Diagenetic tendencies in aragonitic fibrous structures of corals and calcified demosponges from the Triassic of Turkey. *Comptes Rendus de l'Académie des Sciences, Paris (series 2)* 316(9):1319–1325.
- Gautret, Pascale, & Saloua Razgallah. 1987. Architecture et microstructure des Chaetétides du Permien du Jebel Tebagha (Sud-Tunisie). *Annals de Paléontologie* 73(2):59–82.
- Gautret, Pascale, Joachim Reitner, & Frederic Marin. 1996. Mineralization events during growth of the coralline sponges *Acanthochaetes* and *Vaceletia*. *Bulletin de l'Institut océanographique de Monaco* no. spécial 14:325–334.
- Gautret, Pascale, Jean Vacelet, & J.-P. Cuif. 1991. Caractéristiques des spicules et du squelette carbonaté des espèces actuelles du genre *Merlia* (Demosponges, Merliida) et comparaison avec des Chaetétides fossiles.

- Bulletin du Muséum National d'Histoire Naturelle, Paris (4e série) 13(sect. A):289–307.
- Geldsetzer, H. H. J., W. D. Goodfellow, & D. J. McLaren. 1993. The Frasnian/Famennian extinction event in a stable cratonic shelf setting: Trout River, Northwest Territories, Canada. *Palaeogeography, Palaeoclimatology, Palaeoecology* 104:81–95.
- Germovsek, Cveto. 1954. Zgornjejurski Hidrozoji iz okolice Novega Mesta [Hydrozoa of Upper Jurassic in the environs of Novo Mesto]. Sprejeto na seji. Razprave, Slovenske Akademije Znanosti in Umetnosti 4(2):341–386. In Slovenian with French summary.
- Geyer, Gerd, Ed Landing, & Wolfram Heldmaier. 1995. Faunas and deposition environments of the Cambrian of the Moroccan Atlas regions. *Beringeria*, Special Issue 2:47–119, 26 fig.
- Geyer, Gerd, & J. H. Shergold. 2000. The quest for internationally recognized divisions of Cambrian time. *Episodes* 23:188–195, 1 table.
- Giattini, G. B. 1902. Fossili del Lovcen nel Montenegro. *Rivista Italiana di Paleontologia* 8:62–66.
- Gibson, M. A., & T. W. Broadhead. 1989. Species-specific growth responses of favositid corals to soft-bottom substrates. *Lethaia* 22:287–299.
- Gillette, Tracy. 1947. The Clinton of western and central New York. *New York State Museum Bulletin* Number 341:191 p., 20 fig., 4 tables.
- Gilis, Melany, Alain Baronnet, Phillippe Dubois, Laurent Legras, Olivier Grauby, & Phillippe Willenz. 2012. Biologically controlled mineralization in the hypercalcified sponge *Petrobiona massiliiana* (Calcarea, Calcaronea). *Journal of Structural Biology* 178 (issue 3): 279–289.
- Ginn, B. K., A. Logan, & M. L. H. Thomas. 2000. Sponge ecology on sublittoral hard substrates in a high current velocity area. *Estuarine, Coastal, and Shelf Science* 50:403–414.
- Girty, G. H. 1895. A revision of the sponges and coelenterates of the Lower Helderberg Group of New York. 49th Annual Report of the New York State Geologist 2:261–309.
- Girty, G. H. 1908a. The Guadalupian Fauna. United States Geological Survey, Professional Paper 58:651 p., 31 pl.
- Girty, G. H. 1908b. On some new and old species of Carboniferous fossils. *Proceedings of the U.S. National Museum* 34:281–303, pl. 14–21.
- Girty, G. H. 1913. A Report on Upper Paleozoic fossils collected in China in 1903–1904. In Bailey Willis, Eliot Blackwelder, R. H. Sargent, Friedrich Hirth, C. D. Walcott, S. Weller, & G. H. Girty, eds., Research in China, vol. 3. Carnegie Institute of Washington, Publication 54:297–334.
- Girty, G. H. 1915. Fauna of the Wewoka Formation of Oklahoma. United States Geological Survey, Bulletin 544: 17–18, 2 fig., 1 pl.
- Gischler, E. 1995. Current and wind induced facies patterns on a Devonian atoll: Iberg Reef, Harz Mts., Germany. *Palaios* 10:180–189.
- Glaessner, M. F. 1962. Precambrian fossils. *Biological Review* 37:467–494.
- Glaessner, M. F. 1980. Pseudofossils from the Precambrian, including "Buschmannia" and "Praesolenopora." *Geological Magazine* 117:199–200.
- Glass, L. M., & D. Phillips. 2006. The Kalkarindji continental flood basalt province: A new Cambrian large igneous province in Australia with possible links to faunal extinctions. *Geology* 34:461–464, 3 fig., 1 table.
- Goldfuss, G. A. 1826. *Petrefacta Germaniae*, Band 1, Heft 1. Arnz & Co. Düsseldorf. p. 1–76, pl. xxv.
- Goldfuss, G. A. 1829. *Petrefacta Germaniae oder Abbildungen und Beschreibungen der Perrefecten Deutschlands und der angrenzenden Lander*, Band 1, Heft 2. Unter Mitwirkung des Grafen George zu Münster. Düsseldorf. p. 77–164, pl. xxvi–l.
- Goldfuss, G. A. 1831. *Petrefacta Germaniae oder Abbildungen und Beschreibungen der Perrefecten Deutschlands und der angrenzenden Lander*, Band 1, Heft 3. Unter Mitwirkung des Grafen George zu Münster. Düsseldorf. p. 165–240, pl. li–lxii.
- Goldfuss, G. A. 1833. *Petrefacta Germaniae oder Abbildungen und Beschreibungen der Perrefecten Deutschlands und der angrenzenden Lander*, Band 1, Heft 4. Unter Mitwirkung des Grafen George zu Münster. Düsseldorf. p. 241–252.
- Golonka, Jan. 2002. Plate-tectonic maps of the Phanerozoic. In Wolfgang Kiessling, Erik Flügel, & Jan Golonka, eds., *Phanerozoic Reef Patterns*. SEPM (Society for Sedimentary Geology) Special Publication 72:21–75.
- Gómez-Herguedas, Alberto, & Sergio Rodríguez. 2009. Palaeoenvironmental analysis based on rugose corals and microfacies: A case study at La Cornuda section (early Serpukhovian, Guadiato Area, SW Spain). *Lethaia* 42:39–54.
- Gong Y. M., & Xu Rusu. 2003. Conodont apatite $\delta^{18}\text{O}$ signatures indicate climatic cooling as a trigger of the late Devonian extinction: Comment and Reply. *Geology* 31:383.
- González, P. D., M. F. Tortello, S. E. Damborenea, M. Naipauer, A. M. Sato, & R. Varela. 2013. Archaeocyathids from South America: Review and a new record. *Geological Journal* 48: 114–125, 7 fig.
- Gordienko, I. V., A. V. Filimonov, O. R. Minina, M. A. Gornova, A. Ya. Medvedeva, V. S. Klimuk, A. L. Elbaev, & O. Tomurtogoo. 2007. Dzhida island-arc system in the Paleoasian Ocean: Structure and main stages of Vendian-Paleozoic geodynamic evolution. *Russian Geology and Geophysics* 48(1):91–106, 10 fig., 3 tables.
- Gordon, W. T. 1920. Scottish National Antarctic Expedition 1902–1904: Cambrian organic remains from a dredging in the Weddell Sea. Royal Society of Edinburgh, *Transactions* 52:681–714, 2 fig., 7 pl.
- Gorsky, I. I. 1938. Nekotorye Stromatoporoida iz paleozoiskikh otlozenii Novoĭ Zemli [Some stromatoporoids from Paleozoic beds of Novaya Zemlya]. Trudy Arkhicheskogo Instituta (Leningrad) 101:7–45, 7 pl., 2 tables. In Russian with English translation, p. 26–41.
- Gould, S. J. 1980. Crazy old Randolph Kirkpatrick. In S. J. Gould, *The Panda's Thumb*. W. W. Norton. New York. p. 225–235.
- Gould, S. J. 1985. The paradox of the first tier. *Paleobiology* 11:2–12.

- Gould, S. J. 1989. Wonderful Life: The Burgess shale and the nature of history. W. W. Norton. New York. 347 p.
- Gozalo, Rodolfo, Eladio Lifán, M. E. Dies, J. A. Gámez Vintaned, & Eduardo Mayoral. 2007. The Lower-Middle Cambrian boundary in the Mediterranean subprovince. In U. Linnemann, R. D. Nance, P. Kraft, & G. Zulauf, eds., The Evolution of the Rheic Ocean: From Avalonian-Cadomian active margin to Alleghenian-Variscan collision. Geological Society of America, Special Paper 423:359–373, 6 fig.
- Grabau, A. W., & W. H. Sherzer. 1910. The Monroe Formation of southern Michigan and adjoining basins. Michigan Geological and Biological Survey (Geological Series 1) 2:87–94.
- Grabau, A. W., & H. W. Shimer. 1909. North American Index Fossils, vol. 1. A. G. Seiler. New York. 853 p., 1210 fig.
- Gradstein, F. M., & J. Ogg. 1996. A Phanerozoic time scale. Episodes 19:3–5.
- Gradstein, F. M., J. G. Ogg, & A. G. Smith. 2004. A Geologic Time Scale 2004. Cambridge University Press. Cambridge, UK. 589 p. [Other contributors include F. P. Agterberg, J. R. Ali, W. Bleeker, H. Brinkhuus, R. A. Cooper, V. Davydov, P. Gibbard, F. Hilgen, L. Hinnov, J. J. Hooker, M. R. House, R. J. Howarth, A. H. Knoll, J. Laskar, L. Lourens, H.-P. Luterbacher, J. M. McArthur, M. J. Melchin, S. Monechi, K. A. Plumb, J. Powell, I. Raffi, L. J. Robb, U. Röhl, P. M. Sadler, A. Sanfilippo, B. Schmitz, N. J. Shackleton, J. H. Shergold, G. A. Shields, H. Strauss, J. Van Dam, T. van Kolfschoten, J. Veizer, M. Villeneuve, B. R. Wardlaw, & D. Wilson.]
- Gradstein, F. M., Ogg, J. C., Schmidtz, M. D., & Ogg, G. M., eds. 2012. The Geologic Time Scale 2012. 2 vol. Elsevier. Amsterdam. 1176 p. DOI: 10.1016/B978-0-444-59425-9.00004-4. [Other contributors include F. P. Agterberg, J. Altermann, D. E. Anthonissen, L. E. Babcock, B. L. Beard, A. G. Beu, T. R. Becker, A. F. Boyes, J. A. Catt, B. D. Cramer, R. A. Cooper, P. J. Crutzen, J. A. van Dam, V. I. Davydov, J. G. Gehling, P. Gibbard, S. R. Gradstein, E. T. Gray, E. L. Grossman, O. Hammer, W. K. Hartmann, C. M. Henderson, A. C. Hill, F. J. Hillgen, L. A. Hinnov, P. F. Hoffman, C. J. Hollis, J. J. Hooker, R. J. Howarth, C. Huang, C. M. Johnson, J. F. Kasting, H. Kerp, D. Korn, W. Krijgsman, L. J. Lourens, J. M. McArthur, B. A. MacGabhann, M. A. Maslin, M. J. Melchin, V. A. Melezhik, G. M. Narbonne, A. P. Nutman, A. Paytan, S. Peng, D. Papineau, B. Peucker-Ehrnbrink, B. Pillans, W. E. Piller, F. Pirajno, G. E. Ravizza, P. M. Sadler, M. A. Saltzman, G. A. Shields, M. D. Simmons, R. P. Speiger, W. Steffen, K. L. Tanaka, E. Thomas, N. Vandenberghe, Van Kruskamp, B. R. Wardlaw, D. S. Wilson, S. Xiao, J. Zalasiewicz, A. C. Zhou.]
- Grahn, Yngve, & M. V. Caputo. 1992. Early Silurian glaciations in Brazil. Palaeogeography, Palaeoclimatology, Palaeoecology 99:9–15.
- Grant, R. E. 1836. Animal Kingdom. In R. B. Todd, ed., The Cyclopaedia of Anatomy and Physiology, vol. 1. Sherwood, Gilbert, & Piper. London. p. 107–118.
- Gravestock, D. I. 1983. Structure and function of the exothecal tissue of *Somphycyathus coralloides* Taylor and allied regular Archaeocyatha. Association of Australasian Palaeontologists, Memoir 1:67–74, 5 fig., 1 table.
- Gravestock, D. I. 1984. Archaeocyatha from lower parts of the Lower Cambrian carbonate sequence in South Australia. Association of Australasian Palaeontologists, Memoir 2:139 p., 64 fig., 1 table.
- Gravestock, D. I., E. M. Alexander, Yu. E. Demidenko, N. V. Esakova, L. E. Holmer, J. B. Jago, Lin Tianrui, L. M. Mel'nikova, P. Yu. Parkhaev, A. Yu. Rozanov, G. T. Ushatinskaya, Zang Wenlong, E. A. Zhegallo, & A. Yu. Zhuravlev. 2001. The Cambrian biostratigraphy of the Stansbury Basin, South Australia. Palaeontological Institute, Russian Academy of Sciences, Transactions 282:1–344, 26 fig., 54 pl., 2 tables.
- Gray, D. I. 1980. Spicule pseudomorphs in a new Palaeozoic chaetetid, and its sclerosponge affinities. Palaeontology 23(4):803–820, 5 fig., pl. 102–103, 2 tables.
- Gray, J. E. 1842. Northern Zoological Gallery, Room II, III, Radiated animals. In Synopsis of the Contents of the British Museum, 44th edit. British Museum. London. p. 128–135.
- Gray, J. E. 1867. Notes on the arrangement of sponges, with the descriptions of some new genera. Proceedings of the Zoological Society of London 2:492–558, pl. xxvii–xxviii.
- Gray, J. E. 1872. Notes on the classification of sponges. Annals and Magazine of Natural History (series 4) 9(54):442–461.
- Greggs, R. G. 1959. Archaeocyatha from the Colville and Salmo areas of Washington and British Columbia. Journal of Paleontology 33:63–75, pl. 11–14.
- de Gregorio, A. 1930. Sul Permiano di Sicilia (Fossili del calcare con Fusulina di Palazzo Adriano). Annals of Geology and Paleontology 52:1–70, 21 pl.
- Gregory, J. W. 1898. *Millestroma*, a Cretaceous milliporoid coral from Egypt. Geological Magazine (new series, decade IV) 5:337–342, pl. 13.
- Guernet, C., & G. Termier. 1969. Sur un Sphincozoaire (Spongiaire) du Permien de l'Eubée (Grèce). *Amblysiphonella canaliculata* nov. sp. Annales de la Société Géologique de Normandie 91(2):141–143, 2 fig., 1 pl.
- Gundrum, L. 1979. Demosponges as substrates: An example from the Pennsylvanian of North America. Lethaia 12:105–119.
- Gürich, G. 1896. Das Palaeozoicum des Polischen Mittelgebirges. Verhandlungen der Russisch-Kaiserlichen Mineralogischen Gesellschaft zu St. Petersburg (series 2) 32:1–539.
- Gutschick, R. C. 1965. *Pterotocrinus* from the Kinkaid Limestone (Chester, Mississippian) of Illinois and Kentucky. Journal of Paleontology 39(4):636–646, 6 fig., 2 pl.
- Haas, O. 1909. Bericht über neue Aufsammlungen in den Zlambach-Mergeln der Fischerwiese bei Alt-Aussee. Beiträge zur Paläontologie und Geologie von Österreich-Ungarns und des Orients. Mitteilungen des geologischen und paläontologischen Instituts der Universität Wien 22:143–167, 2 pl.

- Haase-Schramm, A., F. Böhm, A. Eisenhauer, W.-C. Dullo, M. M. Joachimski, B. Hansen, & J. Reitner. 2003. Sr/Ca ratios and oxygen isotopes from sclerosponges: Temperature history of the Caribbean mixed layer and thermocline during the Little Ice Age. *Paleoceanography* 18(3):1–15.
- Haase-Schramm, A., F. Böhm, A. Eisenhauer, D. Garbe-Schönberg, W.-C. Dullo, & J. Reitner. 2005. Annual to interannual temperature variability in the Caribbean during the Maunder sunspot minimum. *Paleoceanography* 20:8 p., doi: 10.1029/2005PA001137.
- Haeckel, E. 1872. System der Kalkschwämme (Calcospongien oder Grantien). Verlag von Georg Reimer. Berlin. 418 p.
- Haimé, J. 1854. Description des bryozoaires fossiles de la formation jurassique. Mémoires de Société Géologique du France, Paris (series 2) tome V, mémoire 2:157–218, pl. vi–xi.
- Hajdu, Eduardo. 2002. Family Hamacanthidae Gray, 1872. In J. N. A. Hooper & R. W. M. van Soest, eds., *Systema Porifera: A Guide to the Classification of Sponges*, vol. 1. Kluwer Academic/Plenum Publishers. New York, Boston, Dordrecht, London, & Moscow. p. 665–668.
- Hajdu, Eduardo, & R. W. M. van Soest. 2002. Family Merliidae Kirkpatrick, 1908. In J. N. A. Hooper & R. W. M. van Soest, eds., *Systema Porifera: A Guide to the Classification of Sponges*, vol. 1. Kluwer Academic/Plenum Publishers. New York, Boston, Dordrecht, London, & Moscow. p. 691–693.
- Hall, J. 1847. Paleontology of New York. Containing descriptions of the organic remains of the Lower Division of the New York System, vol. 1. Natural History of New York. New York State Geological Survey. Albany. 339 p.
- Hall, J., & R. Whitfield. 1873. Description of new species of fossils from the Devonian rocks of Iowa. 23rd Annual Report, New York State Cabinet. Regents of the University of the State of New York. p. 223–239.
- Hallam, A. 1990. The end-Triassic mass extinction event. Geological Society of America Special Paper 247:577–583.
- Hallam, A. 1996. Major bio-events in the Triassic and Jurassic. In O. H. Walliser, ed., *Global Events and Event Stratigraphy*. Springer. Berlin. p. 265–283, 5 fig.
- Hallam, A. 2002. How catastrophic was the end-Triassic mass extinction? *Lethaia* 35:147–157.
- Hallam, A. 2004. Catastrophes and Lesser Calamities: The causes of mass extinctions. Oxford University Press. Oxford, UK. 274 p.
- Hallam, A., & W. D. Goodfellow. 1990. Facies and geochemical evidence bearing on the end-Triassic disappearance of the Alpine reef ecosystem. *Historical Biology* 4:131–138.
- Hallam, A., & P. B. Wignall. 1997. *Mass Extinctions and Their Aftermath*. Oxford University Press. Oxford. 320 p.
- Hamdi, Bahaeddin. 1995. Treatise on the Geology of Iran. Vol. 20, Precambrian-Cambrian Deposits in Iran. Geological Survey of Iran. Tehran. 535 + 11 p., 30 fig., 68 pl.
- Hamilton, Warren. 1970. The Uralides and the motion of the Russian and Siberian Platforms. *Geological Society of America Bulletin* 81:2553–2576.
- Hammer, O. 1999. Computer-aided study of growth patterns in tabulate corals exemplified by *Catenipora heintzi* from Ringerike, Oslo-region. *Norsk Geologisk Tidsskrift* 79(4):219–226.
- Han J., Q. Ou, X.-L. Zhang, Z.-F. Zhang, U. J.-N. Li, J.-F. Guo, D. G. Shu, & H.-F. Liu. 2008. Archaeocyathids from the early Cambrian Chengjiang fauna, South China. In T. A. Voronina, ed., *The 13th International Field Conference of the Cambrian Stage Subdivision Working Group. The Siberian Platform, Western Yakutia. Yakutsk, July 20th–August 1st 2008. Sibirskiy Nauchno-issledovatel'skiy Institut Geologii, Geofiziki i Mineral'nogo Syr'ya*. Novosibirsk. p. 26.
- Hancock, J. L. 1913. Studies of Tetrininae (Acrydiinae) from the Sarawak Museum, Borneo. *The Sarawak Museum Journal* 1(3):39–54.
- Handfield, R. C. 1967. A new Lower Cambrian Archaeocyatha? *Journal of Paleontology* 41:209–212, 1 fig., pl. 23, 1 table.
- Handfield, R. C. 1971. Archaeocyatha from the Mackenzie and Cassiar Mountains, Northwest Territories, Yukon Territory and British Columbia. *Geological Survey of Canada, Bulletin* 201:119 p., 11 fig., 16 pl., 6 tables.
- Handfield, R. C., & R. H. Hansman. 1967. The genus *Tunkia* Bedford & Bedford. *Journal of Paleontology* 41:1002–1003, 1 fig.
- Hanken, N.-M., & A. W. Owen. 1982. The Upper Ordovician (Ashgill) of Ringerike. *Paleontological Contributions of the University of Oslo* 279:122–131.
- Hardie, Lawrence A. 1996. Secular variation in seawater chemistry: An explanation for the coupled secular variation in the mineralogies of marine limestones and potash evaporates over the last 600 m.y. *Geology* 24:279–283.
- Harland, T. L. 1981. Middle Ordovician reefs of southern Norway. *Lethaia* 14:169–188.
- Harper, D. A. T., S. Stouge, & J. L. Christiansen. 2004. Metazoan buildups on the Early Mid-Ordovician carbonate platform in NE Greenland: Radiation of stromatoporoid mounds and substrates. *The Palaeontology Newsletter* 57:157.
- Harper, D. A. T., S. Stouge, & J. L. Christiansen. 2005. Early Mid-Ordovician carbonate platform in NE Greenland: The stromatoporoid takeover. *GFF* 127:49.
- Harrington, R. 1987. Lithofacies and biofacies of the Middle and Upper Devonian Sultan Formation at Mountain Springs, Clark County, Nevada: Implications for stromatoporoid palaeoecology. *Journal of Paleontology* 61:649–662.
- Hartman, W. D. 1958. A re-examination of Bidder's classification of the Calcarea. *Systematic Zoology* 7:97–110.
- Hartman, W. D. 1969. New genera and species of coralline sponges (Porifera) from Jamaica. *Postilla* 137:1–39.
- Hartman, W. D. 1979. A new sclerosponge from the Bahamas and its relationship to Mesozoic stromatoporoids.

- In C. Lévi & N. Boury-Esnault, eds., Biologie des Spongaires. Editions du C.N.R.S. Paris p. 467–474.
- Hartman, W. D. 1980a. Structure and function of a Recent sponge. In W. D. Hartman, J. W. Wendt, & F. Wiedenmayer, eds., Living and Fossil Sponges Notes for a Short Course, Sedimenta VIII. Rosenstiel School of Marine and Atmospheric Science. Miami. p. 3–23.
- Hartman, W. D. 1980b. Systematics of the Porifera. In W. D. Hartman, J. W. Wendt, & F. Wiedenmayer, eds. Living and Fossil Sponges: Notes for a Short Course, Sedimenta VIII. Rosenstiel School of Marine and Atmospheric Science. Miami. p. 24–51.
- Hartman, W. D. 1982. Porifera. In S. P. Parker, ed., Synopsis and Classification of Living Organisms. McGraw-Hill. New York. p. 640–666.
- Hartman, W. D. 1983. Modern and ancient Sclerospongiae. In T. W. Broadhead, ed., Sponges and Spongiomorphs: Notes for a Short Course, Organized by J. K. Rigby & C. W. Stearn. University of Tennessee Department of Geological Sciences, Studies in Geology 7. Knoxville. p. 116–129, 10 fig.
- Hartman, W. D. 1984. Astrorhizae, mamelons and symbionts of Recent sclerosponges. Palaeontographica Americana 54:305–314.
- Hartman, W. D., & T. F. Goreau. 1966. *Ceratoporella*, a living sponge with stromatoporoid affinities. American Zoologist 6(4):262.
- Hartman, W. D., & T. F. Goreau. 1970. Jamaican coralline sponges: Their morphology, ecology and fossil relatives. In W. G. Fry, ed., The Biology of the Porifera. Zoological Society of London Symposium 25:205–243, 22 fig., 1 table.
- Hartman, W. D., & T. F. Goreau. 1972. *Ceratoporella* (Porifera: Sclerospongiae) and the chaetid “corals.” Transactions of the Connecticut Academy of Arts and Science 44:133–148, 26 fig., 1 table.
- Hartman, W. D., & T. F. Goreau. 1975. A Pacific tabulate sponge, living representative of a new order of sclerosponges. Postilla, Peabody Museum Natural History 167:1–21, 15 fig., 2 tables.
- Hartman, W. D., & T. F. Goreau. 1976. A new ceratoporellid sponge (Porifera: Sclerospongiae) from the Pacific. In F. W. Harrison & R. R. Cowden, eds., Aspects of Sponge Biology. Academic Press. New York. p. 328–348.
- Hartman, W. D., & H. Reiswig. 1973. The individuality of sponges. In R. S. Boardman, A. H. Cheetham, & W. A. Oliver, eds., Animal Colonies: Development and Function through Time. Dowden, Hutchison & Ross. Stroudsburg, Pennsylvania. p. 567–584.
- Hartman, W. D., & Ph. Willenz. 1990. Organization of the choanosome of three Caribbean sclerosponges. In K. Rützler, ed., New Perspectives in Sponge Biology. Smithsonian Institution Press. Washington, D.C. p. 228–236.
- Hashimoto, Wataru. 1960. *Yezoactinia*, a new hydrozoan fossil from Shotombetsu, Nakatombetsumachi, Esashi-gun, Hokkaido (Yezo), Japan. Tokyo, Kyoiku Daigaku, Science Reports, Section C, Geology, Mineralogy and Geography 7:95–97, pl. 1–4.
- Hashimoto, Wataru. 1973. *Sarawakia ellipsactinoides*, gen. et sp. nov., an *Ellipsactinia*-like fossil from the Bau Limestone Formation, Sarawak, Malaysia. Geology and Paleontology of Southeast Asia 12:207–215, pl. 32–35.
- Haug, Émile. 1883. Ueber sogenannte *Chaetetes* aus mesozoischen ablagerungen. Neues Jahrbuch für Geologie und Paläontologie 1:171–179, pl. X.
- Haug, Émile. 1909. Traité de Géologie, vol. II, part 2. Masson et Cie. Paris. 931 p. [Volume II issued in 3 parts, 1908–1911.]
- Haug, Émile. 1911. Les Périodes géologiques. Traité de Géologie, vol. 2. Librairie Armand Colin. Paris. p. 539–1356, pl. 72–119.
- Hayasaka, Ichirō. 1917. On a new hydrozoan fossil from the Torinosu-limestone of Japan. Tohoku Imperial University, Sendai, Science Reports (series 2) 4:55–59, pl. 14.
- Hayasaka, I. 1918. *Amblysiphonella* from Japan and China. Scientific Reports from the University of Sendai 5(1):1–10, 2 pl.
- Hayes, B. 2005. Life cycles. American Scientist 93:299–303.
- Hecht, J. 2003. Did a gamma-ray burst devastate life on earth? New Scientist 2414 (27 September 2003):17.
- Heckel, P. H. 1974. Carbonate buildups in the geologic record: A review. In L. Laporte, ed., Reefs in Time and Space. Society of Economic Paleontologists and Mineralogists Special Publication 18:90–154.
- Heckel, P. H., & B. J. Witzke. 1979. Devonian world palaeogeography determined from distribution of carbonates and related lithic palaeoclimatic indicators. In M. R. House, C. T. Scrutton, & M. G. Bassett, eds., The Devonian System: A Palaeontological Association International Symposium. Palaeontological Association Special Papers in Palaeontology 23:99–123.
- Hedberg, H. D., ed. 1976. International Stratigraphic Guide: A Guide to Stratigraphic Classification, Terminology, and Procedure. Wiley-Interscience. New York, London, Sydney, & Toronto. xvii + 200 p., 14 fig., 3 tables.
- Heinrich, M. 1914a. Studien in dem Riffkalken des Rheinischen oberen Mitteldevons. Part 2. Revision der Stromatoporen unter besonderer Berücksichtigung der Formen des Rheinischen Mitteldevons. Dissertation Universität Bonn, Freiberg. 59 p.
- Heinrich, M. 1914b. Über den Bau und das System der Stromatoporen. Zentralblatt für Mineralogie, Geologie und Paläontologie 23:732–736. English translation published in 1916: Classification of the Stromatoporidae, Journal of Geology 24:57–60.
- Helm, C., & I. Schuelke. 2006. Patch reef development in the Florigemma-Bank Member (Oxfordian) from the Deister Mts (NW Germany): A type example for Late Jurassic coral thrombolite thickets. Facies 52(3):441–467.
- Hennig, Anders. 1894. Studier öfver bryozoerna i Sveriges kritsystem [Study of Swedish Cretaceous bryozoans]. II. Cyclostomata. Lunds Universitets Arsskrift 30:46 p., 2 pl.
- Henrich, R. 1982. Middle Triassic carbonate margin development: Hochstaufen-Zwieselmassif, northern Calcareous Alps, Germany. Facies 6:85–106, 4 fig., pl. 11–13.

- Heritsch, F. 1932. *Chaetetes* und *Caninia* aus dem Karbon von Ivovik bei Krupanj in West-Serbien. Service Géologique du Royaume de Yougoslavie, Bulletin 1:221–230, 2 pl.
- Hernández Sampelayo, P. 1933. El Cambriano en España. XVI Congreso Geológico Internacional, Instituto Geológico i Minero de España, Memoria, Gráficas Reunidas. Madrid. 200 p., 19 fig., 6 pl.
- Hickman, C. S. 1988. Analysis of form and function in fossils. American Zoologist 28:775–793.
- Hicks, Melissa, & S. M. Rowland. 2009. Early Cambrian microbial reefs, archaeocyathan inter-reef communities, and associated facies of the Yangtze Platform. Palaeogeography, Palaeoclimatology, Palaeoecology 281:137–153, 18 fig., 2 tables.
- Hickson, S. J. 1911. On *Ceratopea*, the type of a new family of Alcyonaria. Proceedings of the Royal Society of London (series B) 84:195–200.
- Hickson, S. J. 1912. Change in the name of a genus of Alcyonaria. Zoologischer Anzeiger 40:351.
- Hickson, S. J. 1934. On *Gypina plana* and on the systematic position of the stromatoporoids. Quarterly Journal of the Microscopical Society (new series) 303(76):433–480.
- Hildebrandt, A. von. 1971. *Stylothalamia* (Sphinctozoa, Porifera) aus dem Lias von Peru. Mitteilungen der Bayerischen Staatssammlung für Paläontologie und historische Geologie 11:69–75, 1 fig., pl. 6–7.
- Hildebrandt, A. von. 1981. Kontinentalverschiebung und paläogeographische Beziehungen des südamerikanischen Lias. Geologische Rundschau 70(2):570–572, 7 fig.
- Hill, Dorothy. 1935. British terminology for rugose corals. Geological Magazine 72:481–519.
- Hill, Dorothy. 1964a. Archaeocyatha from the Shackleton Limestone of the Ross System, Nimrod Glacier area, Antarctica. Transactions of the Royal Society of New Zealand, Geology 2:137–146, 1 fig., 2 pl.
- Hill, Dorothy. 1964b. The phylum Archaeocyatha. Biological Reviews 39:232–258, 6 fig., 1 pl., 1 table.
- Hill, Dorothy. 1964c. Archaeocyatha from loose material at Plunket Point at the head of Beardmore Glacier. In R. J. Adie, ed., Antarctic Geology. North-Holland. Amsterdam. p. 609–622, 4 fig.
- Hill, Dorothy. 1965. Archaeocyatha from Antarctica and a review of the phylum. Trans-Antarctic Expedition 1955–1958, Scientific Reports 10 (Geology 3):151 p., 25 fig., 12 pl.
- Hill, Dorothy. 1972. Archaeocyatha. In C. Teichert, ed., Treatise on Invertebrate Paleontology. Part E, revised, vol. 1. The Geological Society of America & The University of Kansas Paleontological Institute. Boulder, Colorado, & Lawrence, Kansas. xxx + 158 p., 107 fig., 3 tables.
- Hill, Dorothy. 1981. Rugosa and Tabulata. In C. Teichert, ed., Treatise on Invertebrate Paleontology. Part F, Coelenterata, Supplement 1, vol. 2. The Geological Society of America & The University of Kansas. Boulder, Colorado, & Lawrence, Kansas. p. 379–762.
- Hill, Dorothy, & E. C. Stumm. 1956. Tabulata. In R. C. Moore, ed., Treatise on Invertebrate Paleontology. Part F, Coelenterata. The Geological Society of America & The University of Kansas. New York & Lawrence, Kansas. p. 444–477.
- Hill, Dorothy, & J. W. Wells. 1956. Hydroids and Spongiomorphida. In R. C. Moore, ed., Treatise on Invertebrate Paleontology. Part F, Coelenterata. The Geological Society of America & The University of Kansas. New York & Lawrence. p. 81–89.
- Hill, M., A. Hill, N. Lopez, & O. Harriott. 2006. The Caribbean sponge *Chondrilla nucula* harbors diverse and sponge-specific bacterial symbionts. Integrative and Comparative Biology 45(6):1145.
- Hillmer, G., & Baba Senowbari-Daryan. 1986. Sphinctozoen aus dem Cenoman von Mühlheim-Broich, SW-Westfalen. Mitteilungen aus dem geologisch-paläontologischen Institut der Universität Hamburg 61:161–187, 1 fig., 8 pl., 1 table.
- Hinde, G. J. 1882. Notes on fossil Calcispongiae, with descriptions of new species. Annals and Magazine of Natural History (series 5)10:185–205, pl. 10–12.
- Hinde, G. J. 1884 [1883]. Catalogue of the Fossil Sponges in the Geological Department of the British Museum (Natural History). British Museum (Natural History). London. viii + 248 p., 38 pl.
- Hinde, G. J. 1887. A monograph of the British fossil sponges, part 1. Palaeontographical Society Monograph. London. p. 1–92, pl. 1–8.
- Hinde, G. J. 1889. On *Archaeocyathus*, Billings, and on other genera, allied to or associated with it, from the Cambrian strata of North America, Spain, Sardinia, and Scotland. Geological Society, London, Quarterly Journal 45:125–148, pl. 5.
- Hinde, G. J. 1893. A monograph of the British fossil sponges, part 3: Sponges of Jurassic strata. Palaeontographical Society Monograph. London. p. 189–254, pl. 10–19.
- Hinde, G. J. 1900. On some remarkable calcisponges from the Eocene strata of Victoria (Australia). Quarterly Journal of the Geological Society of London 56:50–66.
- Hinde, G. J., & W. M. Holmes. 1892. On the sponge remains in the lower Tertiary strata near Oamaru, Otago, New Zealand. Journal of the Linnean Society of London, Zoology 24:177–262, pl. 2–15.
- Hints, L., & T. Meidla. 1997. Harju Series (Upper Ordovician): Nabala, Vormsi, Pirgu and Porkuni stages. In Anto Raukas & Aada Teedumäe, eds., Geology and Mineral Resources of Estonia. Estonian Academy Publishers. Tallinn. p. 80–88.
- Hladil, J. 2007. The earliest growth stages of *Amphipora*. In B. Hubmann & W. E. Piller, eds., Fossil Corals and Sponges: Proceedings of the 9th International Symposium on Fossil Cnidaria and Porifera. Österreichische Akademie der Wissenschaften, Schriftenreiche der Erdwissenschaftlichen Kommission 17:51–65.
- Hoffman, A. 1989. Mass extinctions: The view of a skeptic. Journal of the Geological Society of London 146:21–35.
- Hofmann, H. J. 1963. Ordovician Chazy Group in southern Quebec. Bulletin of the Association of Petroleum Geologists 47:270–301, 13 fig., 2 tables.

- Hoggan, R. D. 1975. Paleoecology of the Guilmette Formation in Eastern Nevada and Western Utah. *Geology Studies* 22:141–197.
- Holland, C. H., ed. 1971. Cambrian of the New World. J. Wiley & Sons. London. 456 p., 97 fig., 4 pl., 18 tables.
- Holland, C. H., ed. 1974. Cambrian of the British Isles, Norden and Spitsbergen. J. Wiley & Sons. London. 300 p., 45 fig., 4 pl.
- Hooper, J. N. A., & R. W. M. van Soest, eds. 2002a. *Systema Porifera: A Guide to the Classification of Sponges*, 2 vol. Kluwer Academic/Plenum Publishers. New York, Boston, Dordrecht, London, & Moscow. xlviii + 1708 p.
- Hooper, J. N. A., & R. W. M. van Soest. 2002b. Class Demospongiae Sollias, 1885. In J. N. A. Hooper, & R. W. M. van Soest, eds., *Systema Porifera: A Guide to the Classification of Sponges*, vol. 1. Kluwer Academic/Plenum Publishers. New York, Boston, Dordrecht, London, & Moscow. p. 15–19.
- Hooper, J. N. A., & R. W. M. van Soest. 2002c. Order Hadromerida Topsent, 1894. In J. N. A. Hooper & R. W. M. van Soest, eds., *Systema Porifera: A Guide to the Classification of Sponges*, vol. 1. Kluwer Academic/Plenum Publishers. New York, Boston, Dordrecht, London, & Moscow. p. 169–172.
- Hooper, J. N. A., & R. W. M. van Soest. 2002d. Order Poecilosclerida Topsent, 1928. In J. N. A. Hooper & R. W. M. van Soest, eds., *Systema Porifera: A Guide to the Classification of Sponges*, vol. 1. Kluwer Academic/Plenum Publishers. New York, Boston, Dordrecht, London, & Moscow. p. 403–408.
- Hooper, J. N. A., R. W. M. van Soest, & F. Debrenne. 2002. Phylum Porifera Grant, 1836. In J. N. A. Hooper & R. W. M. van Soest, eds., *Systema Porifera: A Guide to the Classification of Sponges*, vol. 1. Kluwer Academic/Plenum Publishers. New York, Boston, Dordrecht, London, & Moscow. p. 9–13.
- Hooper, J. N. A., & F. Weidenmayer. 1994. Zoological Catalogue of Australia, Vol. 12: Porifera. CSIRO Publishing & Australian Biological Resources Study (ABRS). Melbourne. xiii + 624 p., fig. 1–230.
- Hoppe, W. F. 1988. Reproductive patterns in three species of large coral reef sponges. *Coral Reefs* 7:47–50, 3 fig., 1 table.
- Hoshino, T. 1990. *Merlia tenuis* n.sp. encrusting shell surfaces of gastropods, *Chicoreus*, from Japan. In K. Rützler, ed., *New Perspectives in Sponge Biology*. Smithsonian Institution Press. Washington, D.C. p. 295–301.
- Hough, M. L., G. A. Shields, L. Z. Evins, H. Strauss, R. A. Henderson, & S. Mackenzie. 2006. A major sulphur isotope event at c. 510 Ma: A possible anoxia-extinction-volcanism connection during the Early–Middle Cambrian transition? *Terra Nova* 18:257–263, 3 fig., 1 table.
- Hubert, B. L. M., M. K. Zapalski, J.-P. Nicollin, B. Mistiaen, & D. Brice. 2007. Selected benthic faunas from the Devonian of the Ardennes: An estimation of palaeobiodiversity. *Acta Geologica Polonica* 57(2):187–204.
- Hudson, R. G. S. 1953. The stromatoporoid genus *Millestroma* Gregory. *Journal of Paleontology* 27:884–885.
- Hudson, R. G. S. 1954a. Jurassic stromatoporoids from southern Arabia. *Notes et Mémoires sur le Moyen-Orient* 5:207–221.
- Hudson, R. G. S. 1954b. A new Lower Cretaceous stromatoporoid, *Bekhmeia wetzeli* from northern Iraq. *Journal of Paleontology* 28:47–51, pl. 7–8.
- Hudson, R. G. S. 1954c. Jurassic stromatoporoids from the Lebanon. *Journal of Paleontology* 28(5):657–661, pl. 72–73.
- Hudson, R. G. S. 1955a. On the Jurassic stromatoporoids: I. The type of *Stromatopora douvillei* Dehorne. II. Milleporidium and “*Stromatopora*” from Central Arabia. *Annals and Magazine of Natural History* 12:313–320.
- Hudson, R. G. S. 1955b. On the Jurassic stromatoporoids: III. *Stromatopora arabidensis* Dehorne. *Annals and Magazine of Natural History* 12:705–710.
- Hudson, R. G. S. 1955c. Sequanian stromatoporoids from southwest Arabia. *Notes et Mémoires sur le Moyen-Orient* 6:225–241, pl. 22–25.
- Hudson, R. G. S. 1956a. Tethyan Jurassic hydroids of the family Milleporidiidae. *Journal of Paleontology* 30:714–730.
- Hudson, R. G. S. 1956b. *Steinerina* Hudson, nom. nov. *Geological Magazine* 93(6):518.
- Hudson, R. G. S. 1957. *Stromatorhizae* Bakalow, stromatoporoïde du Jurassique supérieur. *Bulletin de la Société Géologique de France* (6th series) 7:3–10, pl. 1, 2a.
- Hudson, R. G. S. 1958. *Actostroma* gen. nov., a Jurassic stromatoporoid from Makhtesh Hathira, Israel. *Palaeontology* 1:87–98, pl. 15–17.
- Hudson, R. G. S. 1959. The stromatoporoid genus *Milleporella* Deninger. *Geological Magazine* 96(66):311–316, pl. 7.
- Hudson, R. G. S. 1960. The Tethyan Jurassic stromatoporoids *Stromatoporina*, *Debornella* and *Astroporina*. *Palaeontology* 2:180–199.
- Hughson, R. C., & C. W. Stearn. 1989. Upper Silurian reef facies of the Memphremagog-Marbleton area, eastern townships, Québec Appalachians. In H. H. Geldsetzer, N. P. James, & G. E. Tebbutt, eds., *Reefs, Canada and adjacent areas. Memoir of the Canadian Society of Petroleum Geologists* 13:306–315.
- Hurcewicz, Helena. 1972. *Eudea* Lamouroux (Calcispongia) from the Oxfordian of Poland. *Acta Palaeontologica Polonica* 17(2):253–261, 2 fig., pl. 36.
- Hurcewicz, Helena. 1975. Calcispongea from the Jurassic of Poland. *Acta Palaeontologica Polonica* 20(2):223–291, 32 fig., pl. 29–41.
- ICZN (International Commission on Zoological Nomenclature). 1985. International Code of Zoological Nomenclature, 3rd edit. International Trust for Zoological Nomenclature. London. xx + 338 p.
- ICZN (International Commission on Nomenclature). 1996. Opinion 1843, Case 2901. *Bulletin of Zoological Nomenclature* 53(3):201–202.
- ICZN (International Commission on Zoological Nomenclature). 1999. International Code of Zoological Nomenclature, 4th edition. International Trust for

- Zoological Nomenclature. London, xxix + 306 p., online version: <http://www.iczn.org/iczn/index.jsp>. Checked 28 July 2009
- ICZN (International Commission on Zoological Nomenclature). 2005. *Erbocyathus* Zhuravleva, 1955 (Archaeocyatha): not conserved; priority maintained for *Pluralicyathus* Okulitch, 1950. Bulletin of Zoological Nomenclature 62:154–155.
- Igo, Hisayoshi, Hisaharu Igo, & Shuko Adachi. 1988. Permian sphinctozoan sponges from the Ichinotani Formation, Hida Massif, Central Japan. Transactions and Proceedings of the Palaeontological Society of Japan (new series) 150:453–464, 7 fig.
- Ilan, M., & Y. Loya. 1990. Ontogenetic variation in sponge histocompatibility responses. Biological Bulletin 179:279–286, 3 fig., 1 table.
- Ilkhovsky [Ilkovskiy], R. A. 1973. O pozdnepaleozoiskikh Hydroidea Russkoy platformy [On Late Paleozoic Hydroidea of the Russian Platform]. Paleontologicheskiy Zhurnal 1973(4):9–17.
- Inai, Y. 1936. *Discosiphonella*, a new ally of *Amblysiphonella*. Proceedings of the Imperial Academy of Japan 12:169–171, 4 fig.
- Ivanov, A. N., & E. I. Myakova. 1955. Fauna ordovika zapadnogo sklona srednego Urala [Ordovician fauna of the western slope of the Urals]. In A. A. Ivanov, ed., Opisanie fauny otlozhenii ordovika zapadnogo sklona srednego Urala [Description of the fauna from the Ordovician deposits of the western slope of the middle Urals]. Akademiiia Nauk SSSR, Ural'skii filial, Trudy Gorno-geologicheskogo Instituta 23:9–75.
- Ivanovskiy, A. B. 1973. Istorija izuchenija paleozoiskikh korallov i stromatoporoidej [History of the study of Paleozoic corals and stromatoporoids]. Nauka. Moscow. 288 p. In Russian.
- Jaanusson, Valdar 1960. On the series of the Ordovician System. Report of the 21st International Geological Congress (Copenhagen) 7:70–81.
- Jaanusson, Valdar. 1979a. Ecology and faunal dynamics. In V. Jaanusson, S. Laufeld, & R. Skoglund, eds., Lower Wenlock faunal and floral dynamics, Vattenfallet Section, Gotland. Sveriges Geologiska Undersökning (Serie C) 726:253–294.
- Jaanusson, Valdar. 1979b. Ordovician. In R. A. Robison & C. Teichert, eds., Treatise on Invertebrate Paleontology, Part A. Introduction: Fossilization (Taphonomy). Biogeography and Biostratigraphy. The Geological Society of America & The University of Kansas Paleontological Institute. Boulder, Colorado, & Lawrence, Kansas. p. 136–166.
- Jaanusson, Valdar. 1982. Introduction to the Ordovician of Sweden. Palaeontological Contributions of the University of Oslo 279:1–9.
- Jablonski, David. 1986. Background and mass extinctions: The alternation of macroevolutionary regimes. Sciences 231:129–133.
- Jablonski, David. 2000. Micro- and macroevolution: Scale and hierarchy in evolutionary biology and paleobiology. In D. H. Erwin & S. L. Wing, eds., Deep Time: Paleobiology's Perspective. Paleobiology (Special Volume) 29(4):15–52.
- Jablonsky, E. 1971. Segmentierte Kalkschwämme (Sphinctozoa) der Westkarpaten (vor der Lokalität Lipovska Osada). Geologie Zbornik Slovenian Akademie vied 23(2):361–364, 6 fig.
- Jablonsky, E. 1972. *Vesicocaulis reticuliformis* n. sp. (Sphinctozoa) aus der Trias der Westkarpaten. Geologichy Zbornik, Geologica Carpathica 23(2):361–364, 6 fig.
- Jablonsky, E. 1975. *Colospongia andrusovi* n. sp., eine neue Art von segmentierten Kalkschwämme (Sphinctozoa) aus der Trias der Westkarpaten. Geologie Zbornik Slovenian Akademie vied 26:269–273, 1 fig., 3 pl.
- Jackson, J. B. C. 1979. Morphological strategies of sessile animals. In G. Larwood & B. R. Rosen, eds., Biology and Systematics of Colonial Organisms. The Systematics Association Special, vol. 11. Academic Press. London. p. 499–555.
- Jackson, J. B. C., & L. W. Buss. 1975. Allelopathy and spatial competition among coral reef invertebrates. Proceedings of the National Academy of Sciences, USA 72:5160–5163.
- Jackson, J. B. C., T. F. Goreau, & W. D. Hartman. 1971. Recent brachiopod-coralline sponge communities and their paleoecological significance. Science 173:623–625.
- James, N. P., & P.-A. Bourque. 1992. Reefs and Mounds. In R. G. Walker & N. P. James, eds., Facies Models: Response to sea level change. Geological Association of Canada Reprints. Newfoundland. p. 323–347.
- James, N. P., & D. I. Gravestock. 1990. Lower Cambrian shelf and shelf margin buildups, Flinders Ranges, South Australia. Sedimentology 37:455–480, 16 fig.
- James, N. P., & C. F. Klappa. 1983. Petrogenesis of Early Cambrian reef limestones, Labrador, Canada. Journal of Sedimentary Petrology 53:1051–1096, 22 fig., 2 tables.
- James, N. P., & D. R. Kobluk. 1978. Lower Cambrian patch reefs and associated sediments: Southern Labrador, Canada. Sedimentology 25:1–35, 12 fig., 1 table.
- James, N. P., D. R. Kobluk, & C. F. Klappa. 1989. Early Cambrian patch reefs, southern Labrador. In H. H. J. Geldsetzer, N. P. James, & G. E. Tebbutt, eds., Reefs, Canada and Adjacent Area. Canadian Society of Petroleum Geologists, Memoir 13:141–150, 10 fig.
- James, U. P. 1878. Description of newly discovered species of fossils from the Lower Silurian Formation, Cincinnati Group. The Paleontologist 1:1–8.
- James, U. P. 1879. Description of new species of fossils and remarks on some others, from the Lower and Upper Silurian rocks of Ohio. The Paleontologist 3:17–24.
- James, U. P. 1881. On the monticuliporoid corals of the Cincinnati Group, with a critical revision of the species. The Paleontologist 5:33–44.
- Jameson, Jeremy. 1980. Depositional environments in the Petershill Formation, Bathgate, West Lothian, vol. 1. Unpublished doctoral dissertation. University of Edinburgh. Edinburgh. 545 p.
- Jameson, Jeremy. 1987. Carbonate sedimentation on a mid-basin high: The Petershill Formation, Midland Valley of Scotland. In John Miller, A. E. Adams, & V. P. Wright, eds., European Dinantian

- environments. John Wiley & Sons. New York. p. 309–327, 10 fig.
- Jamieson, E. R. 1969. Paleoecology of Devonian reefs in Western Canada. Proceedings of the North American Palaeontological Convention 2:1300–1340.
- Jankauskas, T. V. 1964. O nekotorykh problematicheskikh organicheskikh ostatkakh iz nizhnego kembriya Vostochnogo Sayana [On some problematic organic fossils from the Lower Cambrian of East Sayan]. In V. A. Ivaniya, ed., Materialy po Geologii i Poleznyim Iskopayemym Zapadnoy Sibiri. Doklady Konferentsii, Posvyashchennoy 100-letiyu so Dnya Rozhdeniya Akad. V. A. Obrucheva i 80-letiyu so Dnya Rozhdeniya Akad. M. A. Usova [Materials on the Geology and Natural Resources of Western Siberia. Reports of the Conference Dedicated to the 100th Anniversary of Academician V. A. Obruchev and 80th Anniversary of Academician M. A. Usov]. Tomskiy Universitet. Tomsk. p. 56–59, 1 pl.
- Jankauskas, T. V. 1965. Pterotsiatidy: Novyy otryad kribritsiat [Pterocyathids: A new order of cibrycaths]. Akademiya Nauk SSSR, Doklady 162:438–440, 1 fig.
- Jankauskas, T. V. 1969. Pterotsiatidy nizhnego kembriya Krasnoyarskogo kryazha (Vostochnyy Sayan) [Pterocyathids from the Lower Cambrian of the Krasnoyarsk Range (East Sayan)]. In I. T. Zhuravleva, ed., Biostatigrafiya i Paleontologiya Nizhnego Kembriya Sibiri i Dal'nego Vostoka [Lower Cambrian Biostratigraphy and Paleontology of Siberia and the Far East]. Nauka. Moscow. p. 114–157, 29 fig., pl. 43–50.
- Jankauskas, T. V. 1972. Kribritsiaty nizhnego kembriya Sibiri [Cibrycaths of the Lower Cambrian of Siberia]. In I. T. Zhuravleva, ed., Problemy Biostatigrafi i Paleontologii Nizhnego Kembriya Sibiri [Problems of Biostratigraphy and Paleontology of the Lower Cambrian of Siberia]. Nauka. Moscow. p. 161–183, 19 fig., pl. 22–29.
- Jankauskas, T. V. 1973. Opyt izucheniya kribritsiat kembriya SSSR [Essay on the study of cibrycaths from the Cambrian of the USSR]. Institut Geologii i Geofiziki, Sibirskoe Otdelenie, Akademiya Nauk SSSR, Trudy 49:45–53, 2 fig.
- Janussen, Dorte, Michael Steiner, & Zhu Maoyan. 2002. New well-preserved scleritomes of Chancelloriidae from the Early Cambrian Yuanshan Formation (Chengjiang, China) and the Middle Cambrian Wheeler Shale (Utah, USA) and paleobiological implications. Journal of Paleontology 76:596–606, 7 fig.
- Jeppsson, L. 1990. An oceanic model of lithological and faunal changes tested on the Silurian record. Journal of the Geological Society, London 147:663–674.
- Jeppsson, L., R. J. Aldridge, & K. J. Dorning. 1995. Wenlock (Silurian) oceanic episodes and events. Journal of the Geological Society, London 152:487–498.
- Jin Chuantai, Ye Shaohua, He Yuanxiang, Wan Zhengquan, Wang Shubei, Zhao Yuting, Li Shanji, Xu Xingqui, & Zhang Zhenggui. 1982. The Silurian Stratigraphy and Paleontology in Guanyinqiao, Sichuan. Peoples' Publishing House of Sichuan, China. Chengdu. 84 p., 24 pl.
- Joachimski, M. M., P. H. von Bitter, & W. Buggisch. 2006. Constraints on Pennsylvanian glacioeustatic sea-level changes using oxygen isotopes of conodont apatite. Geology 34:277–280.
- Joachimski, M. M., & W. Buggisch. 1993. Anoxic events in the late Frasnian: Cause of the Frasnian–Famennian faunal crisis. Geology 21:675–678.
- Joachimski, M. M., & W. Buggisch. 2002. Conodont apatite $\delta^{18}\text{O}$ signatures indicate climatic cooling as a trigger of the Late Devonian mass extinction. Geology 30:711–714.
- Joachimski, M. M., R. van Geldern, S. Breisig, W. Buggisch, & J. E. Day. 2002. Oxygen isotope evolution of biogenic calcite and apatite during the Middle and Late Devonian. International Journal of Earth Science (Geologische Rundschau) 93:542–553.
- Johnson, J. G., & A. J. Boucot. 1973. Devonian brachiopods. In A. Hallam, ed., Atlas of Palaeobiogeography. Elsevier. Amsterdam. p. 89–96.
- Johnson, J. G., Gilbert Klapper, & C. A. Sandberg. 1985. Devonian eustatic fluctuations in Euramerica. Geological Society of America Bulletin 96:567–587, 12 fig.
- Johnson, J. G., & C. A. Sandberg. 1988. Devonian eustatic events in the western United States and their biostratigraphic responses. In N. J. McMillan, A. F. Embry, & D. J. Glass, eds., Devonian of the World, vol. III. Canadian Society of Petroleum Geologists Memoir 14:171–178.
- Johnson, M. E., & W. S. McKerrow. 1991. Sea level and faunal changes during the latest Llandovery and earliest Ludlow (Silurian). Historical Biology 5:153–169.
- Johnson, M. E., Mu Xi-Nan, & Rong Jia-Yu. 1998. Enigmatic fossil encrusting an upper Ordovician rocky shore on Hudson Bay, Canada. Journal of Paleontology 72:927–932.
- Johnson, M. E., Rong J.-Y., & W. T. Fox. 1989. Comparison of Late Ordovician epicontinent seas and their relative bathymetry in North America and China. Palaios 4:43–50.
- Johnston, G. 1842. A history of British sponges and lithophytes. W. H. Lizars. Edinburgh. p. i–xii, 1–264.
- Jones, Adam C., James E. Blum, & Joseph R. Pawlik. 2005. Testing for defensive synergy in Caribbean sponges: Bad taste or glass spicules? Journal of Experimental Marine Biology and Ecology 322:67–81.
- Jones, W. C. 1979. The microstructure and genesis of sponge biominerals. Colloques Internationaux de Centre de la National Recherche Scientifique 291:425–477, 2 fig., 1 table.
- Jordan, R. J. 1969. Deutung der astrorhiziden der Stromatoporoidea (?Hydrozoa) als Bohrspuren. Neues Jahrbuch für Geologie und Paläontologie, Monatsheft (1969) 12:705–711.
- Kaandorp, Jaap A., & Janet E. Kubler. 2001. The Algorithmic Beauty of Seaweeds, Sponges, and Corals. Springer-Verlag. Berlin, Heidelberg, & New York. 193 p.
- Kaesler, R. L., ed. 2004. Treatise on Invertebrate Paleontology. Part E, Porifera (revised), vol. 3. The Geological Society of America & The University of

- Kansas Paleontological Institute. Boulder, Colorado, & Lawrence, Kansas. 872 p., 506 fig.
- Kaever, Matthias, & Peter Richter. 1976. *Buschmannia roeringi* n. gen., n. sp. (Archaeocyatha) aus der Nama-Gruppe Südwestafrikas. Paläontologische Zeitschrift 50:27–33, 1 fig., pl. 4.
- Kaljo, Dimitri, Einar Klaamann, & Heldur Nestor. 1963. Nekotorye obshchie cherty fauny korallov i stromatoporoidei ashgillia Estoniae i Norvegii [Features in common in the Ashgillian coral and stromatoporoid faunas of Estonia and Norway]. Eesti NSV Teaduste Akadeemia Geoloogia Instituudi Uurimused 13:75–81.
- Kaljo, Dimitri, Einar Klaamann, & Heldur Nestor. 1970. Paleobiogeograficheskii obzor ordovikskikh i siluriiskikh korallov i stromatoporoidei [Paleobiogeographic review of Ordovician and Silurian corals and stromatoporoids]. In Dimitri Kaljo, ed., Zakonomernosti rasprostraneniia paleozoiskikh korallov SSSR [Distribution and sequence of Paleozoic corals of the USSR]. Trudy 2 Vsesoiuznogo simposiuma po izucheniiu ikopameykh korallov SSSR [Papers of 2nd All-Union Symposium on Fossil Corals of the USSR], vol. 3. Izdatel'stvo Nauka. Moscow. p. 6–15, 2 fig.
- Kamber, B. S., & G. E. Webb. 2007. Transition metal abundances in microbial carbonate: A pilot study based on *in situ* LA-ICP-MS analysis. *Geobiology* (2007)5:375–389.
- Kano, Akahiro. 1989. Deposition and palaeoecology of an Upper Silurian stromatoporoid reef on southernmost Gotland. *Geological Journal* 24:295–315.
- Kano, Akahiro. 1990. Species, morphologies and environmental relationships of the Ludlovian (upper Silurian) stromatoporoids on Gotland, Sweden. *Stockholm Contributions in Geology* 42(2):85–121.
- Kano, Akahiro, & Lee D.-J. 1997. Fluorite cement in Ordovician stromatoporoid skeletons. *Boletín de la Real Sociedad Española de Historia Natural, Sección Geológica* 92(1–4):67–76, 6 fig.
- Kano, Akahiro, Lee D.-J., Choi D. K., & Yoo C. M. 1994. Ordovician (Llanvirnian) stromatoporoids from the Yeongweol area, southern Korea. *Transactions and Proceedings of the Palaeontological Society of Japan (new series)* 174:449–457.
- Kanygin, A. V. 2001. The Ordovician explosive divergence of the Earth's organic realm: Causes and effects of the biosphere evolution. *Russian Geology & Geophysics* 42:599–633.
- Kanygin, A. V., T. A. Moskalenko, & A. G. Yadrenkina. 1988. The Siberian Platform. The Ordovician System in most of Russian Asia (Correlation Charts and Explanatory Notes). International Union of Geological Sciences, Publication 26:1–27, 1 fig., correlation chart (1 sheet).
- Kapp, U. S. 1974. Mode of growth of middle Chazyan (Ordovician) stromatoporoids, Vermont. *Journal of Paleontology* 48:1235–1240.
- Kapp, U. S. 1975. Paleoecology of Middle Ordovician stromatoporoid mounds in Vermont. *Lethaia* 8:195–207.
- Kapp, U. S., & C. W. Stearn. 1975. Stromatoporoids of the Chazy Group (Middle Ordovician), Lake Champlain, Vermont and New York. *Journal of Paleontology* 49:163–186, 4 fig., 4 pl.
- Karimova, F. S., & A. I. Lesovaya. 2007. Stromatoporoids. In A. I. Kim, F. A. Salimova, I. A. Kim, & N. A. Meshchankina, eds., *Palaeontological Atlas of Phanerozoic Faunas and Floras of Uzbekistan*, Vol. I. Republic of Uzbekistan State Committee on Geology and Mineral Resources. Tashkent. p. 28–29, 76–78, 152–158, 380–381, pl. 10–15.
- Kashina, L. N. 1979. Morfologiya i sistematika arkheotsiat nadsemeystva Erbocynthacea [Morphology and systematics of archaeocyaths of the superfamily Erbocynthacea]. Institut Geologii i Geofiziki, Sibirskoe Otdelenie, Akademiya Nauk SSSR, Trudy 406:40–57, 4 fig., pl. 3–10, 9 tables.
- Kashina, L. N., & T. V. Jankauskas. 1973. K stratigrafi i korrelyatsii nizhnemekembriyskikh otlozheniy Manskogo progiba (Vostochnyy Sayan) [On the stratigraphy and correlation of the Lower Cambrian deposits of the Mana Depression (East Sayan)]. Institut Geologii i Geofiziki, Sibirskoe Otdelenie, Akademiya Nauk SSSR, Trudy 49:177–186, 2 fig., 1 table.
- Kauffman, E. G. 1973. Cretaceous Bivalvia. In A. Hallam, ed., *Atlas of Palaeobiogeography*. Elsevier. Amsterdam. p. 353–382.
- Kauffman, E. G., & J. A. Fagerstrom. 1993. The Phanerozoic Evolution of Reef Diversity. In Robert E. Ricklefs & Dolph Schlüter, eds., *Species diversity in ecological communities*. University of Chicago Press. Chicago. p. 315–329.
- Kaźmierczak, Józef. 1969. A new interpretation of astorhizae in Stromatoporoidea. *Acta Palaeontologica Polonica* 14(4):499–535.
- Kaźmierczak, Józef. 1971. Morphogenesis and systematics of the Devonian Stromatoporoidea from the Holy Cross Mountains, Poland. *Palaeontologia Polonica* 26:1–150, 20 fig., 41 pl., 3 tables.
- Kaźmierczak, Józef. 1974. Lower Cretaceous sclerosponge from the Slovakian Tatra Mountains. *Palaeontology* 17:341–347.
- Kaźmierczak, Józef. 1976. Cyanophycean nature of stromatoporoids. *Nature* 264:49–51.
- Kaźmierczak, Józef. 1979. Sclerosponge nature of chaetetids evidenced by speculated *Chaetetopsis favrei* (Deninger, 1906) from the Barremian of Crimea. *Neues Jahrbuch für Geologie und Paläontologie, Monatshefte* 2:97–108.
- Kaźmierczak, Józef. 1980. Stromatoporoid stromatolites: New insight into evolution of cyanobacteria. *Acta Palaeontologica Polonica* 25(2):243–251.
- Kaźmierczak, Józef. 1981. Evidence of the cyanophyte origin of stromatoporoids. In C. Monty, ed., *Phanerozoic Stromatolites*. Springer-Verlag. Berlin. p. 230–241.
- Kaźmierczak, Józef. 1984. Favositid tabulates: Evidence for poriferan affinity. *Science* 225:835–837.
- Kaźmierczak, Józef. 1989. Halysitid tabulates: Sponges in corals' clothing. *Lethaia* 22:195–205.
- Kaźmierczak, Józef. 1991. Further evidence for poriferan affinities of favositids. In Joachim Reitner & Helmut Keupp, eds., *Fossil and Recent Sponges*. Springer-Verlag. Berlin & Heidelberg. p. 212–223.

- Każmierczak, Józef. 1994. Confirmation of the poriferan status of favositid tabulates. *Acta Palaeontologica Polonica* 39(3):233–245.
- Każmierczak, Józef, & Gero Hillmer. 1974. Sclerosponge nature of the lower Hauerian “bryozoan” *Neopora pustulosa* (Roemer, 1839) from western Germany. *Acta Palaeontologica Polonica* 19(4):443–453.
- Każmierczak, Józef, V. Ittekot, & E. T. Degens. 1985. Biocalcification through time: Environmental challenge and cellular response. *Palaontologische Zeitschrift* 59:15–33.
- Każmierczak, Józef, & S. Kempe. 1990. Modern cyanobacterial analogues of Paleozoic stromatoporoids. *Science* 250:1244–1248.
- Każmierczak, Józef, & W. E. Krumbein. 1983. Identification of calcified coccoid cyanobacteria forming stromatoporoid stromatolites. *Lethaia* 16:207–213.
- Keeling, Michael, & Stephen Kershaw. 1994. Rocky shore environments in the Upper Silurian of Gotland, Sweden. *GFF* 116(2):69–74.
- Keeping, W. 1833. The fossils and paleontological affinities of Neocomian deposits of Upware and Brickhill (Cambridgeshire and Bedfordshire). Cambridge University Press, Cambridge. 167 p.
- Kellaway, G. A., & S. Smith. 1938. Stromatoporoids from the Inferior Oolite of southwest England. Geological Society of London, Quarterly Journal 94:321–330.
- Keller, Martin. 1999. Argentine Precordillera: Sedimentary and plate tectonic history of a Laurentian crustal fragment in South America. Geological Society of America, Special Paper 341:1–131.
- Keller, Martin, & Erik Flügel. 1996. Early Ordovician reefs from Argentina: Stromatoporoid vs. stromatolite origin. *Facies* 34:177–192, 5 fig., pl. 45–48.
- Kennard, J. M. 1991. Lower Cambrian archaeocyathan buildups, Todd River Dolomite, northeast Amadeus Basin, central Australia: Sedimentology and diagenesis. Bureau of Mineral Resources, Geology and Geophysics, Australia, Bulletin 236:195–225, 28 fig., 3 tables.
- Kennish, M. J. 1989. Practical Handbook of Marine Science. CRC Press, Boca Raton, Florida. 710 p.
- Kerner, Adeline, Régine Vignes-Lebbe, & Françoise Debrenne. 2011. Computer-aided identification of the Archaeocyatha genera now available online. *Carnets de Géologie/Notebooks on Geology*, Letter 2011/02(CG2011_L02):99–102, 2 fig.
- Kershaw, Stephen. 1980. Cavities and cryptic faunas beneath non-reef stromatoporoids. *Lethaia* 13:327–338.
- Kershaw, Stephen. 1981. Stromatoporoid growth form and taxonomy in a Silurian biostrome, Gotland. *Journal of Paleontology* 55:1281–1295.
- Kershaw, Stephen. 1984. Patterns of stromatoporoid growth in level-bottom environments. *Palaeontology* 27:113–130.
- Kershaw, Stephen. 1990. Stromatoporoid palaeobiology and taphonomy in a Silurian bioherm on Gotland, Sweden. *Palaeontology* 33(3):681–705.
- Kershaw, Stephen. 1993. Sedimentation control on growth of stromatoporoid reefs in the Silurian of Gotland, Sweden. *Journal of the Geological Society, London* 150:197–205.
- Kershaw, Stephen. 1994a. Cathodoluminescence of Silurian stromatoporoids from Gotland, Sweden. *Courier Forschungsinstitut Senckenberg* 172:307–318.
- Kershaw, Stephen. 1994b. Classification and geological significance of biostromes. *Facies* 31:81–92.
- Kershaw, Stephen. 1997. Palaeoenvironmental change in Silurian stromatoporoid reefs, Gotland, Sweden. *Boletín de la Real Sociedad Española de Historia Natural* 91:331–344.
- Kershaw, Stephen. 1998. The applications of stromatoporoid palaeobiology in palaeoenvironmental analysis. *Palaeontology* 41:509–544.
- Kershaw, Stephen. 2012. Part E, Revised, Volume 4, Chapter 13: Paleoecology of the Paleozoic Stromatoporidea. *Treatise Online* 31:1–24, 14 fig., 1 table.
- Kershaw, Stephen, & F. R. Brunton. 1999. Palaeozoic stromatoporoid taphonomy: Ecologic and environmental significance. *Palaeogeography, Paleoclimatology, Palaeoecology* 149:313–328.
- Kershaw, Stephen, & M. Keeling. 1994. Factors controlling the growth of stromatoporoid bioherms in the Ludlow of Gotland, Sweden. *Sedimentary Geology* 89:325–335.
- Kershaw, Stephen, & Robert Riding. 1978. Parameterization of stromatoporoid shape. *Lethaia* 11:233–242.
- Kershaw, Stephen, & Robert Riding. 1980. Stromatoporoid morphotypes of the Middle Devonian Torbay reef complex, Long Quarry Point, Devon. *Proceedings of the Ussher Society* 5:13–23.
- Kershaw, Stephen, & R. R. West. 1991. Chaetetid growth form and its controlling factors. *Lethaia* 24:333–346.
- Kershaw, Stephen, Rachel Wood, & Li Guo. 1999. How did Palaeozoic stromatoporoids relate to their substrates? *Palaeontological Association, 43rd Annual Meeting*, University of Manchester, 19–22 December 1999, Abstracts, The Palaeontology Newsletter 42:24–25.
- Kershaw, Stephen, Rachel A. Wood, & Li Guo. 2006. Stromatoporoid response to muddy substrates in Silurian limestones. *GFF* 128(2):131–138.
- Khain, E. V., E. V. Bibikova, E. B. Salnikova, A. Kröner, A. S. Gibsher, A. N. Didenko, K. E. Degtyarev, & A. A. Fedotova. 2003. The Paleo-Asian ocean in the Neoproterozoic and Early Palaeozoic: New geochronologic data and palaeotectonic reconstructions. *Precambrian Research* 122:329–358, 13 fig., 3 tables.
- Khalfina, V. K. 1956. O noyykh nachnodkakh Stromatoporoidea v Sibiri [On new discoveries of stromatoporoids from Siberia]. *Paleontologicheskiy Ezhegodnik Vsesouznog Paleontologicheskoy Obshchestva* [Yearbook of the Paleontological Society] 15:53–67.
- Khalfina, V. K. 1958. O novom predstavitele podroda *Labechiella* Yabe et Sugiyama iz ordovika Kazakhstana [On a new representative species of *Labechiella* Yabe & Sugiyama from the Ordovician of Kazakhstan]. In B. M. Keller, ed., *Trudy Geologicheskogo Instituta* 9:229–232.
- Khalfina, V. K. 1960a. Stromatoporoidei iz kembriiskikh otlozhennii Sibiri [Stromatoporoids of the Cambrian deposits of Siberia]. *Sibirskogo*

- Nauchno-Issledovatel'skogo Instituta Geologii, Geofiziki i Mineral'nogo Syr'ia, Trudy, Seriya Neftyanaya Geologiya 8:79–83, pl. 5–7.
- Khalfina, V. K. 1960b. Otriad Stomatoporoidei: Kembriiskaya sistema [Order Stomatoporoidea: Cambrian System]. In L. L. Khalfin, ed., Biostratigrafia Paleozoia Saiano-Altaiskoi Gornoi Oblasti, Tom I: Nizhnii Paleozoi [Paleozoic Biostratigraphy of the Sayan-Alai Mountain Region, vol. I: Lower Paleozoic]. Sibirskogo Nauchno-Issledovatel'skogo Instituta Geologii, Geofiziki i Mineral'nogo Syr'ia, Trudy 19:141–143, pl. Cm13–Cm14.
- Khalfina, V. K. 1960c. Otriad Stomatoporoidei: Ordovikskaya sistema [Order Stomatoporoidea: Ordovician System]. In L. L. Khalfin, ed., Biostratigrafia Paleozoia Saiano-Altaiskoi Gornoi Oblasti, Tom I: Nizhnii Paleozoi [Paleozoic Biostratigraphy of the Sayan-Alai Mountain Region, vol. I: Lower Paleozoic]. Sibirskogo Nauchno-Issledovatel'skogo Instituta Geologii, Geofiziki i Mineral'nogo Syr'ia, Trudy 19:370–373, pl. O1–O3.
- Khalfina, V. K. 1961a. Paleontologicheskaya kharakteristika silura Saiano-Altaiskoi oblasti: Stomatoporoidei [Paleontological characteristics of the Silurian of the Sayan-Alai region: Stomatoporoids]. In L. L. Khalfin, ed., Biostratigrafia Paleozoia Saiano-Altaiskoi Gornoi Oblasti, Tom II: Sredniy Paleozoi [Paleozoic Biostratigraphy of the Sayan-Alai Mountain Region, vol. II: Middle Paleozoic]. Sibirskogo Nauchno-Issledovatel'skogo Instituta Geologii, Geofiziki i Mineral'nogo Syr'ia, Trudy 20:24–29.
- Khalfina, V. K. 1961b. Otriad Stomatoporoidei. Siluriiskaya sistema [Order Stomatoporoidea. Silurian System]. In L. L. Khalfin, ed., Biostratigrafia Paleozoia Saiano-Altaiskoi Gornoi Oblasti, Tom II: Sredniy Paleozoi [Paleozoic Biostratigraphy of Sayan-Alai Mountain Region, vol. II: Middle Paleozoic]. Sibirskogo Nauchno-Issledovatel'skogo Instituta Geologii, Geofiziki i Mineral'nogo Syr'ia, Trudy 20:43–56, pl. S1–S8.
- Khalfina, V. K. 1961c. Paleontologicheskaya kharakteristika devona Saiano-Altaiskoi oblasti: Stomatoporoidei [Paleontological characteristics of the Devonian of the Sayan-Alai region: Stomatoporoids]. In L. L. Khalfin, ed., Biostratigrafia Paleozoia Saiano-Altaiskoi Gornoi Oblasti, Tom II: Sredniy Paleozoi [Paleozoic Biostratigraphy of Sayan-Alai Mountain Region, vol. II: Middle Paleozoic]. Sibirskogo Nauchno-Issledovatel'skogo Instituta Geologii, Geofiziki i Mineral'nogo Syr'ia, Trudy 20:245–256.
- Khalfina, V. K. 1961d. Otriad Stomatoporoidei: Devonskaya sistema [Order Stomatoporoidea: Devonian System]. In L. L. Khalfin, ed., Biostratigrafia Paleozoia Saiano-Altaiskoi Gornoi Oblasti, Tom II: Sredniy Paleozoi [Paleozoic Biostratigraphy of Sayan-Alai Mountain Region, vol. II: Middle Paleozoic]. Sibirskogo Nauchno-Issledovatel'skogo Instituta Geologii, Geofiziki i Mineral'nogo Syr'ia, Trudy 20:323–349, pl. D1–D16.
- Khalfina, V. K. 1968a. O novykh rodakh stomatoporoidei iz devonskikh otlozhennii IUZ okrainy Kuzbassa i Altaya [On new genera of stromatoporoids from Devonian deposits of the SW outskirts of Kuzbass and Altai]. In V. A. Ivaniya, ed., Novye materialy po stratigrafi i paleontologii nizhnego i srednego paleozoya Zapadnoi Sibiri [New materials on the stratigraphy and paleontology of the lower and middle Paleozoics of western Siberia]. Trudy Tomskogo Ordena Trudovogo Krasnogo Znameni Gosudarstvennogo Universiteta im. V. V. Kuibysheva, Seriya Geologicheskaya [Transactions of the Tomsk Order of the Red Banner of Labour State University named for V. V. Kujbyleva, Geological Series] 202:147–152, pl. 1–2.
- Khalfina, V. K. 1968b. Obzor kompleksov stomatoporoidei nizhnego i srednego devona Salairia [Survey of the stromatoporoid complexes of the Lower and Middle Devonian of Salair]. In L. L. Khalfin, ed., Materialy po regional'noi geologii Sibiri [Contributions to the Regional Geology of Siberia]. Soveshchanie po Stratigrafi Devona Sibiri, Novosibirsk, 1967 [Conference on Devonian Stratigraphy of Siberia, Novosibirsk, 1967]. Seriya Regional'naia Geologiya. SNIIGGiMS. Novosibirsk. p. 57–69.
- Khalfina, V. K. 1972. Stomatoporoidei [Stromatoporoids]. In B. S. Sokolov, A. B. Ivanovskii, & E. V. Krasnov, eds., Morfologiya i terminologiya kishechnopolostnykh [Morphology and terminology of the coelenterates]. Akademii Nauk SSSR, Sibirskoe Otdelenie, Institut Geologii i Geofiziki, Trudy 133:14–22, 148–152, pl. C-1–C-12.
- Khalfina, V. K., & V. I. Yavorsky. 1967. O drevneishikh stomatoporoideakh [On the oldest stromatoporoids]. Paleontologicheskiy Zhurnal 1967(3):133–136.
- Khalfina, V. K., & V. I. Yavorsky. 1971. Novaya gruppa stomatoporoidei [New groups of stromatoporoids]. Akademii Nauk SSSR, Sibirskoi Otdelenie, Trudy Institut Geologii i Geofiziki [Academy of Science USSR, Siberian Branch, Transactions of the Institute of Geology and Geophysics] 8:118–121.
- Khalfina, V. K., & V. I. Yavorsky. 1973. Klassifikatsiya stomatoporoidei [Classification of the stromatoporoids]. Paleontologicheskiy Zhurnal 1973(2):19–34.
- Khalfina, V. K., & V. I. Yavorsky. 1974. K evoliutsii stomatoporoidei [On the evolution of the stromatoporoids]. In B. S. Sokolov, ed., Drevnie Cnidaria [Ancient Cnidaria], vol. 1. Akademii Nauk SSSR, Sibirskoe Otdelenie, Trudy Instituta Geologii i Geofiziki 201:38–45, 270–271, pl. 1–2.
- Kheraskova, T. N., A. N. Didenko, V. A. Bush, & Yu. A. Volozh. 2003. The Vendian–Early Paleozoic history of the continental margin of eastern Paleogondwana, PaleAsian Ocean, and Central Asian Foldbelt. Russian Journal of Earth Sciences 5:165–184, 10 fig.
- Khomentovskiy, V. V., & G. A. Karlova. 1986. O nizhnney granitse pestrotsvetnoy svity v basseyne r. Aldan [On the lower boundary of the Pestrotsvet Formation in the Aldan River basin]. In V. V. Khomentovskiy, ed., Pozdnii Dokembri i Ranniy Paleozoy Sibiri: Sibirskaya Platforma i Vneshnyaya Zona Sayano-Altayskoy Skladchatoy Oblasti [Late Precambrian and Early Paleozoic of Siberia: Siberian Platform and the Outer Zone of the Sayan-Altay Fold Belt].

- Institut Geologii i Geofiziki, Sibirske Otdelenie, Akademiya Nauk SSSR. Novosibirsk. p. 3–22, 3 fig.
- Khromykh, V. G. 1967. Sistematischeskoe polozenie dendroidnykh stromatoporoidei [Systematic position of the dendroid stromatoporoids]. Materiały Konferencji Molodykh Uchenykh i Aspirantov [Transactions of the Conference of Young Students and Postgraduates]. Sibirske Otdelenie, Institut Geologii i Geofiziki. Moscow. p. 67.
- Khromykh, V. G. 1969. Stomatoporoidei iz srednedevonskikh Omolonskogo Massiva [Stromatoporoids from the Middle Devonian deposits of the Omolon Massif]. In A. B. Ivanovskii, ed., Verkhniy Paleozoi Sibiri i Dalinego Vostoka [Upper Paleozoic of Siberia and the Far East]. Akademiya Nauk SSSR, Sibirske Otdelenie, Trudy Institut Geologii i Geofiziki [Academy of Science USSR, Siberian Branch, Transactions of the Institute of Geology and Geophysics] 68:29–37.
- Khromykh, V. G. 1971. O stromatoporoideakh neliudimskoi svity (Severo-Vostok, SSSR) [On Stromatoporoidea of the Neliudimskaja Suite (North-East USSR)]. In A. B. Ivanovskii, ed., Rugozi i Stomatoporoidei paleozoia SSSR [Paleozoic Rugosa and Stromatoporoids of the USSR]. Trudy Vsesoznogo Simposiuma po Izueniu Isokopaemyh Korallov, II [All-Union Symposium on Fossil Corals of the USSR, II]. Akademiya Nauk SSSR, Sibirske Otdelenie, Institut Geologii i Geofiziki. Izdatel'stvo Nauka. Moscow. p. 125–134.
- Khromykh, V. G. 1974a. Devonskie stromatoporoidei severo-vostoka SSSR [Devonian stromatoporoids of the north-eastern USSR]. Izdatel'stvo Nauka, Sibirske Otdelenie, Novosibirsk, Trudy Instituta Geologii i Geofiziki 64:104 p., 5 fig., pl. 1–18, 2 tables.
- Khromykh, V. G. 1974b. Filogeniya i istoricheskoe razvitiye nekotorykh rodov stromatoporoidei [Phylogeny and historical development of some genera of stromatoporoids]. In B. S. Sokolov, ed., Drevnie Cnidaria [Ancient Cnidaria I]. Akademiya Nauk SSSR, Sibirske Otdelenie, Trudy Instituta Geologii i Geofiziki 201:45–50, 15 fig.
- Khromykh, V. G. 1977. Ordovikskie stromatoporoidei Chukotskogo poluostrova [Ordovician stromatoporoids of the Chukotk Peninsula]. In A. M. Obut, ed., Stratigrafija i fauna ordovika i silura Chukotskogo poluostrova [Stratigraphy and fauna of the Chukotk Peninsula]. Akademija Nauk SSSR, Sibirske Otdelenie, Trudy Instituta Geologii i Geofiziki 351:43–50, 152–157, pl. 1–3.
- Khromykh, V. G. 1996. O sisteme semeistva Clathrodictyidae Kühn, 1939 (Stromatoporoidei) [On the system of the family Clathrodictyidae Kühn 1939 (Stromatoporoidea)]. Geologija i Geofizika 37(2):64–74, 1 fig. English translation: Russian Geology and Geophysics 37(2):59–67, 1 fig.
- Khromykh, V. G. 1999a. Novyi rod drevneishikh stromatoporoidei [New genus of the earliest stromatoporoids]. Doklady Akademii Nauk 364(6):801–803, 2 fig. English translation: Doklady Earth Sciences 365(2):178–180, 2 fig.
- Khromykh, V. G. 1999b. Drevneishie rody stromatoporoidei [The oldest stromatoporoids]. Geologija i Geofizika 40(2):221–230, 2 fig., 1 table. English translation: Russian Geology and Geophysics 40(2):223–231, 2 fig., 1 table.
- Khromykh, V. G. 2001. Novye stromatoporoidei iz verkhnego ordovika Taïmyra [New Upper Ordovician Stromatoporoidea from Taimyr]. Paleontologicheskiy Zhurnal 35(4):11–15, 1 fig., 1 pl. English translation: Paleontological Journal 35(4):344–349, 1 fig., 1 pl.
- Khromykh, V. G. 2010. Evolution of Stromatoporoidea in the Ordovician-Silurian epicontinental basin of the Siberian Platform and Taimyr. Russian Geology and Geophysics 51:684–693, 4 fig.
- Kiessling, Wolfgang. 2001a. Paleoclimatic significance of Phanerozoic reefs. Geology 29(8):665–760.
- Kiessling, Wolfgang. 2001b. Phanerozoic reef trends based on the paleoreef database. In G. D. Stanley Jr., ed., The History and Sedimentology of Ancient Reef Systems. Topics in Geobiology, vol. 17. Kluwer Academic/Plenum Publishers. New York. p. 41–88, 9 fig., 1 table.
- Kiessling, Wolfgang. 2002. Secular variations in the Phanerozoic reef ecosystem. In Wolfgang Kiessling, Erik Flügel, & Jan Golonka, eds., Phanerozoic reef patterns. SEPM (Society for Sedimentary Geology) Special Publication 72:625–690, 33 fig., 12 table.
- Kiessling, Wolfgang, Erik Flügel, & Jan Golonka. 2002. Phanerozoic Reef Patterns. SEPM (Society for Sedimentary Geology) Special Publication 72:775 p.
- Kiessling, Wolfgang, Erik Flügel, & Jan Golonka. 2003. Patterns of Phanerozoic carbonate platform sedimentation. Lethaia 36:195–226, 17 fig., 3 tables.
- Kilty, K. T. 2002. Discussion of Cleland 2001. Geology 30:951–952.
- Kim, A. I., E. A. Yolkin, M. V. Erina, & R. T. Gratsianova. 1978. Tipovye razrezy pogranichnykh sloev nizhnego i srednego devona Srednei Azii [Type sections of the Lower and Middle Devonian Boundary Beds in Middle Asia]. Polevaia Sessiya Mezhdunarodnoi Podkomissii po Stratigrafiyi Devona [Field Session of the International Subcommission on Devonian Stratigraphy]. International Stratigraphic Commission. Akademiya Nauk SSSR, Sibirske Otdelenie, Institut Geologii i Geofiziki. Novosibirsk. 54 p. + atlas of paleontological plates, 48 p., 78 pl.
- King, R. H. 1933 [1932]. A Pennsylvanian sponge from Wise County, Texas. The University of Texas Bulletin 3201:75–85, pl. 7–8.
- King, R. H. 1938. Pennsylvanian sponges of north-central Texas. Journal of Paleontology 12:498–504, 14 fig.
- King, R. H. 1943. New Carboniferous and Permian sponges. Bulletin of the State Geological Survey of Kansas 47:1–36, 2 fig., pl. 1–3.
- Kirkpatrick, R. 1908. On two new genera of Recent pharetronid sponges. Annals and Magazine of Natural History (series 8) 2(12):503–514.
- Kirkpatrick, R. 1909. Notes on *Merlia normani* Kirkp. Annals and Magazine of Natural History (series 8) 4:42–48.
- Kirkpatrick, R. 1910a. A sponge with a siliceous and calcareous skeleton. Nature 83:338.

- Kirkpatrick, R. 1910b. On a remarkable pharetronid sponge from Christmas Island. Proceedings of the Royal Society of London (series B) 83(562):124–133, pl. I–II.
- Kirkpatrick, R. 1910c. Further notes on *Merlia normani* Kirkp. Annals and Magazine of Natural History (series 8) 5:288–291.
- Kirkpatrick, R. 1911. On *Merlia normani*, a sponge with a siliceous and calcareous skeleton. Quarterly Journal of Microscopical Science 56(40):657–702, 5 fig., pl. 32–38.
- Kirkpatrick, R. 1912a. *Merlia normani* and its relation to certain Palaeozoic fossils. Nature 89:502–503.
- Kirkpatrick, R. 1912b. On the nature of stromatoporoids. Nature 89:607.
- Kirkpatrick, R. 1912c. Note on *Astrosclera willeyana* Lister. Proceedings of the Royal Society of London (series B) 84(575):579–580.
- Kirkpatrick, R. 1912d. Note on *Merlia normani* and the “Monticuliporas.” Proceedings of the Royal Society of London (series B) 85(582):562–563.
- Kirkpatrick, R. 1912e. On the stromatoporoids and Eozoon. Annals and Magazine of Natural History (8)10:341–347, pl. 8–9.
- Kirkpatrick, R. 1912f. On the structure of stromatoporoids and of Eozoon. Annals and Magazine of Natural History (8)10:446–460, 3 fig., pl. 11–12.
- Kirkpatrick, R. 1913. The Nummulosphere: An account of the organic origin of so-called igneous rocks and of abyssal red clays. Lamley & Co. London. 104 p.
- Kirschvink, J. L. 1992. A paleogeographic model for Vendian and Cambrian time. In J. W. Schopf & C. Klein, eds., The Proterozoic Biosphere: A Multidisciplinary Study. Cambridge University Press. Cambridge, New York, & Melbourne. p. 567–581, fig. 12.1–12.11, table 12.1.
- Kirschvink, J. L., R. L. Ripperdan, & D. A. Evans. 1997. Evidence for a large-scale reorganization of Early Cambrian continental masses by inertial interchange true polar wander. Science 277:541–545, 3 fig.
- Kissling, D. L., & J. A. Lineback. 1967. Paleoecological analysis of corals and stromatoporoids in a Devonian biostrome: Falls of Ohio, Kentucky, Indiana. Bulletin of the Geological Society of America 78:157–174.
- Klaamann, E. R. 1966. Inkommunikatnye tabulyaty Estonii [Incommunicate Tabulata of Estonia]. Akademiya Nauk Estonia SSR, Institut Geologica (Tallinn):96 p., 31 fig., 22 pl.
- Klapper, G., & J. G. Johnson. 1980. Endemism and dispersal of Devonian conodonts. Journal of Paleontology 54:400–455.
- Klapper, G., & W. A. Oliver Jr. 1995. The Detroit River Group is Middle Devonian: Discussion on “Early Devonian age of the Detroit River Group, inferred from Arctic stromatoporoids.” Canadian Journal of Earth Sciences 32:1070–1073.
- Klapper, G., & W. Ziegler. 1979. Devonian conodont biostratigraphy. Special Papers in Palaeontology 23:199–224.
- Klipstein, A. von. 1843–1845. Mitteilungen aus dem Gebiete der Geologie und Palaeontologie. Beiträge zur geologischen Kenntnis der östlichen Alpen. George Friedrich Heyer's Verlag. Giessen. 311 p., 20 pl.
- Klovan, J. E. 1964. Facies analysis of the Redwater Reef Complex, Alberta, Canada. Bulletin of Canadian Petroleum Geology 12:1–100.
- Klovan, J. E. 1966. Upper Devonian stromatoporoids from the Redwater Reef Complex, Alberta. Bulletin of Geological Survey of Canada 133:1–33, 3 fig., 11 pl., 2 tables.
- Knott, N. A., A. J. Underwood, M. G. Chapman, & T. M. Glasby. 2006. Growth of the encrusting sponge *Tedania anhelans* (Lieberkuhn) on vertical and on horizontal surfaces of temperate subtidal reefs. Marine and Freshwater Research 57(1):95–104.
- Kobluk, D. R. 1974. The orientation of *Amphiphora ramosa* fragments and their potential for use in paleocurrent studies in Devonian carbonate complexes. Bulletin of Canadian Petroleum Geology 22:353–356.
- Kobluk, D. R. 1975. Stromatoporoid paleoecology of the southeastern margin of the Miette carbonate complex, Jasper Park, Alberta. Bulletin of Canadian Petroleum Geology 23:224–277.
- Kobluk, D. R. 1978. Reef stromatoporoid morphologies as dynamic populations: Application of field data to a model and the reconstruction of an Upper Devonian reef. Bulletin of Canadian Petroleum Geology 26:218–236.
- Kobluk, D. R., D. J. Bottjer, & M. J. Risk. 1977. Disorientation of Paleozoic hemispherical corals and stromatoporoids. Canadian Journal of Earth Sciences 14:2226–2231.
- Kobluk, D. R., & N. P. James. 1979. Cavity-dwelling organisms in Lower Cambrian patch reefs from southern Labrador. Lethaia 12:193–218, 17 fig.
- Kobluk, D. R., & R. W. M. van Soest. 1989. Cavity-dwelling sponges in a southern Caribbean coral reef and their paleontological implications. Bulletin of Marine Science 44:1207–1235.
- Koby, F. L. 1888. Monographie des Polypiers jurassiques de la Suisse, Part 8. Mémoire de la Société Paléontologique Suisse 5:401–456, pl. 109–120.
- Koeberl, C., & K. G. MacLeod, eds. 2002. Catastrophic events and mass extinctions: Impacts and beyond. Geological Society of America Special Paper 356:729 p.
- Koechlin, Eduard. 1947. Chaetetiden aus dem Malm des Berner Jura. Schweizerische Palaeontologische Abhandlungen 65:1–16, 2 fig., 4 pl.
- Koehl, M. A. R. 1982. Mechanical design of spicule-reinforced connective tissue: Stiffness. Journal of Experimental Biology 98:239–267.
- Koltun, V. M. 1988. Razvitiye individual'nosti i stanovlenie individua u gubok [The development of individuality and the becoming of the individual in sponges]. In V. M. Koltun & S. D. Stepan'yants, eds., Gubki i Knidarii: Sovremennoe Sostoyanie i Perspektivy Issledovaniy [Porifera and Cnidaria: Modern Status and Perspectives of Investigation]. Zoologicheskiy Institut, Akademiya Nauk SSSR. Leningrad. p. 24–36, 2 fig.
- Konishi, K. 1959. Identity of algal *Tubiphytes* Maslov, 1956, and the hydrozoan genus *Nigriporella* Rigby,

1958. Palaeontological Society of Japan, Transactions and Proceedings (new series) 35:42.
- Könnecker, G., & A. Freiwald. 2005. *Plectroninia celtica* sp. nov. (Calcarea, Minchinellidae), a new species of "Pharetroid" sponge from bathyal depths in the northern Porcupine Seabight, NE Atlantic. *Facies* 51:53–59.
- Konyushkov, K. N. 1967. Novye dannye po arkheotsiatam gor Agyrek severo-vostochnogo Kazakhstana [New data on the archaeocyaths of Mt. Agyrek in northeastern Kazakhstan]. *Vsesoyuznyi Nauchno-Issledovatel'skii Geologicheskii Institut* (new series) 129:104–113, 1 fig., 1 pl.
- Konyushkov, K. N. 1972. Novye dannye po biostratigrafi kembriya i arkheotsiatam Zapadnogo Sayana [New data on Cambrian biostratigraphy and archaeocyaths of West Sayan]. In I. T. Zhuravleva, ed., *Problemy Biostratigrafi i Paleontologii Nizhnego Kembriya Sibiri* [Problems of Lower Cambrian Biostratigraphy and Paleontology of Siberia]. Nauka. Moscow. p. 124–143, pl. 11–17, 1 table.
- Konyushkov, K. N. 1978. Istoricheskoe razvitiye arkheotsiat i nekotorye voprosy ikh biologii [Historical development of archaeocyaths and questions of their biology]. *Ezhegodnik Vsesoyuznogo Paleontologicheskogo Obschestva* 21:12–21, 12 fig.
- Korde, K. B. 1951. Novye rody i vidy izvestikovykh vodoroslei iz kamennougol'nykh otlozhenii Severnogo Urala [New calcareous algal species and genera from the Carboniferous of the northern Urals]. *Moskovskogo Obschestva Ispytatelei Prirody* Trudy 1:175–182, pl. 1–3.
- Korde, K. B. 1959. Problematicheskie ostatki iz kembriyskikh otlozhenii yugo-vostoka Sibirskoy Platformy [Problematic fossils from Cambrian strata of the southeastern Siberian Platform]. Akademiya Nauk SSSR, Doklady 125:625–627, 1 fig.
- Korde, K. B. 1975. Kembriyskie tselenteraty [Cambrian coelenterates]. In B. S. Sokolov, ed., *Drevnie Cnidaria*, Tom II [Ancient Cnidaria, vol. II]. Nauka. Novosibirsk. p. 53–56, 246, 2 fig., 2 pl.
- Korde, K. B. 1979. Novoe rodovoe nazvanie *Yakovlevites* dlya arkheotsiat [A new genus name *Yakovlevites* for archaeocyaths]. *Paleontologicheskiy Zhurnal* 1979(3):126.
- Korshunov, V. I. 1968. *Gonamispongia*: Novyy rod gubok semeystva Chancelloriidae [*Gonamispongia*: New sponge genus of the family Chancelloriidae]. *Paleontologicheskiy Zhurnal* 1968(3):127–129, 1 fig.
- Korshunov, V. I. 1972. Biostratigrafiya i Arkheotsiaty Nizhnego Kembriya Severo-Vostoka Aldanskoy Anteklizy [Lower Cambrian Biostratigraphy and Archaeocyaths of the Northeastern Aldan Antecline]. *Yakutskoe Knizhnoe Izdatel'stvo*. Yakutsk. 128 p., 5 fig., 24 pl.
- Korshunov, V. I. 1976. Novye predstavители podotryada Coscinocyathina iz nizhnego kembriya yuga Sibirskoy Platformy [New representatives of the suborder Coscinocyathina from the Lower Cambrian of the southern Siberian Platform]. *Institut Geologii i Geofiziki, Sibirskoe Otdelenie, Akademiya Nauk SSSR, Trudy* 296:149–150, pl. 13.
- Korshunov, V. I. 1983a. Arkheotsiaty nizhney chasti atdabanskogo yarusa stratotipicheskogo razreza reki Leny [Archaeocyaths of the lower Artdabanian stage in the River Lena stratotype section]. *Institut Geologii i Geofiziki, Sibirskoe Otdelenie, Akademiya Nauk SSSR, Trudy* 541:94–108, pl. 19–22.
- Korshunov, V. I. 1983b. Novye arkheotsiaty iz olozhchenii nizhnego kembriya basseyna r. Leny [New archaeocyaths from the Lower Cambrian deposits of the R. Lena basin]. *Institut Geologii i Geofiziki, Sibirskoe Otdelenie, Akademiya Nauk SSSR, Trudy* 541:108–112, pl. 23.
- Korshunov, V. I., & I. T. Zhuravleva. 1967. Novye vidy arkheotsiat iz nizhnego kembriya Yakutii [New archaeocyath species from the Lower Cambrian of Yakutia]. In A. B. Ivanovskiy & B. S. Sokolov, eds., *Novye Dannye po Biostratigrafi Nizhnego Paleozoya Sibirskoy Platformy* [New Data on the Lower Paleozoic Biostratigraphy of the Siberian Platform]. Nauka. Novosibirsk. p. 3–11, 2 fig., pl. 1–2.
- Kosareva, E. G. 1968. *Stromatoporoidae*. In V. A. Ivaniia & E. G. Kosareva, eds., *K voprasu Kur'inskikh izvestniakov severnaya khasti Rudnogo Altaia* [Toward the question of the age of the Kur'inskikh Limestone (northern part of Rudny Altai)]. In V. A. Ivaniia, ed., *Novye materialy po stratigrafi i paleontologii nizhnego i srednego paleozoya Zapadnoi Sibiri* [New contributions to the paleontology of the Lower and Middle Paleozoic of western Siberia]. *Trudy Tomskogo Ordena Trudovogo Krasnogo Znameni Gosudarstvennogo Universiteta im V. V. Kujbyleva, Seriya Geologicheskaya* 202:67–82.
- Kosareva, E. G. 1976. K revizii rodov *Clathrocoilona* i *Synthetostroma* (Stromatoporoidea) [On the revision of the genera *Clathrocoilona* and *Synthetostroma* (Stromatoporoidea)]. *Paleontologicheskiy Zhurnal* 1976(1):19–26.
- Kosareva, E. G. 1979. K voprosu o vozraste Losishinsk svity [On the problem of the age of the Losishinsk formation]. In O. A. Betekhtina & R. T. Gratsianova, eds., *Fauna i stratigrafiya srednego i verkhnego paleozoya* [Fauna and stratigraphy of the Middle and Upper Paleozoic of Siberia]. Akademiya Nauk SSSR, Sibirskoi Otdelenie, *Trudy Institut Geologii i Geofiziki* [Academy of Science USSR, Siberian Branch, Transactions of the Institute of Geology and Geophysics] 401:39–44.
- Kotel'nikov, D. V. 1995. Novye vidy arkheotsiat nizhnekembriyskogo Vadi-Balinskogo organogen'nogo kompleksa (tsentral'naya Tuva) [New archaeocyath species from the Lower Cambrian of the Vadi-Bala organogenic complex (central Tuva)]. *Paleontologicheskiy Zhurnal* 1995(2):21–29, fig. 1, pl. 2.
- Kötter, I., & J. Pernthaler. 2002. In situ feeding rates of obligate and facultative coelobite (cavity-dwelling) sponges in a Caribbean coral reef 1. In M. K. Moosa, S. Soemodihardjo, A. Soegiarto, K. Romimohtarto, A. Nontji, S. S. Soekarno and W. S. A. Suharsono, eds., *Proceedings of the 9th International Coral Reef Symposium*, Bali, 23–27 Oct. 2000, vol. 1:347–350.
- Kovács, S. 1978a. New sphinctozoan sponges from the North Hungarian. *Neues Jahrbuch für Geologie und Paläontologie, Monatshefte* 1978(11):685–697, 6 fig.

- Kovács, S. 1978b. New calcareous sponges from the Wetterstein reef limestone of Alsóhegy Karsplateau (Silica nape, Western Carpathians, North Hungary). *Acta Mineralogica-Petrographica*, Szeged 23(2):299–317, 7 pl.
- Krasnopeeva, P. S. 1937. Vodorosli i arkheotsiaty drevneyshikh tolshch Potekhinskogo planshetu Khakassii [Algae and archaeocyaths from the oldest formations of the Potekhino quadrangle of Khakassia]. In M. A. Usov, ed., *Materialy po Geologii Krasnoyarskogo Kraya* [Materials on the Geology of the Krasnoyarsk Region]. Zapadno-Sibirskiy Geologicheskiy Trest', Tomsk 3:1–51, 8 fig., 8 pl., 3 tables.
- Krasnopeeva, P. S. 1953. Osobennosti kameshkovskogo kompleksa arkheotsiat v fasi effuzivno-osadochnykh otlozheniy na primere arkheotsiat zapadnoy chasti Tuvy [Features of the Kameshi archaeocyathan assemblage in the facies of effusive-sedimentary deposits exemplified by the archaeocyaths of the western part of Tuva]. Tomskiy Gosudarstvennyi Universitet, Trudy, seriya geologicheskaya 124:51–62, 4 pl., 1 table.
- Krasnopeeva, P. S. 1955. Tip Archaeocyathi: Arkheotsiaty [Phylum Archaeocyatha: Archaeocyaths]. In L. L. Khalfina, ed., *Atlas Rukovodyashchikh Form Iskopaemykh Fauny i Flory Zapadnoy Sibiri*, Tom 1 [Atlas of the Index Forms of Fossil Fauna and Flora of Western Siberia, vol. 1]. Gosudarstvennoe Nauchno-Tekhnicheskoe Izdatel'stvo Literatury po Geologii i Okhrane Nedr. Moscow. p. 17–21, 74–102, fig. 1–15, 117–156, pl. 1–10, table 2.
- Krasnopeeva, P. S. 1959. Arkheotsiaty gor Agyrek-Pavlodarskoy oblasti Kazakhskoy SSR [Archaeocyaths of the Agyrek Mountains, Pavlodar region of the Kazakh SSR]. Akademiya Nauk Kazakhskoy SSR, Izvestiya, seriya geologicheskaya 3(36):3–10, 3 fig., 2 pl.
- Krasnopeeva, P. S. 1960. K voprosu o sistematicheskom polozhenii arkheotsiat [On the question of the systematic position of archaeocyaths]. Tomskiy Gosudarstvennyi Universitet, Trudy, seriya geologicheskaya 146:37–44, 6 pl.
- Krasnopeeva, P. S. 1961. Novye arkheotsiaty iz obruchevskogo gorizonta Altai-Sayanской oblasti [New archaeocyaths from the Obruchev Horizon of the Altay-Sayan region]. Sibirskiy Nauchno-Issledovatel'skiy Institut Geologii, Geofiziki i Mineral'nogo Syr'ya, Trudy 5:247–253, 1 fig., 4 pl.
- Krasnopeeva, P. S. 1969. Osnovnye osobennosti morfologii arkheotsiat [Basic features of the morphology of archaeocyaths]. In I. T. Zhuravleva, ed., *Biostratigrafiya i Paleontologiya Nizhnego Kembriya Sibiri i Dal'nego Vostoka* [Lower Cambrian Biostratigraphy and Paleontology of Siberia and the Far East]. Nauka. Moscow. p. 60–65, pl. 26–29.
- Krasnopeeva, P. S. 1972. Nekotorye novye okamenelosti kembriya zapadnoy Sibiri [Some new fossils from the Cambrian of western Siberia]. In I. T. Zhuravleva, ed., *Problemy Biostratigrafi i Paleontologii Nizhnego Kembriya Sibiri* [Problems of Lower Cambrian Biostratigraphy and Paleontology of Siberia]. Nauka. Moscow. p. 144–146, pl. 18–19.
- Krasnopeeva, P. S. 1978. Printsipy estestvennoy klassifikatsii arkheotsiat (trubchatye arkheotsiaty) [Principles of the natural classification of archaeocyaths (tubulose archaeocyaths)]. In A. R. Anan'ev, ed., *Stratigrafiya i Paleontologiya Sibiri i Urala* [Stratigraphy and Paleontology of Siberia and the Urals]. Tomskiy Universitet. Tomsk. p. 76–84, 3 pl.
- Krasnopeeva, P. S. 1980. Arkheotsiaty s trubkami v intervallyume: Klass Syringoidea Krasnopeeva, 1953 [Archaeocyaths with tubes in the intervalum: Class Syringoidea Krasnopeeva, 1953]. In I. T. Zhuravleva, ed., *Kembri Altai-Sayanoy Skladchatoy Oblasti* [Cambrian of the Altay Sayan Fold Belt]. Nauka. Moscow. p. 151–160, 1 fig., pl. 21–22.
- Kraus, O., & E. Ott. 1968. Eine ladinische Riff-Fauna im Dobratsch-Gipfelkalk (Kärnten, Österreich) und Bemerkungen zum Faziesvergleich von Nordalpen und Drauzug. Mitteilungen der Bayerischen Staatssammlung für Paläontologie und historische Geologie 8:263–290, 3 fig., pl. 17–20.
- Krautter, Manfred. 1994. Observations on *Eudea clavata* Lamouroux (Calcarea) from the Upper Jurassic of Portugal. In R. W. M. van Soest, T. M. G. van Kempen, & J. C. Braekman, eds., *Sponges in Time and Space*. Balkema. Rotterdam. p. 29–34, 12 fig.
- Krebedünkel, J. 1995. Stromatoporen aus dem Givet und Frasne des Bergischen Landes. Geologisches Institut der Universität zu Köln Sonderveröffentlichungen 106:182 p., 18 pl.
- Krebs, C. J. 1972. Ecology: The Experimental Analysis of Distribution and Abundance. Harper and Row. New York. 694 p.
- Krebs, W. 1974. Devonian carbonate complexes of central Europe. In L. F. Laporte, ed., *Reefs in time and space*. Society of Economic Paleontologists and Mineralogists Special Publication 18:155–208.
- Krempf, A. 1934. Enregistrement du cycle marégraphique de 18 ans 2/3 par le polypier en voie de croissance de quelques corallaires. Annales des Sciences Naturelles, Zoologie et Biologie Animale (series 10) 18:135–143.
- Krotow, P. 1888. Geologicheskiye izslyedovaniya na zapadnom sklonye Solidkamskogo i Cherdynskogo Urala, Russia [Geological investigations on the western slope of the Urals in the regions of Tschedyn and Solikamsk]. Geologicheskogo Komiteteta, Trudy [Transactions of the Geological Committee] 6:563 p., 2 pl.
- Krumbeck, L. 1913. Obere Trias von Buru und Misol [Upper Triassic of Buru and Misol]. Palaeontographica, Supplement 4:1–161, pl. 1–11.
- Kruse, P. D. 1978. New Archaeocyatha from the Early Cambrian of the Mt. Wright area, New South Wales. Alcheringa 2:27–47, 12 fig., 8 tables.
- Kruse, P. D. 1982. Archaeocyathan biostratigraphy of the Gnalta Group at Mt. Wright, New South Wales. Palaeontographica (Abteilung A) 177:129–212, 21 fig., 16 pl.
- Kruse, P. D. 1983. Middle Cambrian "Archaeocyathus" from the Georgina basin is an anthaspidellid sponge. Alcheringa 7:49–58, 6 fig.
- Kruse, P. D. 1987. Further Australian Cambrian sphinctozoans. Geological Magazine 124:543–553, 6 fig.
- Kruse, P. D. 1990a. Are archaeocyaths sponges, or are sponges archaeocyaths? In J. B. Jago & P. J. Moore,

- eds., The Evolution of a Late Precambrian–Early Palaeozoic Rift Complex: The Adelaide Geosyncline. Geological Society of Australia, Special Publication 16:310–323, 9 fig.
- Kruse, P. D. 1990b. Cambrian paleontology of the Daly Basin. Northern Territory Geological Survey Report 7:1–58, 23 fig., 27 pl.
- Kruse, P. D. 1991. Cyanobacterial-archaeocyathan-radiocyathan bioherms in the Wirrealpa Limestone of South Australia. Canadian Journal of Earth Sciences 28:601–615, 14 fig., 2 tables.
- Kruse, P. D., & Françoise Debrenne. 1989. Review of archaeocyath microstructure. In P. A. Jell & J. W. Pickett, eds., Fossil Cnidaria 5. Memoirs of the Association of Australasian Palaeontologists 8:133–141, 5 fig.
- Kruse, P. D., Anna Gandin, Françoise Debrenne, & Rachel Wood. 1996. Early Cambrian bioconstructions in the Zavkhan Basin of western Mongolia. Geological Magazine 133:429–444, 10 fig., 1 table.
- Kruse, P. D., & Elena Moreno-Eiris. 2013. Archaeocyaths of the White Point Conglomerate, Kangaroo Island, South Australia. Alcheringa 38:1–64, 35 fig., 6 tables. ICZN-compliant article published online, August 21, 2013 (www.tandfonline.com).
- Kruse, P. D., & P. W. West. 1980. Archaeocyatha of the Amadeus and Georgina Basins. BMR Journal of Australian Geology and Geophysics 5:165–181, 13 fig.
- Kruse, P. D., A. Yu. Zhuravlev, & F. Debrenne. 2012. Part E, Revised, Volume 4, Chapter 20A: Radiocyaths and potentially allied taxa. Treatise Online 54:1–11, 4 fig.
- Kruse, P. D., A. Yu. Zhuravlev, & N. P. James. 1995. Primordial metazoan-calcimicrobial reefs: Tomotian (Early Cambrian) of the Siberian Platform. Palaios 10:291–321, 13 fig., 2 tables.
- Kügel, H.-W. 1987. Sphinctozoen aus den Auernig-schichten des Naßfeldes (Oberkarbon, Karnische Alpen, Österreich). Facies 16:143–156, 4 fig., pl. 33–35, 2 tables.
- Kühn, Othmar. 1926. Eine neue Hydrozoa as dem Stramberger Jura. Sitzungsberichte der Akademie der Wissenschaften in Wien, mathematisch-naturwissenschaftliche Klasse (Abteilung I) 135:413–423, pl. 1.
- Kühn, Othmar. 1927. Zur Systematik und Nomenklatur der Stromatoporen. Zentralblatt für Mineralogie, Geologie und Paläontologie (Abteilung B) 1927:546–551.
- Kühn, Othmar. 1928. Hydrozoa. Fossilium Catalogus, I: Animalia, Part 36. W. Junk. Berlin. 114 p.
- Kühn, Othmar. 1939a. Eine neue Familie der Stromatoporen. Zentralblatt für Mineralogie, Geologie und Paläontologie 1939:338–345, 3 fig.
- Kühn, Othmar. 1939b. Hydrozoa. In O. H. Schindewolf, ed., Handbuch der Paläozoologie, 2A. Borntraeger. Berlin. 68 p., 96 fig.
- Kummel, B., & D. M. Raup, eds. 1965. Handbook of Paleontological Techniques. W. H. Freeman & Co. San Francisco. 852 p.
- Kump, L. R., A. Pavlova, & M. A. Arthur. 2005. Massive release of hydrogen sulfide to the surface ocean and atmosphere during intervals of oceanic anoxia. Geology 33:397–400.
- LaBarbera, M., & G. E. Boyajian. 1991. The function of astrorhizae in stromatoporoids: Quantitative tests. Paleobiology 17:121–132.
- Lachkhem, H., & B. Mistiaen. 1994. *Stachyodes australis* (Wray, 1967): Stromatopore à morphologie et mode de croissance particuliers. Mémoires de l'Institut Géologique de l'Université Catholique de Louvain 35:191–195.
- Lafuste, J. G. 1970. Lames ultra-minces à faces polies. Procédé et application à la microstructure des Madréporaires fossiles. Comptes Rendus de l'Académie des Sciences, Paris, D270:679–681.
- Lafuste, J. G., & Françoise Debrenne. 1970. Observation en lames ultra-minces de la microstructure d'Archéocyathes. Société Géologique de France, Comptes Rendus Sommaires des Séances 6:224–225, 1 fig.
- Lafuste, J. G., & Françoise Debrenne. 1977. Présence de deux types de microstructure chez *Archaeocyathus atlanticus* Billings (Cambrien inférieur, Labrador, Canada). Géobios 10:103–107, 2 fig., 1 pl.
- Lafuste, J. G., & Françoise Debrenne. 1982. Différences microstructurales entre formes à une seule muraille et formes à deux murailles chez les archéocyathes réguliers: Faut-il “couper” les Monocyathida des Archéocyath? Société Géologique de France, Réunion Annuelle des Sciences de la Terre 9:350, 2 fig.
- Lafuste, J. G., Françoise Debrenne, Anna Gandin, & D. I. Gravestock. 1991. The oldest tabulate coral and the associated Archaeocyatha, Lower Cambrian, Flinders Ranges, South Australia. Géobios 24(6):697–718, 9 fig., 7 pl.
- Lafuste, J. G., & Jean-Claude Fischer. 1971. Sur la présence de fibres à bosselures chez les Chaetetida (cnidaires) du Paléozoïque et du Mésozoïque. Comptes Rendus de l'Académie des Sciences, Paris D272:1488–1490.
- Lagenau-Héranger, L. 1962. Contribution à l'étude des Spongaires siliceux du Crétacé inférieur. Mémoires de la Société Géologique de France (new series) 95:252 p., 30 fig., 16 pl., 7 tables.
- Lai C.-G., Wang W.-F., Yi Y.-E., An T.-X., Zhang W.-T., Qiu H.-R., Chen T.-E., Fu K., Lin B.-Y., Liu D.-Y., Yi Y.-E., & Yang J.-Z. 1982. The Ordovician System of China. Stratigraphy of China, number 5. Geological Publishing House. Beijing. 297 p., 5 fig., 11 pl., 16 tables. In Chinese.
- Lamarck, J. P. B. A. 1816. Histoire des polypiers coralligènes flexibles, vulgairement nommés Zoophytes. F. Poisson. Caen. 560 p., 19 pl.
- Lamouroux, J. V. F. 1821. Exposition méthodique des genres d'ordre des Polypiers, des Zoophytes d'Ellis et Solander. Chez Mme Veuve Agasse. Paris. 115 p., 84 pl.
- Landing, Ed. 1998. Cambrian subdivisions and correlations: Introduction. Canadian Journal of Earth Sciences 35:321–322.
- Landing, Ed. 2011. No Late Cambrian shoreline ice in Laurentia. GSA Today 21:e19.
- Landing, Ed., & K. E. Bartowski. 1996. Oldest shelly fossils from the Taconic Allochthon and late Early

- Cambrian sea-levels in eastern Laurentia. *Journal of Paleontology* 70:741–761, 11 fig., 1 table.
- Landing, Ed., & B. A. MacGabhann. 2010. First evidence for Cambrian glaciations provided by sections in Avalonian New Brunswick and Ireland: Additional data for Avalon-Gondwana separation by the earliest Palaeozoic. *Palaeogeography, Palaeoclimatology, Palaeoecology* 285:174–185, 7 fig.
- Landing, Ed., G. M. Narbonne, Paul Myrow, A. P. Benus, & M. M. Anderson. 1988. Faunas and depositional environments of the Upper Precambrian through Lower Cambrian, southeastern Newfoundland. In Ed Landing, G. M. Narbonne, & Paul Myrow, eds., *Trace Fossils, Small Shelly Fossils and the Precambrian-Cambrian Boundary*. Proceedings, August 8–18, 1987, Memorial University. New York State Museum, Bulletin 463:18–52, 33 fig.
- Lang, B. 1985. Die ersten Sphinctozoen (segmentierte Kalkschwämme) aus dem Ober-Jura der Frankenalb (Süddeutschland). Mitteilungen der Bayerischen Staatssammlung für Paläontologie und Historische Geologie 25:3–15, 5 fig., 2 pl.
- Lang, J. C., W. D. Hartman, & L. S. Land. 1975. Sclerosponges: Primary framework constructors on the Jamaican deep-fore reef. *Journal of Marine Research* 33:223–231.
- Lang, W. D., & Stanley Smith. 1939. Some new generic names for Palaeozoic corals. *Annals and Magazine of Natural History* (series 11) 3:152–156, pl. 4.
- Lang, W. D., Stanley Smith, & H. D. Thomas. 1940. Index of Palaeozoic coral genera. British Museum (Natural History). London. 231 p.
- Lange, Robert, Matthias Bergbauer, Ulrich Szewzyk, & Joachim Reitner. 2001. Soluble proteins control growth of skeleton crystals in three coralline demosponges. *Facies* 45:195–202.
- Langenbruch, P. F., & W. C. Jones. 1990. Body structure of marine sponges. VI. Choanocyte chamber structure in the Haplosclerida (Porifera, Demospongiae) and its relevance to the phylogenesis of the group. *Journal of Morphology* 204:1–8.
- Laporte, L. F. 1967. Carbonate deposition near mean sea-level and resultant facies mosaic: Manlius Formation (Lower Devonian) of New York State. American Association of Petroleum Geologists, Bulletin 51(1):77–100.
- Larroux, C., B. Fahey, B. D. Liubicich, V. F. Hinman, M. Gauthier, M. Gongora, Gert Wörheide, S. P. Leys, & B. M. Degnan. 2006. Developmental gene expression in a sponge: Insights into the last common ancestor of all metazoans. *Evolution and Development* 8(2):150–173.
- Lasemi, Yaghoob, & Hadi Amin-Rasouli. 2007. Archaeocyathan buildups within an entirely siliciclastic succession: New discovery in the Toyonian Lalun Formation of northern Iran, the Proto-Palaeotethys passive margin of northern Gondwana. *Sedimentary Geology* 201:302–320, 12 fig.
- Laube, G. C. 1865. Die Fauna der Schichten von St. Cassian. Ein Beitrag zur Paläontologie der alpinen Trias, I. Abtheilung. Spongitalien, Coral- len, Echiniden und Crinoiden. *Denkschriften der Kaiserlichen Akademie der Wissenschaften, Mathematisch-naturwissenschaftliche Klasse* 24:223–296, 10 pl.
- Laubenfels, M. W. de. 1936. A discussion of the sponge fauna of the Dry Tortugas in particular and the West Indies in general, with material for a revision of the families and orders of the Porifera. *Carnegie Institute of Washington (Tortugas Laboratory Paper, number 467)* 30:1–225, pl. 1–22.
- Laubenfels, M. W. de. 1947. Ecology of sponges of a brackish water environment at Beaufort, North Carolina. *Ecological Monograph* 17:31–46.
- Laubenfels, M. W. de. 1950. An ecological discussion of the sponges of Bermuda. *Transactions of the Zoological Society of London* 27:155–201.
- Laubenfels, M. W. de. 1955. Porifera. In R. C. Moore, ed., *Treatise on Invertebrate Paleontology*. Part E, Archaeocyatha and Porifera. Geological Society of America & University of Kansas Press. New York & Lawrence, Kansas. p. 21–112, fig. 14–89.
- Laurie, J. R., & C. Burnett. 1992. Biogeographic significance of Ordovician brachiopods from Thailand and Malaysia. *Journal of Paleontology* 66:16–23, 5 fig.
- Lavrov, D. V., Wang X., & M. Kelly. 2008. Reconstructing ordinal relationships in the Demospongiae using mitochondrial genomic data. *Molecular Phylogenetics and Evolution* 49:111–124.
- Lazareth, C. E., Philippe Willenz, Jacques Navez, Eddy Keppens, Frank Dehairs, & Luc Andre. 2000. Sclerosponges as a new potential recorder of environmental changes: Lead in *Ceratoporella nicholsoni*. *Geology* 28:515–518.
- Leavitt, E. M. 1968. Petrology, paleontology, Carson Creek North Reef Complex, Alberta. *Bulletin of the Canadian Petroleum Geology* 16(3):298–413.
- Lebold, J. G. 2000. Quantitative analysis of epizoans on Silurian stromatoporoids within the Brassfield Formation. *Journal of Paleontology* 74:394–403.
- Lecompte, M. J. 1939. Les Tabules du Devonien moyen et supérieur du Bord sud du Bassin de Dinant. Musée Royal d'Histoire Naturelle de Belgique, Mémoirs 90:229 p.
- Lecompte, M. J. 1951–1952. Les stromatoporoides du Dévonien moyen et supérieur du bassin de Dinant, parties I & II. Mémoires, Institut Royale des Sciences Naturelles Belgique 116–117:360 p.
- Lecompte, M. J. 1952a. Révision des stromatoporoides mésozoïques des collections Dehorne et Steiner. Institut Royal des Sciences Naturelles de Belgique, Bulletin 28(52):1–39, pl. 1–3.
- Lecompte, M. J. 1952b. Madréporaires Paléozoïques. In Jean Piveteau, ed., *Traité de Paléontologie*, vol. 1, Généralités, Protistes, Spongiaires, Coelenterata, Bryozoaires. Masson et Cie, Éditeurs. Paris. p. 419–538.
- Lecompte, M. J. 1956. Stromatoporidea. In R. C. Moore, ed., *Treatise on Invertebrate Paleontology*. Part F, Coelenterata. The Geological Society of America & The University of Kansas Press. New York & Lawrence, Kansas. p. 107–144, fig. 86–114.

- Lehnert, H., & Joachim Reitner. 1997. Lebensdauer und regeneration bei *Ceratoporella nicholsoni* (Hickson, 1911) und *Spirastrella (Acanthochaetetes) wellsi* (Hartman & Goreau, 1975). Geologische Blätter für Nordost-Bayern und angrenzende Gebiete 47:265–272.
- Leinfelder, R. R. 2001. Jurassic Reef Ecosystem. In G. D. Stanley Jr., ed., The History and Sedimentology of Ancient Reef Systems. Topics in Geobiology, vol. 17. Kluwer Academic/Plenum Publishers. New York. p. 251–309, 20 fig.
- Leinfelder, R. R., F. Schlagintwelt, W. Werner, O. Erbli, M. Nose, D. U. Schmid, & G. W. Hughes. 2005. Significance of stromatoporoids in Jurassic reefs and carbonate platforms: Concepts and implications. Facies 51:287–325.
- Leinfelder, R. R., D. U. Schmid, Martin Nose, & Winfried Werner. 2002. Jurassic reef patterns: The expression of a changing globe. In Wolfgang Kiessling, Erik Flügel, & Jan Golonka, eds., Phanerozoic Reef Patterns. SEPM (Society of Sedimentary Geology) Special Publication 72:465–520, 18 fig.
- Le Maître, Dorothée. 1935. Études paléontologiques sur les Lias du Maroc. Spongiomorphides et algues: Description des spongiomorphides et des algues. Protectorat de la République française au Maroc, Service des Mines et de la Carte géologique, Notes et Mémoires 34:17–59, 12 pl.
- Le Maître, Dorothée. 1956. Le genre *Staphylopora* n. g. Caractères et gisements de *Staphylopora chaetiformis* Le Maître. Comptes Rendus de les l'Académie des Sciences, Paris. 243:1654–1656.
- Lendenfeld, R. V. 1885. A monograph of the Australian sponges, part 4: Preliminary report on the Australian Myxispongiae. Proceedings of the Linnean Society of New South Wales 10(1):3–22.
- Lessovaja [Lessovaya], A. I. 1962. Stromatoporoidei ludlova severnogo sklonu Turkestanskogo khrebeta [Ludlow stromatoporoids of the northern slope of Turkestan range]. In Stratigrafia i paleontologija Uzbekistana i sopredel'nykh raionov, Tom 1 [Stratigraphy and paleontology of Uzbekistan and neighboring districts, vol. 1]. Akademii Nauk Uzbek SSR. Institut Geologii. Tashkent. p. 107–117, 120–121, pl. 8–14.
- Lessovaja [Lessovaya], A. I. 1970. Stromatoporoidei devona Zeravshanskogo khrebeta [Stromatoporoids of the Zeravshan Range]. In T. S. Shayakubov, ed., Biostratigrafiya osadochnykh obrazovanii Uzbekistana [Biostratigraphy of the sedimentary formations of Uzbekistan]. Ministerstvo Geologii, Uzbek SSR 9:74–100.
- Lessovaja [Lessovaya], A. I. 1971. Stromatoporoidei po granichnykh sloev silura i devona Zheravshanskogo khrebeta [Stromatoporoids of the Silurian and Devonian boundary beds of Zheravshan range]. In A. B. Ivanovski, ed., Rugozi i stromatoporoidei paleozoya SSSR. Trudy 2 Vsesoiuznogo simposiuma po izucheniiu iskopaemykh korallov SSSR, 2 [Paleozoic Rugosa and Stromatoporoidea of the USSR. Papers of 2nd All-Union Symposium of fossil corals of the USSR]. Izdatel'stvo Nauka. Moscow. p. 112–125, pl. 29–38, 2 tables.
- Lessovaja [Lessovaya], A. I. 1972. Novye siluriiskie i nizhnedevonskie stromatoporoidei Yuzhnogo Tyan'-Shanya [New Silurian and Lower Devonian stromatoporoids of the southern Tien Shan]. In A. S. Masumov & R. N. Abdullaev, eds., Novye dannye po faune paleozoya i mezozoia Uzbekistana [New data on Paleozoic and Mesozoic of Uzbekistan]. Izdatel'stvo FAN. Tashkent. p. 46–52, pl. 24–28.
- Lessovaja [Lessovaya], A. I. 1978a. Atlas paleontologicheskikh tablits. Prilozhenie k путеводителю ekskursii. Poevaya Sessiya Mezhdunarodnoy Podkomissii po stratigrafiia Devona [Atlas of paleontological plates. Supplement to the guidebook of excursions]. Field Session of the International Subcommission on Devonian Stratigraphy, FAN. Samarkand. Tashkent USSR. 48 p.
- Lessovaja [Lessovaya], A. I. 1978b. Stromatoporaty [Stromatoporates]. In B. S. Sokolov & E. A. Yolkin, eds., Pogranichnye sloi ordovika i silura Altae-Saianskoi oblasti i Tian'-Shania [Ordovician and Silurian boundary beds in Altai-Sayan region and Tien Shan]. Akademii Nauk SSSR, Sibirske Otdelenie, Instituta Geologii i Geofiziki, Trudy 397:52–57, 173–175, 208, pl. 1–3.
- Lessovaja [Lessovaya], A. I. 1982. Ranne-i srednedevonskie stromatoporaty iuzhnogo Tian-Shania [Early and Middle Devonian stromatoporates from Tian Shan]. In B. S. Sokolov & M. A. Rzhonsnitskaya, eds., Biostratigrafiia pogranichnykh otlozhennii nizhnego-i srednego devona [Biostratigraphy of the Lower and Middle Devonian boundary deposits]. Akademii Nauk SSSR (VSEGEI). Leningrad. p. 102–104.
- Lessovaja [Lessovaya], A. I. 1984. Stromatoporoid charts. In B. S. Sokolov & V. G. Garkovets, eds., 27th International Geological Congress, Moscow, USSR, Excursion 100, Middle Paleozoic of southern Tian Shan. Guidebook. 1 sheet.
- Lessovaja [Lessovaya], A. I. 1986. Novyye nizhnedevonskiye stromatoporaty Zeravshanskogo khrebeta [New Lower Devonian stromatoporoids of the Zeravshan Range] Paleontologicheskiy Zhurnal 1986(1):33–37.
- Lessovaja [Lessovaya], A. I. 1991. Novye siluriiskie stromatoporaty severnogo Nuratau iuzhnogo Tian'-Shania [New Silurian stromatoporoids from northern Nuratau of the southern Tien Shan]. Paleontologicheskiy Zhurnal 1991(4):26–31, 1 fig., pl. 2.
- Lessovaja [Lessovaya], A. I., & V. M. Zakharova. 1970. Novye stromatoporoidei iz verkhnego silura Turkestanskogo khrebeta [New stromatoporoids from the upper Silurian of the Turkestan range]. Paleontologicheskiy Zhurnal 1970(2):47–51, pl. 5–6.
- Lévi, Claude. 1953. Sur une nouvelle classification des démosponges. Comptes Rendus de l'Académie des Sciences de Paris 236:853–855.
- Lévi, Claude. 1956. Étude de *Halisarca* de Roscoff. Embryologie et systématique des démosponges. Archives de Zoologie Expérimentale et Générale 93:1–181, 62 fig.
- Lévi, Claude. 1957. Ontogeny and systematics in sponges. Systematic Zoology 6:174–183.
- Li Z.-X., & C. McA. Powell. 2001. An outline of the palaeogeographic evolution of the Australasian region

- since the beginning of the Neoproterozoic. *Earth-Science Reviews* 53:237–277.
- Li Z.-X., Zhang L., & C. McA. Powell. 1996. Positions of the East Asian cratons in the Neoproterozoic supercontinent Rodinia. *Australian Journal of Earth Sciences*, 43:593–604.
- Lieberman, B. S. 1997. Early Cambrian paleogeography and tectonic history: A biogeographic approach. *Geology* 25:1039–1042, 3 fig.
- Lieberman, B. S. 2000. Paleobiogeography: Using Fossils to Study Global Change, Plate Tectonics, and Evolution. Kluwer Academic/Plenum Publishers. New York. 208 p.
- Lin Baoyu, & B. D. Webby. 1988. Clathrodictyid stromatoporoids from the Ordovician of China. *Alcheringa* 12:233–247.
- Lin Baoyu, & B. D. Webby. 1989. Biogeographic relationships of Australian and Chinese Ordovician corals and stromatoporoids. *Memoir of the Association of Australasian Palaeontologists* 8:207–217, 6 fig., 1 table.
- Lin Baoyu, Tchi Yongyi, Jin Chuntai, Li Yaoxi, & Yan Youyin. 1988. Monograph of Palaeozoic Corals: Tabulatomorphic Corals, 2 vol. Geological Publishing House. Beijing. 467 p., vol. 1; 491 p.
- Lindström, G. 1873. Några antekningar om Anthozoa Tabulata. *Översigt af Kongliga Vetenskaps-akademiens Förfärlingar*, Stockholm 30(4):3–20.
- Lindström, G. 1876. On the affinities of the Anthozoa Tabulata. *Annals and Magazine of Natural History* (series 4) 18:1–17.
- Lister, J. J. 1900. *Astrosclera willeyana*, the type of a new family of sponges. In A. Willey, *Zoological Results, Part 4*. Cambridge University Press. Cambridge. p. 459–482, 3 fig., 4 pl.
- Liu Jia-run & Dong De-yuan. 1991. Middle Devonian stromatoporoids from mountlike superimposed bioherms along carbonate platform margin from Liuzhai, Nandan, Guangxi. *Acta Micropalaeontologica Sinica* 8(3):309–324, 4 pl. In Chinese with English abstract.
- Lobitzer, H. 1975. Kurze Mitteilung über Sphinctozoa aus den Auernigschichten (Oberkarbon) der Karpatischen Alpen. *Verhandlungen der Geologischen Bundesanstalt, Wien* 1975(4):249–251.
- Long, D. G. F., & P. Copper. 1987. Late Ordovician sand-wave complexes on Anticosti Island, Quebec: Marine tidal embayment? *Canadian Journal of Earth Sciences* 24:1821–1832.
- Lonsdale, W. 1839. Corals. In R. I. Murchison, ed., *The Silurian System, Part 2*. John Murray. London. p. 675–694, pl. 15–16.
- Lord, E. K., & S. E. Walker. 2009. The paleoecology of a Mississippian reef from northwestern Georgia. *Geological Society of America Abstracts with Programs* 41(7):102.
- Lord, E. K., S. E. Walker, & M. Aretz. 2011. Mississippian (Serpukhovian) framework reef in northwestern Georgia, USA. In M. Aretz, S. Delculée, J. Denayer, & E. Poty, eds., *Abstracts, 11th Symposium on Fossil Cnidaria and Sponges*, Liège, Belgium August 19–29. Kölner Forum für Geologie und Paläontologie 19:100–101.
- Lowe, D. R. 1975. Regional controls on silica sedimentation in the Ouachita system. *Geological Society of America Bulletin* 86:1123–1127.
- Lowenstam, H. A. 1981. Minerals formed by organisms. *Science* 211(4487):1126–1131, 3 fig.
- Luczynski, P. 2005. Improving the parameterization of stromatoporoid shapes? A detailed approach to stromatoporoid morphometry. *Lethaia* 38:143–154.
- Luo Huilin, Jiang Zhiwen, Wu Xiche, Song Xueliang, Ouyang Lin, & others. 1982. *The Sinian-Cambrian Boundary in Eastern Yunnan, China*. People's Publishing House. Kunming. 265 p., 14 fig., 22 pl., 8 tables. In Chinese with English abstract.
- Lyashenko, A. V. 1969. *Novye konikongkhii srednego devona Azii* [New coniconchia of the Middle Devonian of Asia]. Trudy vsoyuznogo nauchno-issledovatel'skogo geologicheskogo neftyanogo instituta [Transactions of the National Scientific Geological Institute] 93:120–129.
- M'Coy, F. 1850. Description of three new Devonian zoophytes. *Annals and Magazine of Natural History* (series 2) 6:377–378.
- Ma Ting Ying H. 1933. On the seasonal change in growth of some Palaeozoic corals. *Proceedings of the Imperial Academy of Japan* 9:407–409.
- Ma Ting Ying H. 1934. On the growth rate of reef corals and the sea water temperature in the Japanese Islands during the latest geological times, *Science Report Tohoku Imperial University* (2nd series, Geology) 16(3):165–187.
- Ma Ting Ying H. 1937a. On the seasonal growth in Palaeozoic tetracorals and the climate during the Devonian period. *Palaeontologia Sinica* (series B) 2(3):50 p.
- Ma Ting Ying H. 1937b. On the growth rate of reef corals and its relation to sea water temperature. *Palaeontologia Sinica* (series B) 16(1):226 p., 100 pl.
- Ma Ting Ying H. 1943a. *The Climate and the Relative Positions of Eurasia and North America During the Ordovician Period: Research on the Past Climate and Continental Drift*, vol. 1. Published by the author. Yungan, Fukien, China. 34 p.
- Ma Ting Ying H. 1943b. *The Climate and the Relative Positions of Continents During the Silurian Period as Determined by the Growth Rate of Corals: Research on the Past Climate and Continental Drift*, vol. 2. Published by the author. Yungan, Fukien, China. 88 p.
- Ma Ting Ying H. 1943c. *The Climate and the Relative Positions of Continents During the Devonian Period: Research on the Past Climate and Continental Drift*, vol. 3. Published by the author. Yungan, Fukien, China. 92 p.
- Ma, X.-P., Y.-L. Sun, W.-C. Hao, & W.-H. Liao. 2002. Rugose corals and brachiopods across the Frasnian-Famennian boundary in central Hunan, South China. *Acta Palaeontologia Polonica* 47(2):373–396.
- Machel, H. G., & I. G. Hunter. 1994. Facies models for Middle to Late Devonian shallow-marine carbonates, with comparisons to modern reefs: A guide for facies analysis. *Facies* 30:155–176.
- Maldonado, Manuel, M. Carmen Carmona, María J. Uriz, & Antonio Cruzado. 1999. Decline in

- Mesozoic reef-building sponges explained by silicon limitation. *Nature* 401:785–788.
- Maliva, R. G. 1998. Skeletal aragonite neomorphism: Quantitative modelling of a two-water diagenetic system. *Sedimentary Geology* 121:179–190.
- Mallamo, M. P. 1995. Paleoceanography of the Upper Devonian Fairholme Carbonate complex, Kananaskis-Banff area, Alberta. Ph.D. thesis. McGill University, Montreal, Quebec. 433 p.
- Mallamo, M. P., & C. W. Stearn. 1991. Skeletal mineralogy of Ordovician stromatoporoids: New geochemical evidence for an aragonite skeleton. *Geological Society of America, Abstracts with Programs* 23:164.
- Mallett, C. W. 1971. The stromatoporoid genera *Actinostroma* Nicholson and *Nexililamina* gen. nov. from the Devonian Broken River Formation, North Queensland. *Proceedings of the Royal Society of Victoria* 84:235–244, 4 fig., pl. 13–14.
- Mann, S. 1983. Mineralization in biological systems. *Structure and Bonding* 54:127–174.
- Mansuy, H. 1913. Faune des calcaires à Productus de l'Indochine. 1st série. *Mémoire de Service Géologique de Indochine* 2(4):1–133, 13 pl.
- Mansuy, H. 1914. Faune des calcaires à Productus de l'Indochine, 2eme série. *Mémoires de Service Géologique de l'Indochine* 3(3):1–59, 7 pl.
- Mansy, J.-L., Françoise Debrenne, & A. Yu. Zhuravlev. 1993. Calcaires à archéocyathes du cambrien inférieur du nord de la Colombie Britannique (Canada). Implications paléogéographiques et précisions sur l'extension du continent Américano-Koryakien. *Géobios* 26:643–683, 11 fig., 7 pl., 2 tables.
- Manten, A. A. 1971. Silurian Reefs of Gotland: Developments of Sedimentology, vol. 13. Elsevier. Amsterdam. 539 p.
- Manuel, M. 2006. Phylogeny and evolution of calcareous sponges. *Canadian Journal of Zoology* 84:225–241.
- Manuel, M., C. Borchellini, E. Alivon, Y. Le Parco, J. Vacelet, & N. Boury-Esnault. 2003. Phylogeny and evolution of Calcaceous sponges: Monophyly of Calcinea and Calcaronea, high level of morphological homoplasy, and the primitive nature of axial symmetry. *Systematic Biology* 52:311–333.
- Manuel, M., R. Borojevic, N. Boury-Esnault, & J. Vacelet. 2002. Class Calcarea. In J. N. A. Hooper & R. W. M. van Soest, eds., *Systema Porifera: A Guide to the Classification of Sponges*, vol. 2. Kluwer Academic/Plenum Publishers. New York, Boston, Dordrecht, London, & Moscow. p. 1103–1110.
- Marin, F., & P. Gautret. 1994. Les teneurs en acides aminés des matrices organiques solubles associées aux squelettes calcaires des démosponges et des cnidaires: Une implication possible dans leur transformation diagénétique [Acidic Amino-Acid Contents in Soluble Organic Matrices of Sponges and Corals Calcaceous Skeletons: A Possible Implication in Their Diagenetic Change]. *Bulletin de la Société Géologique de France* 165(1):77–84.
- Marshall, J. E. A., D. A. Rogers, & M. J. Whiteley. 1996. Devonian marine incursions into the Orcadian Basin, Scotland. *Journal of the Geological Society, London* 153:451–466.
- Marshall, W. 1892. Spongiologische Beiträge. *Festschrift*. Leipzig. p. i–v, 1–36, 8 pl.
- Martin, G. D., B. H. Wilkinson, & K. C. Lohman. 1986. The role of skeletal porosity in aragonite neomorphism: *Strombus* and *Montastraea* from the Pleistocene Key Largo Limestone, Florida. *Journal of Sedimentary Petrology* 56:194–203.
- Maslov, A. B. 1957. O novom predstavitele semeystva Ethmophyllidae Okulitch, 1943 iz kembriya Chitinskoy oblasti s sokhranivshimsya vnutrennimi organom [On a new representative of the family Ethmophyllidae Okulitch, 1943 from the Cambrian of the Chita region with preserved internal organ]. *Akademiya Nauk SSSR, Doklady* 117:307–309, 2 fig.
- Maslov, A. B. 1960. Novyy vid roda *Rhabdocnema* Okulitch, 1943, s pel'toy v verkhney chasti kubka [A new species of the genus *Rhabdocnema* Okulitch, 1943, with pelta at the upper part of the cup]. *Akademiya Nauk SSSR, Doklady* 130:1117–1119, 1 fig.
- Maslov, A. B. 1961. O novykh nakhodkakh arkheotsiat s pel'tami v verkhney chasti kubkov [On new discoveries of archaeocyaths with peltae at the upper part of the cup]. *Moskovskoe Obshchestvo Ispytatelei Prirody, Byulleten'*, seriya geologicheskaya 36(6):121–122.
- Maslov, V. P. 1956. Iskopaemye izvestkovye vodorosli SSSR [Fossil Calcareous Algae of the USSR]. *Akademiya Nauk SSSR, Instituta Geologicheskiy Nauk, Trudy* [Academy of Science USSR, Institute of Geological Science, Transactions] 160:302 p., 86 pl.
- Mastandrea, A. A., & R. Rettori. 1989. Presenza di una Associazione a Sphinctozoi (Poriferi) nei corpi carbonatici della formazione di Monte Facito (Appennino Meridionale). *Atti della Società dei Naturalisti e Matematici Di Modena* 120:15–26, 2 fig., 3 pl.
- Mastandrea, A. A., & Franco Russo. 1995. Microstructure and diagenesis of calcified demosponges from the Upper Triassic of the Northeastern Dolomites (Italy). *Journal of Paleontology* 69(3):416–431, fig. 1–10.
- Mathewson, J. E. 1977. Chaetetids and their paleoenvironments in the Amoret Limestone Member (Desmoinesian) of Labette County, Kansas. Unpublished Master's thesis. Kansas State University. Manhattan. 148 p.
- Matthew, G. F. 1886. Illustrations of the fauna of the St. John group continued. Series 1, Vol. III: Descriptions of new genera and species (including a description of a new species of *Solenopleura* by J. W. Whiteaves). Royal Society of Canada, *Transactions* (section 4) 1885:29–84, pl. 5–7.
- May, Andreas. 1993. Korallen aus dem höheren Eifelium und unteren Givetium (Devon) des nordwestlichen Sauerlandes (Rheinisches Schiefergebirge). Teil II: Rugose Korallen, Chaetetiden und spezielle Themen. *Palaeontographica* (Abteilung A) 228:1–103.
- May, A. 1997. Ein modell zu Erklärung der Bio-Events und der biogeographischen Entwicklung in Devon durch den Meerespiegel. *Beitrag zur Landeskunde, naturwissenschaftliche Mitteilungen* 31:137–174. Also published under different title in *Coral Research Bulletin* 5:291–318.

- May, A. 1999. Kommensalische Syringopora-Arten (Anthozoa; Tabulata) aus dem Devon von Zentral-Böhmen. Münstersche Forschungen zur Geologie und Paläontologie 86:135–146.
- May, Andreas. 2005. Die Stromatoporen des Devons und Silurs von Zentral-Böhmen (Tschechische Republik) und ihre Kommensalen. *Zitteliana* B25:117–250, 6 fig., 43 pl.
- May, Andreas. 2008. Corals (Anthozoa, Tabulata and Rugosa) and chaetetids (Porifera) from the Devonian of the Semara area (Morocco) at the Museo Geominero (Madrid, Spain), and their biogeographic significance. *Bulletin de l'Institut Scientifique, Rabat, Section Sciences de la Terre* 30:1–12.
- McCollum, L. B., & D. M. Miller. 1991. Cambrian stratigraphy of the Wendover area, Utah and Nevada. United States Geological Survey, *Bulletin* 1948:1–43, 17 fig.
- McCracken, A. D., D. K. Armstrong, & T. E. Bolton. 2000. Conodonts and corals in kimberlite xenoliths confirm a Devonian seaway in central Ontario and Quebec. *Canadian Journal of Earth Sciences* 37:1651–1663.
- McGhee, G. R. 1996. The Late Devonian Mass Extinction. Columbia University Press. New York. 303 p.
- McGhee, G. R. 2001. The multiple impact hypothesis for mass extinction: A comparison of the Late Devonian and late Eocene. *Palaeogeography, Palaeoclimatology, Palaeoecology* 176:47–58.
- McGhee, G. R. 2006. Modelling Late Devonian extinction hypotheses. In D. J. Over, J. R. Morrow, & P. B. Wignall, eds., *Understanding Late Devonian and Permian-Triassic Biotic and Climatic Events: Towards an Integrated Approach*. Elsevier B. V. Amsterdam. p. 37–50.
- McGhee, G. R., P. M. Sheehan, D. J. Bottjer, & M. L. Droser. 2004. Ecological ranking of Phanerozoic biodiversity crises: Ecological and taxonomic severities are decoupled. *Palaeogeography, Palaeoclimatology, Palaeoecology* 211:289–297.
- McKerrow, W. S., C. R. Scotese, & M. D. Brasier. 1992. Early Cambrian continental reconstructions. *Journal of the Geological Society, London* 149:599–606, 3 fig., 1 table.
- McKinney, F. K., & J. B. C. Jackson. 1989. *Bryozoan Evolution*. University of Chicago Press. Chicago. 238 p.
- McLaren, D. J. 1983. Bolides and stratigraphy. *Geological Society of America Bulletin* 94:313–324.
- McMenamin, M. A. S., Françoise Debrenne, & A. Yu. Zhuravlev. 2000. Early Cambrian Appalachian archaeocyathids: Further age constraints from the fauna of New Jersey and Virginia, U.S.A. *Géobios* 33:693–708, 6 fig.
- Meek, F. B. 1868a. Preliminary notice of a remarkable new genus of corals, probably typical of a new family. *American Journal of Science (series 2)* 45:62–64.
- Meek, F. B. 1868b. Note on *Ethmophyllum* and *Archaeocyathus*. *American Journal of Science (series 2)* 46:144.
- Meert, J. G., & B. S. Lieberman. 2008. The Neoproterozoic assembly of Gondwana and its relationship to the Ediacaran-Cambrian radiation. *Gondwana Research* 14:5–21, 8 fig.
- Meglitskiy, N. G. 1851. Geognostische Bemerkungen aus einer Reise in Ost-Sibirien im Jahre 1850. Russisch-Kaiserliche Mineralogische Gesellschaft zu St. Petersburg, *Verhandlungen* 1851:118–162, 8 fig.
- Mehl, Dorte. 1996. Organization and microstructure of chancelloriid skeleton: Implications for the biomineralization of the Chancelloriidae. *Bulletin de l'Institut Océanographique de Monaco, Numero Special* 14(4):377–385, 2 fig.
- Mel'nikov, B. N., A. Yu. Rozanov, M. V. Susov, & V. D. Fonin. 1986. *Pervye arkheotsaty iz nizhnego kembriya tsentral'nogo Iran'a* [First archaeocyaths from the Lower Cambrian of central Iran]. Akademiya Nauk SSSR, Izvestiya, seriya geologicheskaya 7:134–138, 4 fig.
- Mel'nikov, N. V., V. A. Astashkin, L. I. Kilina, & B. B. Shishkin. 1989. *Paleogeografiya Sibirskoy platformy v rannem kembrii* [Paleogeography of the Siberian Platform in the Early Cambrian]. In R. G. Matukhin, ed., *Paleogeografiya Fanerozoya Sibiri* [Paleogeography of the Phanerozoic of Siberia]. Sibirski Nauchno-Issledovatel'skiy Institut Geologii, Geofiziki i Mineral'nogo Syr'ya. Novosibirsk. p. 10–17, 4 fig.
- Mello, J. 1975. Triassische Biohermenkalke im östlichen Teil des Slowakischen Karstes. *Geologicky Zbornik, Geologica Carpathica* 25(1):21–46, 7 fig., 8 pl.
- Melville, R. V. 1974. Opinion 1007. *Coscinocyathus Bornemann, 1884 (Archaeocyatha): Designation of a type-species under the plenary powers*. *Bulletin of Zoological Nomenclature* 30:155–156.
- Melville, R. V. 1982. Opinion 1215: *Stromatoporella* Nicholson 1886 (Stromatoporoidea), fixation of the type species *Stromatopora granulata* Nicholson, 1873. *Bulletin of Zoological Nomenclature* 39:126–127.
- Méndez-Bedia, Isabel, Francisco Soto, & Esperanza Fernández-Martínez. 1994. Devonian reef types in the Cantabrian Mountains (NW Spain) and their faunal composition. In P. Oekentorp-Küster, ed., *Proceedings of the VI International Symposium on Fossil Cnidaria and Porifera, Munster Cnidarian Symposium*, vol. 2. Courier Forschungsinstitut Senckenberg 172:161–183, 10 fig.
- Meneghini, G. 1881. Nuovi trilobiti di Sardinia. *Atti Societa Toscanà Scienze Naturali, Processi verbali*, vol. 2 (1879–1881). Pisa. p. 199–202.
- Meroz-Fine, E., S. Shefer, & M. Ilan. 2005. Changes in morphology and physiology of an East Mediterranean sponge in different habitats. *Marine Biology* 147:243–250.
- Merriam, C. W. 1974 (imprint 1973). Middle Devonian rugose corals of the central Great Basin. United States Geological Survey, *Professional Paper* 799:iv + 53 p., 14 pl.
- Metcalf, I. 1996. Gondwanaland dispersion, Asian accretion and evolution of eastern Tethys. *Australian Journal of Earth Sciences* 43:605–623.
- Metelkin, D. V., & A. Yu. Kazanskiy. 2002. Paleomagnito-tektonicheskaya kharakteristika kembriyskikh komplekssov Batenevskogo kryazha

- [Paleomagnetic-tectonic characteristics of the Cambrian complexes of the Batenev Range]. In A. K. Gapeev, ed., Paleomagnetizm i Magnetizm Gornykh Porod: Teoriya, Praktika, Eksperiment. Materialy Seminara. Borok 19–22 Oktyabrya 2002 g. [Paleomagnetism and Magnetism of Rocks: Theory, Practice, Experiment. Materials for the Seminar. Borok 19–22 October 2002]. GEOS. Moscow. p. 58–60.
- Meyen, S. V. 1988. Nomothetical plant morphology and the nomothetical theory of evolution: The need for cross-pollination. *Acta Biotheoretica* 27(7):21–36, 2 fig.
- Meyer, F. O. 1981. Stromatoporoid growth rhythms and rates. *Science* 213:894–895.
- Meyrick, E. 1881. Descriptions of Australian micro-Lepidoptera. Linnean Society of New South Wales, Proceedings 1(6):629–706.
- Michelin, Hardouin. 1840–1847. Iconographie Zoophytologique, Description par Localités et Terrains des Polypiers Fossiles de France et Pays Environnantes. P. Bertrand. Paris. 348 p., 79 pl.
- Mickleborough, J., & A. G. Wetherby. 1878. A Classified List of Lower Silurian Fossils, Cincinnati Group. James Barclay. Cincinnati, Ohio. 26 p.
- Migliorini, C. I., & S. Venzo. 1933. Il Ladinico superiore dell'Isola di Rodi (Egeo). *Palaeontographica Italiana* 34:137–170.
- Mikhail'tsev, N. E., A. Yu. Kazanskiy, & N. V. Sennikov. 2002. Pereskala li Tuva paleoekvator? [If Tuva crossed the paleoequator?]. In A. K. Gapeev, ed., Paleomagnetizm i Magnetizm Gornykh Porod: Teoriya, Praktika, Eksperiment. Materialy Seminara. Borok 19–22 Oktyabrya 2002 g. [Paleomagnetism and Magnetism of Rocks: Theory, Practice, Experiment. Materials for the Seminar. Borok 19–22 October 2002]. GEOS. Moscow. p. 63–65.
- Milan, Ante. 1969. Facijelni odnosi i hydrozojska fauna malma primorskog dijela sjevernog Velebita i Velike Kapele. *Geoloski Vjesnik* 22:135–217, pl. 1–22. In Croatian.
- Miller, A. L. 2000. Conversations about Phanerozoic global diversity. In D. H. Erwin & S. L. Wing, eds., Deep Time, Paleontology's Perspective. *Paleobiology* (Supplement) 26(4):53–73.
- Miller, K. B., & R. R. West. 1997. Growth-interruption surfaces within chaetetid skeletons: Records of physical disturbance and depositional dynamics. *Lethaia* 29:289–299.
- Miller, S. A. 1877. American Paleozoic fossils: A Catalogue of the Genera and Species. Published by the author. Cincinnati, Ohio. 253 p.
- Miller, S. A. 1889. North American Geology and Palaeontology for the Use of Amateurs, Students, and Scientists. Press of Western Methodist Book Concern. Cincinnati, Ohio. 718 p., 1265 fig.
- Millet, J., & W. Kiessling. 2009. First record of coralline demosponges in the Pleistocene: Implications for reef ecology. *Coral Reefs* 28:867–870.
- Milne-Edwards, Henri, & Jules Haime. 1848. Recherches sur les polypiers. Mémoire 2, Monographie des turbinolides. *Annales des Sciences Naturelles, Zoologie* (série 3) 9:211–344, pl. 7–10.
- Milne-Edwards, Henri, & Jules Haime. 1849. Mémoire sur les polypiers appartenant aux groupes naturels des Zoanthaires perforés et des Zoanthaires tabulés. Académie des Sciences de Paris, *Comptes Rendus* 29:257–263.
- Milne-Edwards, Henri, & Jules Haime. 1850–1854. A Monograph of the British Fossil Corals. Palaeontographical Society. London. lxxxv + 322 p., 11 pl., DOI: 10.5962/bhl.title.11691. [Published in five separate parts, between 1850 and 1854: Part 1 in 1850 (p. i–lxxxv, 1–71; pl. 1–11), Part 2 in 1851 (p. 73–145, pl. 12–30), Part 3 in 1852 (p. 147–210, pl. 31–46), Part 4 in 1853 (p. i–xvi + p. 211–244, pl. 47–56), Part 5 in 1854 (p. 245–322, with index; pl. 57–72)].
- Milne-Edwards, Henri, & Jules Haime. 1851. Monographie des Polypiers Fossiles des Terrains Paléozoïque. Archives du Muséum d'Histoire Naturelle, Paris. 502 p., 20 pl.
- Minchin, E. A. 1900. Chapter III. Sponges. In E. R. Lankester, ed., A Treatise on Zoology. Part II: The Porifera and Coelenterata 2. Adam & Charles Black. London. p. 1–178.
- Minwegen, E. 2001. Die biokonstruktionen im Pennsylvanium des Kantabrischen Gebirges (Nordspanien). *Kölner Forum für Geologie und Paläontologie* 9:139 p.
- Minwegen, E. 2007. Moscovian beresellid algal-chaetetid sponge buildups, Northern Spain. In E. Vennin, M. Aretz, F. Boulvain, & A. Munnecke, eds., Facies from Palaeozoic reefs and bioaccumulations. *Mémoires du Muséum National d'Histoire Naturelle* 198:261–263.
- Missarzhevskiy, V. V. 1961. Rannekembriyskie arkheotsiaty basseyyna reki Shivelig-Khem [Early Cambrian archaeocyaths from the River Shivelig-Khem basin]. *Paleontologicheskiy Zhurnal* 1961(4):19–23, 1 fig., 1 pl.
- Missarzhevskiy, V. V., & A. Yu. Rozanov. 1962. K morfologii naruzhnykh stenok pravil'nykh arkheotsiat [On the morphology of the outer wall of regular archaeocyaths]. *Paleontologicheskiy Zhurnal* 1962(2):34–44, 6 fig., pl. 3.
- Mistiaen, Bruno. 1980. Stromatopores du Givétien de Ferques (Boulonnais, France). *Bulletin du Muséum National d'Histoire Naturelle*, Paris (4th series), vol. 2, section C (no. 3):167–257, 3 fig., 17 pl.
- Mistiaen, Bruno. 1982. Comments on the stratigraphic distribution of stromatoporoids around the Middle-Upper Devonian boundary. Subcommission on Devonian Stratigraphy, Papers on the Frasnian-Givetian Boundary. Geological Survey of Belgium. p. 91–100.
- Mistiaen, Bruno. 1984a. Comments on the *Caunopora* tubes: Stratigraphic distribution and microstructure. *Palaeontographica Americana* 54:501–508.
- Mistiaen, Bruno. 1984b. Disparition des Stromatopores paléozoïque ou survie du groupe: Hypothèse et discussion. *Bulletin de la Société Géologique de France* 26(6):1245–1250.
- Mistiaen, Bruno. 1985. Phénomènes récifaux dans le Dévonien d'Afghanistan (Montagnes Centrales): Analyse et systématique des Stromatopores, vol. 2.

- Société Géologique du Nord Publication 11:1–245, 20 pl.
- Mistiaen, Bruno. 1988. Stromatopores du Givetien et du Frasnien de Ferques (Boulonnais, France). In D. Brice, ed., *Le Dévonien de Ferques, Bas-Boulonnais (N. France)*. Biostratigraphie du Paléozoïque 7:163–195, 17 fig., pl. 20–23.
- Mistiaen, Bruno. 1991. Nouvelle interprétation morphofontionnelle du Stromatopore Frasnien *Stachyodes australis* (Wray, 1967). *Geobios Mémoire Spéciale* 13:175–182.
- Mistiaen, Bruno. 1994. Skeletal density: Implications for development and extinction of Palaeozoic stromatoporoids. *Courier Forschungsinstitut Senckenberg* 172:319–327, 6 fig., appendix.
- Mistiaen, Bruno. 1997. Découverte du genre *Amphipora* Schulz, 1883, dans le Famennien terminal “Strunien” de la carrière du Parcq à Etroeungt, stratotype du Calcaire d’Etroeungt, et ailleurs en Avenois (Nord de France). *Comptes Rendus, Académie des Sciences, Paris (série IIa)* 324:655–662.
- Mistiaen, Bruno. 1999. On some Devonian (Frasnian) stromatoporoids from Kerman Province, eastern Iran. *Annales Société Géologique du Nord (new series)* 7:33–44.
- Mistiaen, Bruno, & H. Gholamalian. 2000. Stromatoporoids and some tabulate corals from Chahriseh area (Esfahan Province, central Iran). *Annales Société Géologique du Nord (new series)* 8:81–91.
- Mistiaen, Bruno, Hou Hong-fei, & Wu Xian-tao. 1997. Identité des genres *Stylostroma* Gorsky 1938 et *Pennastroma* Dong De-yuan 1964, Stromatopores du Famennien supérieur (Strunien). *Geobios Mémoire Spéciale* 20:407–414, 3 fig.
- Moiseev, A. S. 1944. Vodorosli, gubki, gidroidnye polipy i korallye veknogo triassa Kavkazskogo khreba [Algae, sponges, aqueous polyps and corals of the Upper Triassic of the Caucasus Ridge]. In S. S. Kuznetsov, ed., *Uchenye Zapiski, Seriya Geologo-Pochvennykh Nauk. Leningradski Gesudarstvennyi Ordena Lenina Universitet [Scientific Papers of the Leningrad Order of Lenin State University, Geology and Soil Science Series]* 70(11):15–28, pl. 1–5.
- Molineux, A. 1994. A late Pennsylvanian encruster: Terminal Paleozoic calcified demosponge. In A. Embry, B. Beauchamps, & D. Glass, eds., *Pangea: Global Environments and Resources*. Canadian Society of Petroleum Geologists Memoir 17:967–982.
- Montanaro-Gallitelli, E. 1954. Il Permiano del Sosio e i suoi Coralli. *Palaeontographica Italica* 49:1–98, pl. 1–10.
- Montanez, Isabel P. 2002. Biological skeletal carbonate records changes in major-ion chemistry of paleo-oceans. *Proceedings of the National Academy of Sciences* 99(25):15,852–15,854.
- Montenat, Christian, Paschal Barrier, & Philippe Ott D’Estevou. 2002. The Vigny limestones: A record of Paleocene (Danian) tectonic-sedimentary events in the Paris Basin. *Sedimentology* 49:421–440.
- Monty, Claude. 1981. Introduction. In Claude Monty, ed., *Phanerozoic stromatolites*. Springer-Verlag, Berlin, p. v–viii.
- Monty, Claude, M. Bernet-Rollande, & A. Maurin. 1982. Re-interpretation of the Frasnian classical ‘reefs’ of the southern Ardennes, Belgium (extended Abstract). *Annales de la Société Géologique de Belgique* 105:339–341.
- Moore, R. C. 1956. Treatise on Invertebrate Paleontology. Part F, Coelenterata. Geological Society of America & University of Kansas Press. New York & Lawrence, Kansas. xx + 498 p., 358 fig.
- Moore, R. C., Dorothy Hill, & J. W. Wells. 1956. Glossary of morphological terms applied to corals. In R. C. Moore, ed., *Treatise on Invertebrate Paleontology*. Part F, Coelenterata. Geological Society of America & University of Kansas Press. New York & Lawrence, Kansas. p. 245–251.
- Moore, R. C., & R. M. Jeffords. 1945. Descriptions of lower Pennsylvanian corals from Texas and adjacent states. *University of Texas Publication* 4401:77–208, fig. 1–214, pl. 14.
- Moore, R. C., ed. Treatise on Invertebrate Paleontology. Part E, Archaeocyatha and Porifera. Geological Society of America & University of Kansas Press. New York & Lawrence, Kansas. 122 p., 728 fig.
- Moores, E. M. 1991. Southwest U.S.-East Antarctic (SWEAT) connection: A hypothesis. *Geology* 19:425–428, 3 fig.
- Moreno-Eiris, Elena. 1987. Los montículos arrecifales de Algas y Arqueociatos del Cámbrico inferior de Sierra Morena, I: Estratigrafía y facies. *Boletín Geológico y Minero* 98(3):295–317, 12 fig., 2 pl.
- Moreno-Eiris, Elena. 1994. Lower Cambrian reef mounds of Sierra Morena (SW Spain). *Courier Forschungsinstitut Senckenberg* 172:185–192, fig. 7.
- Moret, Leon. 1966. *Manuel de Paleontologie Animale*. Masson & Cie, Éditeurs. Paris. 781 p.
- Morgan, George D. 1924. Geology of the Stonewall Quadrangle, Oklahoma. Bureau of Geology, Bulletin 2:248 p.
- Morgan, N. 1976. The Montenegro bioherms: Their paleoecology, relation to other archaeocyathid bioherms and to Early Cambrian sedimentation in the White and Inyo Mountains, California. In J. N. Moore & A. E. Fritsche, eds., *Depositional Environments of Lower Paleozoic Rocks in the White-Inyo Mountains, Inyo County, California*. Pacific Coast Paleogeography Field Guide 1. Society of Economic Paleontologists and Mineralogists, Pacific Section. Los Angeles. p. 13–17.
- Mori, K. 1968. Stromatoporoids from the Silurian of Gotland, Part 1. Stockholm Contributions in Geology 19:1–100, 10 fig., pl. 1–24, 2 tables.
- Mori, K. 1970. Stromatoporoids from the Silurian of Gotland, Part 2. Stockholm Contributions in Geology 22:152 p., 29 fig., 30 pl., 5 tables.
- Mori, K. 1976. A new Recent sclerosponge from Ngargol, Palau Islands and its fossil relatives. *Tohoku University Scientific Reports (2nd series, Geology)* 46(1):1–9.
- Mori, K. 1977. A calcitic sclerosponge from Ishigakishima Coast, Ryukyu Islands, Japan. *Tohoku University Scientific Reports (2nd series, Geology)* 47(1):1–5.

- Mori, K. 1978. Stromatoporoids from the Silurian of the Oslo Region, Norway. *Norsk Geologisk Tidsskrift* 58:121–144, 5 fig., 6 pl., 1 table.
- Mori, K. 1980. Revision of the Permian “stromatoporoids” reported from Japan. *Transactions and Proceedings of the Palaeontological Society of Japan* (new series) 117:237–241.
- Mori, K. 1982. Coelenterate affinity of stromatoporoids. *Stockholm Contributions in Geology* 37:167–175.
- Mori, K. 1984. Comparison of skeletal structures among stromatoporoids, sclerosponges and corals. *Palaeontographica Americana* 54:354–357.
- Mori, K. 1994. Taxonomic note on the stromatoporoid and rugose coral genera *Labecheiella*, *Labecheillata*, and *Mazaphyllum*. *Transactions and Proceedings of the Palaeontological Society of Japan* (new series) 176:677–678.
- Mortensen, P. B., & H. T. Rapp. 1998. Oxygen- and carbon isotope ratios related to growth line patterns in skeletons of *Lophelia pertusa* (L.) (Anthozoa: Scleractinia): Implications for determination of linear extension rates. *Saria* 83:433–446.
- Mory, A. J., R. P. Iasky, A. Y. Glikson, & F. Pirajno. 2000. Woodleigh, Carnarvon Basin, western Australia, a new 120 km diameter impact structure. *Earth and Planetary Science Letters* 177:119–128.
- Mostler, Helfried. 1990. Mikroskleren von demospionien (Porifera) aus dem basalen Jura der nördlichen Kalkalpen. *Geologisch-Paläontologische Mitteilungen Innsbruck* 17:119–142.
- Mount, J. F., & P. W. Signor. 1992. Faunas and facies: Fact and artifact. Paleoenvironmental controls on the distribution of Early Cambrian faunas. In J. H. Lipps & P. W. Signor, eds., *Origin and Early Evolution of the Metazoa*. Plenum Press. New York & London. p. 27–51, 4 fig., 3 tables.
- Mountjoy, E. W. 1967. Factors concerning the development of the Frasnian, Miette and Ancient Wall reef complexes (banks and biostromes), Alberta. In D. H. Oswald, ed., *International Symposium on the Devonian System*. Alberta Society of Petroleum Geologists, Calgary, Alberta 2:387–408, 7 fig., 4 pl.
- Mountjoy, E. W., H. E. Cook, L. C. Pray, & P. N. McDaniels. 1972. Allochthonous carbonate debris flows: World-wide indications of reef complexes, banks and shelf margins. 24th International Geological Congress, Montreal, section 6:172–189.
- Mountjoy, E. W., & R. Riding. 1981. Foreslope stromatoporoid-renalcid bioherm with evidence of early cementation, Devonian Ancient Wall reef complex, Rocky Mountains. *Sedimentology* 28:299–319.
- Müller, Arno Hermann. 1963. Lehrbuch der Paläozoologie. Band II, Invertebraten, Teil 1, Protozoa, Mollusca 1. VEB Gustav Fischer Verlag. Jena. 575 p.
- Müller, W. 1974. Beobachtungen am der hexactinelliden Juraspönge *Casearia articulata* (Schmidel). *Stuttgarter Beiträge zur Naturkunde* (Series B, Geologie und Paläontologie) 12:1–19, 6 fig., 4 pl.
- Müller, W. 1984. Die Kalkschwämme der Unterordnung Inozoa Steinmann aus dem oberen Jura von Württemberg (SW-Deutschland). *Stuttgarter Beiträge zur Naturkunde* (Series B, Geologie und Paläontologie) 100:11–85, 24 pl.
- Müller, Werner E. G., Anatoli Krasko, Gael Le Pennec, Renate Steffen, Matthias Wiens, Mohammed Shokry A. Ammar, Isabel Müller, & Heinz C. Schröder. 2003. Molecular mechanism of spicule formation in the demosponge *Suberites domuncula*: Silicatein-Collegen-Myotrophin. In W. E. G. Müller, ed., *Silicon Biomineralization: Biology—Biochemistry—Molecular Biology—Biotechnology*. Progress in Molecular and Subcellular Biology Series, vol. 33. p. 195–221.
- Müller-Wille, S., & J. Reitner. 1993. Paleontological reconstructions of selected sphinctozoan sponges from the Cassian beds (Lower Carnian) of the Dolomites (Northern Italy). *Berliner Geowissenschaftliche Abhandlungen* (series E) 9:253–281, 8 fig., 4 pl.
- Munier-Chalmas, E. 1882. *Barroisia*, nouveau genre des éponges. *Bulletin de la Société Géologique de France* (series 3) 10:425.
- Munier-Chalmas, E. 1894. Étude préliminaire sur les terrains Jurassiques des Ardennes. *Mittheilungen der Geologischen Landesanstalt von Elsass-Lothringen* (1890–1901) 6(38):13–26.
- Münster, G. Graf zu. 1841. Beschreibung und Abbildung der in den Kalkmergelschichten von St. Cassian gefundenen Versteinerungen. In H. L. Wissmann & G. Graf zu Münster, eds., *Beiträge zur Geognosie und Petrefactenkunde des Südöstlichen Tirols*, vorzüglich des Schichten von St. Cassian 4:152 p., 16 pl.
- Murphy, A. E., B. B. Sageman, & D. J. Hollander. 2006. Eutrophication by decoupling of the marine biogeochemical cycles of C, N, and P: A mechanism of Late Devonian extinction. *Geology* 28:427–430.
- Murray, J. W. 1966. An oil producing reef fringed carbonate bank in Upper Devonian Swan Hills Member, Judy Creek, Alberta. *Bulletin of Canadian Petroleum Geology* 14:1–103.
- Musatov, D. I., V. N. Nemirovskaya, E. V. Shirokova, & I. T. Zhuravleva. 1961. Sretenskiy opornyiy razrez nizhnego kembriya v Vostochnom Sayane [Sretenka reference section of the Lower Cambrian in East Sayan]. In A. V. Kryukov, ed., *Materialy po Geologii i Poleznyim Iskopayemym Krasnoyarskogo Kraya 2* [Materials on Geology and Natural Resources of the Krasnoyarsk Region 2]. Krasnoyarsk Publishing House. Krasnoyarsk. p. 3–49, 1 fig., 7 pl., 2 tables.
- Myagkova, E. I. 1955a. K characteristike klassa Aphrosalpingoidea Myagkova [On the characteristics of the class Aphrosalpingoidea, Myagkova, 1955]. Akademiya Nauk SSSR Doklady [Academy of Sciences of the USSR] 104(3):478–481, 2 fig.
- Myagkova, E. I. 1955b. Novye predstaviti tipa Archaeocyatha [New representatives of the phylum Archaeocyatha]. Akademiya Nauk SSSR Doklady [Academy of Sciences of the USSR] 104(4):638–641, 2 fig.
- Myagkova, E. I. 1985. Tip Receptaculita [Phylum Receptaculita]. Institut Geologii i Geofiziki, Sibirskoe Otdelenie, Akademiya Nauk SSSR, Trudy 632:44–51, pl. 21.

- Nagai, Koichi. 1979. Organic reef deposits developed in the lower part of the Akiyoshi Limestone Group. *Chikyu* 1:661–667. In Japanese.
- Nagai, Koichi. 1985. Reef-forming algal chaetetid boundstones found in the Akiyoshi limestone Group, southwest Japan. *Bulletin of the Akiyoshi-dai Museum of Natural History* 20:1–15.
- Nagai, Koichi. 1992. Growing mechanism of the Carboniferous Akiyoshi Organic Reef Complex. Doctoral dissertation. Kyushu University. Fukuoka, Japan. 238 p., 64 pl.
- Nagai, Koichi, A. Kano, T. Sugiyama, T. Haikawa, & A. Sugimura. 1999. Carboniferous oceanic reef complex in the Akiyoshi terrane, southwest Japan. Guidebook for Field Trip B1. 8th International Symposium on Fossil Cnidaria and Porifera. Sendai, Japan. 56 p.
- Nagai, Koichi, Erika Kido, & Tetsuo Sugiyama. 2007. Late Palaeozoic oceanic reef complex, Akiyoshi limestone, Japan. In E. Vennin, M. Aretz, F. Boulvain, & A. Munnecke, eds., *Facies from Palaeozoic reefs and bioaccumulations. Mémoires du Muséum National d'Histoire Naturelle* 195:257–259.
- Nagai, Koichi, R. R. West, T. Sugiyama, & S. Mizuki. 2007. Living and Pleistocene chaetetid sponges from Okinawa, Southwest Japan. In Olga Kossovaya, Ian Somerville, & Irina Evdokimova, eds., *Tenth International Symposium on Fossil Cnidaria and Porifera, Abstracts*. Russian Academy of Sciences, Federal Agency on Mineral resources of the Russian Federation, Russian National Committee of Geologists, International Association for the Study of Fossil Cnidaria and Porifera, & A. P. Karpinsky. Russian Geological Research Institute (VSEGEI). Saint-Petersburg, Russia. p. 66.
- Naimark, E. B., & A. Yu. Rozanov. 1997. Zakonomernosti razvitiya regional'nykh faun pravil'nykh arkheotsiat [Regularities in the development of regional faunas of regular archaeocyaths]. Stratigrafiya, Geologicheskaya Korrelyatsiya 5:67–78, 6 fig., 10 tables.
- Nakamori, Tsutomu. 1986. Community structures of Recent and Pleistocene hermatypic corals in the Ryukyu Islands, Japan. *Tohoku University Scientific Reports* (2nd series, Geology) 56(2):71–133.
- Nakazawa, Tsutomu. 2001. Carboniferous reef succession of the Panthalassan open-ocean setting: Example from Omi Limestone, central Japan. *Facies* 44:183–210.
- Nakazawa, Tsutomu, Katsumi Ueno, & Masayuki Fujikawa. 2012. Middle Permian sponge-microencruster bioherms in the Akiyoshi Limestone, SW Japan: Implications of Late Palaeozoic reef evolution on mid-Panthalassan atolls. *Geological Journal* 47:495–508.
- Nardine, Elise, Isabelle Rouget, & Pascale Neige. 2005. Tendencies in paleontological practice when defining species, and consequences on biodiversity studies. *Geology* 33(2):969–972.
- Nardo, G. D. 1833. Auszug aus einem neuen System der Spongarien wonach bereits die Aufstellung in der Universität-Sammlung zu Padua gemact ist. In *Isis, oder Encyclopädische Zeitung Coll. Oken*. Jena. p. 510–523.
- Nestor, Heldur. 1960. *Plumatalinia: Novyi rod otriada Stromatoporoidea iz verkhnego ordovika Estonskoi SSR* [*Plumatalinia: A new genus of Stromatoporoidea from the Upper Ordovician of the Estonian SSR*]. *Izvestiya Akademii Nauk Estinskoi SSR, Seriya Fiziko-Matematicheskikh i Tekhnicheskikh Nauk* 9(3):225–228, pl. 1–2.
- Nestor, Heldur. 1962. Reviziia stromatoporoidey opisanyykh F. Rozenom v 1867 godu [A revision of the stromatoporoids described by F. Rosen in 1867]. *Akademiiia Nauk Éstonskoi SSR, Trudy Instituta Geologii* 9:3–23, pl. 1–8.
- Nestor, Heldur. 1964a. *Stromatoporoidei Ordovika i Llandoveri Estonii* [Ordovician and Llandovery Stromatoporoidea of Estonia]. *Akademiiia Nauk Estonskoi SSR, Institut Geologii*. Tallinn. 112 p., 38 fig., 32 pl., 5 tables. In Russian with English summary.
- Nestor, Heldur. 1964b. *Stromatoporoidei Ordovika i Silura Estonii. Avtoreferat*. *Akademiiia nauk Estonskoi SSR*. Tallinn. 23 p.
- Nestor, Heldur. 1966a. *Stromatoporoidei venloka i ludlova Éstonii* [Wenlockian and Ludlovian Stromatoporoidea of Estonia]. *Akademiiia Nauk Éstonskoi SSR, Institut Geologii, "Valgus."* Tallinn. 87 p., 18 fig., 24 pl., 7 tables.
- Nestor, Heldur. 1966b. O drevneishikh stromatoporoideiakh [On the oldest stromatoporoids]. *Paleontologicheskiy Zhurnal* 1966(2):3–12, 2 fig., 1 pl. English translation: *International Geology Review* 9(2):174–182, 2 fig., 1 pl.
- Nestor, Heldur. 1974. O filogenii paleozoiskikh stromatoporoidei [On the phylogeny of Paleozoic stromatoporoids]. In B. S. Sokolov, ed., *Drevnie Cnidaria I* [Ancient Cnidaria I]. *Trudy Institut Geologii i Geofiziki, Siberskoe Otdelenie, Akademiiia Nauk SSSR* [Transactions of the Institute of Geology and Geophysics, Siberian Branch, Academy of Sciences USSR] 201:27–38, 6 fig.
- Nestor, Heldur. 1976. *Rannepaleozoiskie stromatoporoidei basseina reki Moiero: Sever Sibirskoi platformy* [Early Paleozoic stromatoporoids from the Moiero River: North of the Siberian Platform]. *Akademiiia Nauk Éstonskoi SSR, Institut Geologii, "Valgus."* Tallinn. 95 p., 19 fig., 18 pl.
- Nestor, Heldur. 1978. *Évolutsiiia i usloviia obitaniiia paleozoiskikh stromatoporat* [Evolution and habitats of Paleozoic stromatoporates]. *Avtoreferat dissertatsii doktora geologo-mineralogitseksikh nauk*. M.V. Lomonosova gosudarstvennyi universitet [Dr. Sci. Dissertation. Moscow M.V. Lomonosova State University]. Tallinn. 39 p.
- Nestor, Heldur. 1979. *Stromatoporoids*. In V. Jaanusson, S. Laufeld, & R. Skoglund, eds., *Lower Wenlock Faunal and Floral Dynamics: Vattenfallet Section, Gotland. Sveriges Geologiska Undersökning*, C-762. Uppsala. p. 63–64, fig. 20.
- Nestor, Heldur. 1981a. The relationship between stromatoporoids and heliolitids. *Lethaia* 14:21–25.
- Nestor, Heldur. 1981b. *Stromatoporaty* [Stromatoporates]. In L.V. Nekhorosheva, ed., *Ob"iasnitel'naiia zapiska k skheme stratigrafiia verkhnesiluriiskikh otlozhennii Vaigachgo-Iuzhnonovozemel'skogo regiona*

- [Explanatory note to the stratigraphic chart of the upper Silurian deposits of Vaigach-Novaia Zemlia region]. VNII Okeangeologii. Leningrad. p. 97–106, fig. 5–8, pl. 11–13.
- Nestor, Heldur. 1982. The Baltic Middle Silurian stromatoporoid succession. In D. Kaljo & E. Klaamann, eds., Ecostratigraphy of the East Baltic Silurian. "Valgus." Tallinn. p. 43–49.
- Nestor, Heldur. 1983. Stromatoporaty [Stromatoporates]. In L.V. Nekhorosheva, ed., Ob"iasnitel'naia zapiska k skheme stratigrafiia nizhnesiluriiskikh otlozhennii iuga Novoi Zemli [Explanatory letter to the stratigraphic chart of the lower Silurian deposits of Novaia Zemlia region]. Sevmorgeologiiia. Leningrad. p. 48–52, fig. 2.
- Nestor, Heldur. 1984. Autecology of stromatoporoids in Silurian cratonic seas. In M. G. Bassett & J. D. Lawson, eds., Autecology of Silurian organisms. Special Papers in Palaeontology 32:265–280.
- Nestor, Heldur. 1990a. Biogeography of Silurian stromatoporoids. In W. S. McKerrow & C. R. Scotese, eds., Palaeozoic Palaeogeography and Biogeography. Geological Society of London Memoir 12:215–221, 2 fig., 4 tables.
- Nestor, Heldur. 1990b. Stromatoporoids. In D. Kaljo & H. Nestor, eds., An Excursion Guidebook. Field Meeting Estonia 1990. Tallinn. p. 46–51, 109, tables 6–7, pl. 1.
- Nestor, Heldur. 1994. Main trends in stromatoporoid evolution during the Silurian. Courier Forschungsinstitut Senckenberg 172:329–339, 4 fig.
- Nestor, Heldur. 1995. Ordovician and Silurian reefs in the Baltic area. In B. Lathuiliere & J. Geister, eds., Coral reefs in the past, present and future. Proceedings of the Second European Regional Meeting of the International Society for Reef Studies, Luxembourg. Publications du Service Géologique du Luxembourg 29:39–47.
- Nestor, Heldur. 1997. Evolutionary history of the single-layered, laminate, clathrodictyid stromatoporoids. Boletín Real Sociedad Española de Historia Natural, Sección Geológica 91(1–4):319–328, 2 fig., 2 pl.
- Nestor, Heldur. 1999a. Telychian (Lower Silurian) stromatoporids from the Charlestown Inlier, Co. Mayo, Ireland. Irish Journal of Earth Sciences 17:115–121, 1 pl., 1 table.
- Nestor, Heldur. 1999b. Community structure and succession of Baltoscandian Early Palaeozoic stromatoporoids. Proceedings of the Estonian Academy of Science, Geology 48(3):123–139, 2 fig., 1 table.
- Nestor, Heldur. 2011. Part E, Revised, Volume 4, Chapter 16C: Clathrodictyida. Treatise Online 26:1–15, 8 fig.
- Nestor, Heldur, Paul Copper, & C. W. Stock. 2010. Late Ordovician and Early Silurian Stromatoporoid Sponges from Anticosti Island, Eastern Canada: Crossing the O/S Mass Extinction Boundary. National Research Council Research Press. Ottawa, Canada. 163 p., 28 fig., 28 pl.
- Nestor, Heldur, & C. W. Stock. 2001. Recovery of the stromatoporoid fauna after the Late Ordovi- cian extinction. In Yoichi Ezaki, Kei Mori, Toshio Sugiyama, & J. E. Sorauf, eds., Proceedings of the 8th International Symposium on Fossil Cnidaria and Porifera, September 12–16, 1999, Sendai, Japan. Bulletin of the Tohoku Imperial University Museum 1:333–341, 5 fig.
- Nestor, Heldur, & B. D. Webby. 2013. Biogeography of the Ordovician and Silurian Stromatoporoidea (Chapter 7). In D. A. T. Harper & T. Servais, eds. Early Paleozoic Biogeography and Palaeogeography. Geological Society, London, Memoirs 38:67–79, 12 fig.
- Neumayr, Melchior. 1889. Die Stämme des Thierreiches 1. Verlag von F. Tempsky, Buchhändler der Kaiserlichen Akademie der Wissenschaften in Wien, Österreich. Wien and Prague. 603 p.
- Neumayr, Melchior. 1890. Das Alter der japanischen Juraablagerungen: Zur geologie un paleontologie von Japan. Denkschriften der Kaiserlichen Akademie der Wissenschaften, Mathematisch-Naturwissenschaftliche Classe 57:27–40, pl. 4–5.
- Newell, N. D. 1935. Some Mid-Pennsylvanian invertebrates from Kansas and Oklahoma. II. Stromatoporoidea, Anthozoa and gastropods. Journal of Paleontology 9(4):341–355.
- Newell, N. D. 1967. Revolutions in the history of life. Geological Society of America Special Paper 89:63–91.
- Newell, N. D. 2001. The Permian Guadalupian Reef Complex of West Texas and eastern New Mexico. In G. D. Stanley Jr., ed., The History and Sedimentology of Ancient Reef Systems. Topics in Geobiology, vol. 17. Kluwer Academic/Plenum Publishers. New York. p. 205–215, 5 fig.
- Nguyen Huu Hung. 2001. Astrorhizae-like structures on epitheca of a rugose coral from the Carboniferous of Laos. Acta Palaeontologica Polonica 46(4):583–588.
- Nguyen Huu Hung, & Bruno Mistiaen. 1997. *Vacuustroma*, un genre nouveau de stromatopore dendroïde du Dévonien du Vietnam et du Boulonnais (France). Geobios 30(2):193–204.
- Nguyen Huu Hung, & Bruno Mistiaen. 1998. Uppermost Famennian stromatoporoids of north central Viet Nam. Journal of Geology (Ha Noi) (series B) 11–12:57–75, 1 fig., pl. 1–5.
- Nicholson, H. A. 1873. On some new species of *Stromatopora*. Annals and Magazine of Natural History (series 4) 12:89–95.
- Nicholson, H. A. 1874. Descriptions of species of *Chaetetes* from the Lower Silurian rocks of North America. Quarterly Journal of the Geological Society of London 30:499–515.
- Nicholson, H. A. 1875. Description of the corals of the Silurian and Devonian Formations. Description of Amorphozoa from the Silurian and Devonian Formations. Description of the Polyzoa from the Silurian Formation. Report of the Geological Survey of Ohio 2(2):181–268.
- Nicholson, H. A. 1879a. A Manual of Palaeontology for the Use of Students with a General Introduction on the Principles of Palaeontology, 2nd edit., vol. 1. William Blackwood & Sons. Edinburgh & London. 511 p.

- Nicholson, H. A. 1879b. On the structure and affinities of the "Tabulate Corals" of Palaeozoic Period. William Blackwood & Sons. Edinburgh & London. xii + 342 p., 44 fig., 15 pl.
- Nicholson, H. A. 1881. On the Structure and Affinities of the Genus *Monticulipora* and its Sub-Genera. William Blackwood & Sons. Edinburgh & London. xvi + 240 p., 50 fig., 6 pl.
- Nicholson, H. A. 1886a. A Monograph of the British Stromatoporoids. Part I, General Introduction, vol. 39. Palaeontographical Society. London. p. 1–130, fig. 1–17, pl. 1–11.
- Nicholson, H. A. 1886b. On some new or imperfectly known species of stromatoporoids, part 1. Annals and Magazine of Natural History (series 5) 17:225–239, pl. 6–8.
- Nicholson, H. A. 1886c. On some new and imperfectly known species of stromatoporoids, part 2. Annals and Magazine of Natural History (series 5) 18:8–22, 1 fig., pl. 1–2.
- Nicholson, H. A. 1886d. On *Desmidopora alveolaris*, Nich., a new genus and species of Silurian Corals. Geological Magazine (new series), decade 3, vol. 3(7):289–292, pl. 8.
- Nicholson, H. A. 1887. On some new or imperfectly known species of stromatoporoids, part 3. Annals and Magazine of Natural History (series 5) 19(109):1–17, pl. 1–3.
- Nicholson, H. A. 1889. A Monograph of the British Stromatoporoids, part 2, vol. 42. Palaeontographical Society. London. p. 131–158, fig. 18, pl. 12–19.
- Nicholson, H. A. 1891a. A Monograph of the British Stromatoporoids, part 3, vol. 44. Palaeontographical Society. London. p. 159–202, fig. 19–27, pl. 20–25.
- Nicholson, H. A. 1891b. On some new and imperfectly known species of stromatoporoids, part 4. Annals and Magazine of Natural History (series 6) 7:309–328, 2 fig., pl. 8–10.
- Nicholson, H. A. 1892. A Monograph of the British Stromatoporoids, part 4, vol. 46. Palaeontographical Society. London. p. 203–234, fig. 28–33, pl. 26–29.
- Nicholson, H. A., & A. H. Foord. 1886. On a new genus of Devonian corals, with descriptions of some species of the same. Annals and Magazine of Natural History (series 5) 17:389–400, 518–523, fig. A–G, pl. 15–17.
- Nicholson, H. A., & J. Murie. 1878. On the minute structure of *Sstromatopora* and its allies. Zoological Journal of the Linnean Society 14:187–246, 5 fig., pl. 1–4.
- Nield, E. W. 1984. The borings of Silurian stromatoporoids: Towards an understanding of larval behaviour in the *Trypanites* organism. Palaeogeography, Palaeoclimatology, Palaeoecology 48(1984):229–243.
- Nield, E. W. 1986. Non-cryptic encrustation and pre-burial fracturing in stromatoporoids from the Upper Visby Beds of Gotland, Sweden. Palaeogeography, Palaeoclimatology, Palaeoecology 55:35–44.
- Nitecki, M. H. 1972. North American Silurian receptaculitid algae. Fieldiana, Geology 28:xii + 108, 45 fig., 1 table.
- Nitecki, M. H., & Françoise Debrenne. 1979. The nature of radiocyathids and their relationship to receptaculitids and archaeocyathids. Geobios 12:5–27, 5 pl.
- Nitecki, M. H., & H. Mutvei. 1996. Nature and mineralogy of receptaculitid skeleton. Bulletin de l'Institut Océanographique de Monaco, Numéro Special 14(4):287–294, 3 fig.
- Nitecki, M. H., H. Mutvei, & D. V. Nitecki. 1999. Receptaculitids: A Phylogenetic Debate on a Problematic Fossil Taxon. Kluwer Academic/Plenum Publishers. New York. xvii + 241 p., 81 fig.
- Nitecki, M. H., & D. F. Toomey. 1979. Nature and classification of receptaculitids. Centre de Recherche et d'Exploration-Production Elf-Aquitaine, Bulletin 3:725–732.
- Nitecki, M. H., I. T. Zhuravleva, E. I. Myagkova, & D. F. Toomey. 1981. Skhodstvo *Soanites bimuralis* s arkheotsiatami i retseptakulitami [Similarity of *Soanites bimuralis* to archaeocyaths and receptaculitids]. Paleontologicheskiy Zhurnal 1981(1):5–9, 1 fig.
- Noble, J. P. A. 1970. Biofacies analysis, Cairn Formation, of Miette reef complex (Upper Devonian), Jasper Park, Alberta. Bulletin of Canadian Petroleum Geology 18:493–543.
- Noble, J. P. A. 1989. The Late Silurian Laplante reefs of northern New Brunswick, Canada. In H. H. J. Geldsetzer, N. P. James, & G. E. Tebbutt, eds., Reefs, Canada and adjacent areas. Memoir of the Canadian Society of Petroleum Geologists 13:344–349.
- Noé, S. 2003. Spätstadium einer sterbenden Karbonatplattform: Schelfrand- und Außenriff-Entwicklung der Tansil-Formation (Permian Reef Complex, New Mexico, USA). Kölner Forum Geologie und Paläontologie 11:1–245, 33 fig., 38 pl.
- Norford, B. S. 1971. Upper Ordovician corals *Chaetetipora* and *Sibiriolites* from northern Ellesmere Island, District of Franklin. Canadian Geological Survey Bulletin 197:1–11, 1 fig., 2 pl.
- Norris, R. D. 1998. Recognition and macroevolutionary significance of photosymbiosis in molluscs, corals, and foraminifera. In R. D. Norris & R. M. Corfield, eds., Isotope Paleobiology and Paleoenvironment. Paleontological Society Paper 4:68–100.
- Norris, R. D., & R. M. Corfield, eds. 1998. Isotope Paleobiology and Paleoenvironment. Paleontological Society Papers 4:285 p.
- Nowinski, A., & E. Sarnecka. 2003. Sclerospongiae, chaetetids. In M. Pajchlowa, L. Malinowska, L. Milaczewski, E. Sarnecka, & T. Woroncow-Marcinowska, eds., Atlas of Index and Characteristic Fossils, vol. III, part 1b, Devonian (Fascicles 1–2). Wydawnictwa PIG. Warsaw, Poland. p. 39–42.
- Oakley, Kenneth P. 1936. An Ordovician species of *Chaetetes*. The Geological Magazine 73(10):440–444, pl. 12.
- Oekentorp, K. 1969. Kommensalismus bei Favositiden. Münsterische Forschungen zur Geologie und Paläontologie 12:164–217.
- Oekentorp, Klemens. 1985. Spicules in favositid Tabulata: Remarks to J. Kazmierczak's interpretation by Kl. Oekentorp. Fossil Cnidaria 14(1):34–35.

- Ogar, V. V. 2011. Carboniferous buildups in the Donets Basin (Ukraine). In M. Aretz, S. Delculée, J. Denayer, & E. Pory, eds., Abstracts, 11th Symposium on Fossil Cnidaria and Sponges, Liège, Belgium August 19–29. Kölner Forum für Geologie und Paläontologie 19:121–122.
- Ogar, V. V. 2012. Carboniferous buildups in the Donets Basin (Ukraine). *Geologica Belgica* 15(4):340–349.
- Ogg, J. G. 2004. Status of divisions of the International Geologic Time Scale. *Lethaia* 37:183–199.
- Oken, L. 1815. Lehrbuch der Narurgeschichte, 3 Band. Lehrbuch der Zoologie, 1st Abtheilung, Zoologie, Fleischlose Thiere. C. H. Reclam. Leipzig. 846 p., 40 pl.
- Okulitch, V. J. 1935a. Tetradiidae: A revision of the genus *Tetradium*. Royal Society of Canada, Transactions (series 3, section 4) 29:49–74.
- Okulitch, V. J. 1935b. Cyathospongia: A new class of Porifera to include the Archaeocyathinae. Royal Society of Canada, Transactions (series 3, section 4) 29:75–106, 3 fig., 2 pl.
- Okulitch, Vladimir J. 1936a. *Streptindites chaetetiae*, a new species of "parasitic" annelid found in *Chaetetes radians*. *The American Midland Naturalist* 17:983–984.
- Okulitch, Vladimir J. 1936b. On the genera *Heliolites*, *Tetradium*, and *Chaetetes*. *American Journal of Science* 32:361–379.
- Okulitch, V. J. 1937a. Some changes in nomenclature of Archaeocyathi (Cyathospongia). *Journal of Paleontology* 11:251–252.
- Okulitch, V. J. 1937b. Changes in nomenclature of Archaeocyathi (Cyathospongia). *Proceedings of the Geological Society of America* 1936:358.
- Okulitch, V. J. 1940. Revision of type Pleospongia from eastern Canada. Royal Society of Canada, Transactions (series 3, section 4) 34:75–87, 3 pl.
- Okulitch, V. J. 1943. North American Pleospongia. *Geological Society of America Special Paper* 48:vii + 112 p., 19 fig., 18 pl., 1 table.
- Okulitch, V. J. 1950a. *Vacuocyathus*, a new name for *Coelocyathus* Vologdin, 1933. *Journal of Paleontology* 24:392–393.
- Okulitch, V. J. 1950b. Nomenclatural notes on pleo-sponge genera *Archaeocyathus*, *Spirocyathus*, *Flindersocyathus*, *Pycnoidocyathus* and *Cambrocyathus*. *Journal of Paleontology* 24:393–395.
- Okulitch, V. J. 1950c. *Pluralicyathus*, new name for *Polycyathus* Vologdin, 1928 not Duncan, 1876. *Journal of Paleontology* 24:503.
- Okulitch, V. J. 1955a. Archaeocyatha. In R. C. Moore, ed., *Treatise on Invertebrate Paleontology*. Part E. Geological Society of America & University of Kansas Press. New York & Lawrence. p. 1–20, fig. 1–13.
- Okulitch, V. J. 1955b. Archaeocyatha from the Mc-Dame area of northern British Columbia. Royal Society of Canada, Transactions (series 3, section 4) 49:47–64, 3 pl.
- Okulitch, V. J., & M. W. de Laubenfels. 1953. The systematic position of Archaeocyatha (Pleosponges). *Journal of Paleontology* 27:481–485.
- Okulitch, V. J., & E. F. Roots. 1947. Lower Cambrian fossils from the Aiken Lake area, British Columbia. Royal Society of Canada, Transactions (series 3, section 4) 41:37–46, pl. 1.
- Okuneva, O. G. 1967. Novyy podrod monotsiatid iz nizhnego kembriya Primor'ya [A new subgenus of monocyathids from the Lower Cambrian of Primorye]. *Paleontologicheskiy Zhurnal* 1967(1):132–135, 2 fig.
- Okuneva, O. G. 1969. K biostratigrafiyi nizhnego kembriya Primor'ya (Spasskiy i Chernigovskiy rayony) [On the biostratigraphy of the Lower Cambrian of Primorye (Spassk and Chernigovka regions)]. In I. T. Zhuravleva, ed., *Biostratigrafiya i Paleontologiya Nizhnego Kembriya Sibiri i Dal'nego Vostoka* [Lower Cambrian Biostratigraphy and Paleontology of Siberia and the Far East]. Nauka. Moscow. p. 66–85, 2 fig., pl. 30–33.
- Okuneva, O. G. 1972. Novyy predstavitel' rannekembriyskikh arkheotsiat Primor'ya [A new representative of Early Cambrian archaeocyaths from Primorye]. In I. E. Zanina, ed., *Novye Vidy Drevnikh Rasteniy i Bespozvonochnykh SSSR* [New Species of Plants and Invertebrates of the USSR]. Nauka. Moscow. p. 57–58, pl. 10.
- Okuneva, O. G., & L. N. Repina. 1973. *Biostratigrafiya i Fauna Kembriya Primor'ya* [Biostratigraphy and Fauna of the Cambrian of Primorye]. Institut Geologii i Geofiziki, Sibirskoe Otdelenie, Akademiya Nauk SSSR, Trudy 37:284 p., 104 fig., 46 pl., 10 tables.
- Oliver, W. A., Jr. 1977. Biogeography of Late Silurian and Devonian rugose corals. *Palaeogeography, Palaeoclimatology, Palaeoecology* 22:85–135.
- Oliver, W. A., Jr. & I. Chlupac. 1991. Defining the Devonian: 1979–89. *Lethaia* 24:119–122.
- Oliver, W. A., Jr. Charles W. Merriam, & Michael Churkin, Jr. 1975. Ordovician, Silurian, and Devonian corals of Alaska. United States Geological Survey, Professional Paper 823-B:13–44, 13 fig., 23 pl., 19 tables.
- Oliver, W. A., Jr., & A. E. H. Pedder. 1989. Origins, migrations, and extinctions of Devonian Rugosa on the North American Plate. In P. A. Jell & J. W. Pickett, eds., *Fossil Cnidaria 5. Association of Australasian Palaeontologists Memoir* 8:231–237.
- Omara, Sayed. 1972. An early Cambrian outcrop in southwestern Sinai, Egypt. *Neues Jahrbuch für Mineralogie und Paläontologie, Monatschafte* 5:306–314, 3 fig.
- Oomori, T., Y. Tamaki, K. Nobushima, & Y. Iraha. 1998. The lead ion taken in hard tissues of marine organisms (corals and sclerosponges). *Chikyu Monthly* 20(4):202–208.
- Öpik, A. A. 1975. Cymbric Vale fauna of New South Wales and Early Cambrian biostratigraphy. Bureau of Mineral Resources, Geology and Geophysics, Australia, Bulletin 159:iv + 78 p., 14 fig., 7 pl.
- Oppenheim, Paul. 1930. Die Anthozoen der Gosau-schichten in den Ostalpen. Privately published. Lichtenfelde, Berlin. 476 p., 48 pl.
- Opplinger, F. 1915. Die Spongien der Birmensdorfer Schichten des schweizerischen Jura. *Abhandlungen der schweizerischen paläontologischen Gesellschaft* 40:1–86, 12 pl.

- Opplunger, F. 1929. Die Kalkschwämme des schweizerischen Jura. Abhandlungen der schweizerischen Palaeontologischen Gesellschaft 48:1–31, 4 pl.
- Oradovskaya, M. M. 1988. The Ordovician System in most of Russian Asia: Northeastern and far eastern USSR. International Union of the Geological Sciences, Publication 26:85–115.
- d'Orbigny, Alcide. 1847. Zoophytes. Voyage dans l'Amérique méridionale. P. Bertrand. Paris.
- d'Orbigny, Alcide. 1849a [1848]. Description de quelques genres nouveaux de Mollusques bryozoaires. Revue et Magazine de Zoologie, Pure et Appliquée (series 2) 1:499–504.
- d'Orbigny, Alcide. 1849b [1848]. Note sur la classe des Amorphozaires. Revue et Magazine de Zoologie, Pure et Appliquée (series 2) 1:545–550.
- d'Orbigny, Alcide. 1850–1852 [1849]. Prodrome de Paléontologie Stratigraphique Universelle des Animaux Mollusques et Rayonnés Faisant Suite au Cours Élémentaire de Paléontologie et de Géologie Stratigraphiques. Victor Masson. Paris. 394 p. (vol. 1, Jan., 1850); 427 p. (vol. 2, Nov., 1850); 196 p. + index, pl. 190 (vol. 3, 1852).
- d'Orbigny, Alcide. 1851–1854. Paléontologie Française, Terrains Crétacés, tome 5: Bryozoaires. Victor Masson. Paris. 1192 p., pl. 600–800.
- Orchard, M. J. 1989. Conodonts from the Frasnian–Famennian boundary interval in western Canada. In N. J. McMillan, A. F. Embry, & D. J. Glass, eds., Devonian of the World. Canadian Society of Petroleum Geologists Memoir 14(3):35–52.
- Osadchaya, D. V. 1979. Biogeograficheskoe rayonirovaniye Altaye-Sayanskogo morskogo rannekembriyskogo basseyna v sanashtykgol'skoe vremya (po arkheotsiatam) [Biogeographic division of the Altay-Sayan marine Early Cambrian basin in Sanashtykgol time (according to archaeocyaths)]. In O. A. Betekhtina & I. T. Zhuravleva, eds., Sreda i Zhizn' v Geologicheskem Proshlyom. Voprosy Ekosstratigrafi [Environment and Life in the Geological Past. Problems of Ecostratigraphy]. Institut Geologii i Geofiziki, Sibirske Otdelenie, Akademiya Nauk SSSR, Trudy 431:76–86, 1 fig., 2 tables.
- Osadchaya, D. V., & T. Yu. Ganachkova. 1986. Nekotorye arkheotsiaty Atdabanskogo yarusa Altaye-Sayanskoy skladchatoy oblasti [Some archaeocyaths from the Atdabanian stage of the Altay-Sayan fold region]. Institut Geologii i Geofiziki, Sibirske Otdelenie, Akademiya Nauk SSSR, Trudy 669:169–183, pl. 18–24.
- Osadchaya, D. V., L. N. Kashina, I. T. Zhuravleva, N. P. Borodina, & A. S. Boyarinov. 1979. Stratigrafiya i Arkheotsiaty Nizhnego Kembriya Altaye-Sayanskoy Oblasti [Lower Cambrian Stratigraphy and Archaeocyaths of the Altay-Sayan Region]. Nauka. Moscow. 215 p., 20 fig., 28 pl., 9 tables.
- Osadchaya, D. V., & D. V. Kotelnikov. 1998. Archaeocyathids from the Atdabanian (Lower Cambrian) of the Altay-Sayan Foldbelt, Russia. Geodiversitas 20:5–18, 11 fig.
- Ota, Masamichi. 1968. The Akiyoshi Limestone Group: A geosynclinal organic reef complex. Bulletin of the Akiyoshi-dai Museum of Natural History 5:44 p., 17 fig., 31 pl., 6 tables. In Japanese with English abstract and captions.
- Ota, Masamichi. 1977. General geology of the Akiyoshi Limestone Group. Geological studies of Akiyoshi, part 1. Bulletin of the Akiyoshi-dai Museum of Natural History 12:33 p., 3 fig., 3 pl., 4 tables.
- Ota, Nobuki, Akihiro Sugimura, & Masamichi Ota. 1969. Reef deposits in the *Millerella* Zone of the Akiyoshi Limestone Group. In Tatsuro Matsumoto, ed., Litho- and Bio-facies of Carbonate Sedimentary Rocks: A Symposium. Palaeontological Society of Japan Special Paper 14:1–12, pl 1–3.
- Ott, E. 1967. Segmentierte Kalkschwämme (Sphinctozoa) aus der alpinen Mitteltrias und ihre Bedeutung als Riffbildner im Wettersteinkalk. Bayerischer Akademie der Wissenschaften, mathematisch-naturwissenschaftliche Klasse, Abhandlungen (new series) 131:1–96, 9 fig., pl. 1–10, 5 tables.
- Ott, Ernst. 1974. *Phragmocoelia* n. g. (Sphinctozoa), ein segmentierter Kalkschwamm mit neuem Füllgewebetyp aus der Alpinen Trias. Neues Jahrbuch für Geologie und Paläontologie, Monatshefte 12:712–723, 4 fig.
- Over, D. J., J. R. Morrow, & P. B. Wignall, eds. 2005. Understanding Late Devonian and Permian-Triassic Biotic and Climatic Events: Towards an Integrated Approach. Elsevier B. V. Amsterdam. 344 p.
- Oxley, P., & M. Kay. 1959. Ordovician Chazyan Series of Champlain Valley, New York and Vermont, and its reefs. Bulletin of the American Association of Petroleum Geologists 43:817–853.
- Ozaki, Kin-emon. 1938. On some stromatoporoids from the Ordovician limestone of Shantung and South Manchuria. Journal of the Shanghai Science Institute, Section 2(2):205–223, pl. 23–34.
- Özdikmen, Hüseyin. 2009. Substitute names for eight sponge genus group names (Porifera). Munis Entomology & Zoology 4:212–218.
- Pacaud, J.-M., D. Merle, & J.-C. Meyer. 2000. La faune danienne de Vigny (Val-d'Oise, France): Importance pour l'étude de la diversification des mollusques au début du Tertiaire. Comptes Rendus de l'Académie des Sciences, Sciences de la Terre et des Planètes, Paris (série 2a) 330(12):867–873.
- Paleobiology Database (PBDB). 2006. <http://paleodb.org/cgi-bin/bridge.pl>. Checked June 2010.
- Pallini, G., & F. Schiavonotto. 1981. Upper Carixian-Lower Domerian sphinctozoa and ammonites from some sequences in central Appenines. In A. Farinacci & S. Elmi, eds., Rosso Ammonitico Symposium, Proceedings. Technoprint. Rome. p. 521–539, 1 fig., 3 pl.
- Palmer, A. R. 1998. Why is intercontinental correlation within the Lower Cambrian so difficult? Revista Española de Paleontología, numero extraordinario, Homenaje al Prof. Gonzalo Vidal. Sociedad Española de Paleontología. Oviedo. p. 17–21, 4 fig.
- Palmer, A. R., & N. P. James. 1980. The Hawke Bay event: A circum-Iapetus regression near the Lower-Middle Cambrian boundary. In D. R. Wones, ed., Proceedings, Caledonides in the U.S.A. Virginia Polytechnic Institute and State Department of Geological Sciences, Memoirs 2:15–18, 2 fig.

- Palmer, A. R., & L. N. Repina. 1993. Through a glass darkly: Taxonomy, phylogeny, and biostratigraphy of the Olenellina. University of Kansas Paleontological Contributions (new series) 3:1–35, 13 fig., 2 tables.
- Palmer, A. R., & A. J. Rowell. 1995. Early Cambrian trilobites from the Shackleton Limestone of the central Transantarctic Mountains. Paleontological Society Memoir 45:1–28, 18 fig.
- Pantic, S. 1975. *Ceotinella mirunae* gen. nov., sp. nov. (Spongia, Familia "incertae sedis") from the Middle Triassic of Montenegro. Geoloski Anal Balkanskogo Poluostrva Balkan 39:153–158, pl. 1.
- Paquette, J., C. W. Stearn, & C. F. Klappa. 1983. An enigmatic fossil of sponge affinities from Middle Ordovician rocks of western Newfoundland. Canadian Journal of Earth Sciences 20:1501–1512, 8 fig.
- Parks, W. A. 1907. Stromatoporoids of the Guelph Formation in Ontario. University of Toronto Studies Geological Series 4:37 p., 6 pl.
- Parks, W. A. 1908. Niagara stromatoporoids. University of Toronto Studies, Geological Series 5:1–68, pl. 7–15.
- Parks, W. A. 1909. Silurian stromatoporoids of America (exclusive of Niagara and Guelph). University of Toronto Studies, Geological Series 6:1–52, pl. 16–20.
- Parks, W. A. 1910. Ordovician stromatoporoids. University of Toronto Studies, Geological Series 7:1–52, pl. 21–24.
- Parks, W. A. 1933. New species of stromatoporoids, sponges and corals from the Silurian strata of Baie des Chaleurs. University of Toronto Studies, Geological Series 33:1–40, 8 pl.
- Parks, W. A. 1935. Systematic position of the stromatoporoids. Journal of Paleontology 9:18–29.
- Parks, W. A. 1936. Devonian stromatoporoids of North America, part 1. University of Toronto Studies, Geological Series 39:1–125, 19 pl.
- Parona, C. F. 1928. Faunette Triasiche del Caracorum. In G. Dainelli, Relazioni scientifiche delle spedizioni Italiana de Filippi, nell'Himalaja, Caracorum e Turchestan cinese (1913–14) (series 2), Bologna, Resultati Geologici et Geografici 6:1–39.
- Parona, C. F. 1933. Le spunge della fauna permiana di Palazzo Adriano (Bacino del Sosio) in Sicilia. Memorie della Società Geologica Italiana 1:1–58, 12 pl.
- Parona, C. F., C. Crema, & P. L. Prever. 1909. La fauna coralligena del Cretaceo dei Monti d'Ocre nell'Abruzzo aquilana. Memoire per Servire alla Descrizione della Carta Geologica d'Italia 5(1):242 p., 18 pl.
- Parrish, J. T., A. M. Ziegler, C. R. Scotese, R. G. Humphreville, & J. L. Kirschvink. 1986. Proterozoic and Cambrian phosphorites, Specialist studies: Early Cambrian palaeogeography, palaeoceanography and phosphorites. In P. J. Cook & J. H. Shergold, eds., Phosphate Deposits of the World, vol. 1: Proterozoic and Cambrian Phosphorites. Cambridge University Press. Cambridge. p. 280–294, 5 fig., 2 tables.
- Paul, V. J. 1992. Chemical defenses of benthic marine invertebrates. In V. J. Paul, ed., Ecological Controls of Marine Natural Products. Comstock Publishing Associates. Ithaca, New York. p. 164–188.
- Paulsen, T. S., J. Encarnación, A. M. Grunow, P. W. Layer, & M. Watkeys. 2007. New age constraints for a short pulse in Ross Orogen deformation triggered by east-west Gondwana suturing. Gondwana Research 12:417–427, 8 fig.
- Pedder, A. E. H., & W. A. Oliver, Jr. 1990. Rugose coral distribution as a test of Devonian palaeogeographic models. In W. S. McKerrow & C. R. Scotese, eds., Palaeozoic Palaeogeography and Biogeography. Geological Society of London Memoirs 12:267–275.
- Pegel, T. V. 2000. Evolution of trilobite biofacies in Cambrian basins of the Siberian Platform. Journal of Paleontology 74:1000–1019, 15 fig.
- Pel'man, Yu. L., V. V. Ermak, A. B. Fedorov, V. A. Luchinina, I. T. Zhuravleva, L. N. Repina, V. I. Bondarev, & Z. V. Borodaevskaya. 1990. Novye dannye po stratigrafii i paleontologii verkhnego dokembriya i nizhnego kembriya r. Dzhandy (pravyy pritok r. Aldan) [New data on Upper Precambrian and Lower Cambrian stratigraphy and paleontology of the Dzhanda River (right tributary of the Aldan River)]. Institut Geologii i Geofiziki, Sibirskoe Otdelenie, Akademiya Nauk SSSR, Trudy 765:3–32, 2 fig., pl. 1–3.
- Pelzmann, I. 1930. *Amblysiphonella* und Bryozoen aus dem Oberkarbon der Karawanken. Mitteilungen der Naturwissenschaftlichen Verein Steiermark 67:123–127, 1 pl.
- Pemberton, S. G., B. Jones, & G. Edgecombe. 1988. The influence of *Trypanites* in the diagenesis of Devonian stromatoporoids. Journal of Paleontology 62:22–31.
- Peng Shanchi, & L. E. Babcock. 2011. Continuing progress on chronostratigraphic subdivision of the Cambrian System. Bulletin of Geosciences, Czech Geological Survey 86:391–396, 1 fig.
- Percival, I. G., B. D. Webby, & J. W. Pickett. 2001. Ordovician (Bendigonian, Darriwilian to Gisbornian) faunas from the northern Molong Volcanic Belt of central New South Wales. Alcheringa 25:211–250.
- Perejón, Antonio. 1971. *Pachecocystathus*, nuevo género de Archaeocyáthidos del Cámbrico español. Estudios geológicos 27:81–83, 1 pl.
- Perejón, Antonio. 1973. Contribución al conocimiento de los Arqueociátidos de los yacimientos de Alconera (Badajoz). Estudios geológicos 29:179–206, 2 fig., 7 pl., 8 tables.
- Perejón, Antonio. 1975a. Arqueociatos de los subórdenes Monocyathina y Dokidocyathina. Real Sociedad Española de Historia Natural, Boletín, sección geológica 73:125–145, 3 pl., 4 tables.
- Perejón, Antonio. 1975b. Arqueociatos regulares del Cámbrico inferior de Sierra Morena (SW de España). Real Sociedad Española de Historia Natural, Boletín, sección geológica 73:147–193, 7 pl., 4 tables.
- Perejón, Antonio. 1975c. Nuevas faunas de Arqueociatos del Cámbrico inferior de Sierra Morena (I). Tecniterra 8:8–29, 3 fig., 4 pl., 7 tables.
- Perejón, Antonio. 1976. Nuevos datos sobre los Arqueociatos de Sierra Morena. Estudios Geológicos 32:5–33, 6 pl., 2 tables.

- Perejón, Antonio. 1977. Arqueociatos con túmulos en el Cámbrico inferior de Córdoba (Sierra Morena oriental). *Estudios Geológicos* 33:545–555, 4 fig., 2 pl.
- Perejón, Antonio. 1984. Bioestratigrafía de los Arqueociatos en España. *Cuadernos de Geología Ibérica* 9:213–265, 8 tables.
- Perejón, Antonio. 1989. Arqueociatos del Ovietense en la sección del Arroyo Pedroche: Sierra de Córdoba, España. Real Sociedad Española de Historia Natural, Boletín, sección geológica 84:143–247, 6 fig., 13 pl., 9 tables.
- Perejón, Antonio. 1994. Palaeogeographic and biostratigraphic distribution of Archaeocyatha in Spain. *Courier Forschungsinstitut Senckenberg* 172:341–354, 7 fig., 1 table.
- Perejón, Antonio, Michael Fröhler, Thilo Bechstädt, Elena Moreno-Eiris, & Maria Boni. 2000. Archaeocyathan assemblages from the Gonnese Group, Lower Cambrian (Sardinia, Italy) and their sedimentologic context. *Bollettino della Società Paleontologica Italiana* 39:257–291, 5 fig., 6 pl.
- Perejón, Antonio, & Elena Moreno-Eiris. 1978. Nuevos datos sobre la fauna de Arqueociatos y las facies carbonatadas de la serie de Los Campillos (Urda, Montes de Toledo orientales). *Estudios Geológicos* 34:193–204, 8 fig., 1 pl.
- Perejón, Antonio, & Elena Moreno-Eiris. 2006. Biostratigraphy and paleobiogeography of the archaeocyathids on the southwestern margin of Gondwana. *Zeitschrift der Deutschen Gesellschaft für Geowissenschaften* 157:611–627, 5 fig.
- Perez-Huerta, Alberto. 2003. Biologically induced changes in the brachiopod *Heteraliosia* (sic) *slocomii* during the middle Pennsylvanian. *The Palaeontological Association Newsletter* 54:148–149.
- Peron, Alphonse. 1893. Exploration scientifique de la Tunisie: Description des Brachiopodes, Bryozoaires et autres invertébrés fossiles des terrains crétacés de la région sud des hauts-plateaux de la Tunisie, recueillis en 1885 et 1886 par M. Philippe Thomas, membre de la mission de l'exploration scientifique de la Tunisie. Imprimerie Nationale. Paris. p. 329–405, pl. 30–31.
- Perry, C. T., & L. J. Hepburn. 2008. Syn-depositional alteration of coral reef framework through bioerosion, encrustation and cementation: Taphonomic signatures of reef accretion and reef depositional events. *Earth-Science Reviews* 86:106–144.
- Peterhans, Emile. 1927. Sur la présence d'un Bryozoaire trepostome dans le Malm de la nappe des "Prealpes medians." *Eclogae Geologicae Helvetiae* 20:380–399.
- Peterhans, Emile. 1929a. Étude du genre *Blastochaetetes* Dietrich. *Eclogae Geologicae Helvetiae* 22(1):75–79, pl. vi.
- Peterhans, Emile. 1929b. Étude du genre *Chaetetopsis* Neumayr et classification nouvelle des Chaetetidae. *Eclogae Geologicae Helvetiae* 22(1):81–85.
- Peterhans, Emile. 1929c. Les Chætetidæ du Lias et du Dogger. *Eclogae Geologicae Helvetiae* 22(2):113–131, pl. vii–xv.
- Peters, K. J., C. D. Amsler, J. B. McClintock, & B. J. Baker. 2006. Palatability and chemical defenses of Antarctic peninsula sponges. *Integrative and Comparative Biology* 45(6):1056.
- Petryk, A. A. 1967. Some Silurian stromatoporoids from northwestern Baffin Island, District of Franklin. *Geological Survey of Canada Paper* 67–7:51 p., 2 fig., 4 pl., 2 tables, appendix.
- Petryk, A. A. 1981. Aulacerid ecostratigraphy and its bearing on the Ordovician-Silurian boundary. In P. J. Lesperance, ed., *Field Meeting, Anticosti-Gaspé, Quebec 1981, Stratigraphy and paleontology, Département de Géologie, Université de Montréal* 2:101–105.
- Pfender, J. 1937. Quelques Hydrozoaires de la Syrie septentrionale. Notes et Mémoires Haut-commissariat en Syrie et au Liban 2:125–136.
- Philips, John. 1829. *Illustrations of the Geology of Yorkshire; or a Description of the Strata and Organic Remains of the Yorkshire Coast: Accompanied by a Geological Map, Sections, and Plates of the Fossil Plants and Animals.* Thomas Wilson & Sons. York. 253 p., 25 pl.
- Phillips, John. 1841. *Figures and Descriptions of the Paleozoic rocks of Cornwall, Devon, and West Somerset Observed in the Course of the Ordinance Geological Survey of that District.* Longman, Brown, Green & Longmans. London. 231 p.
- Pia, J. V. 1937. Die wichtigsten Kalkalgen des Jungpaläozoikums und ihre geologische Bedeutung. In *Compte rendu du deuxième Congrès pour l'avancement des études de Stratigraphie Carbonifère, Herleen 1935.* Van Aelst, O. L. Vrouwe Kade. Maastricht. p. 10–11.
- Pickett, J. W. 1970. A redescription of the type species of *Cystistroma* Eth.f. 1895. *Records of the Geological Survey of New South Wales* 11(2):89–92, 2 pl. ["Eth.f." is a shortened version of the name of Robert Etheridge Jr., who established the genus *Cystistroma* in 1895; "f." is an abbreviation of "fillius," a Latin equivalent of "junior."]
- Pickett, J. W. 1982. *Vaceletia progenitor*, the first Tertiary spinctozoan (Porifera). *Alcheringa* 6:241–247, 6 fig.
- Pickett, J. W. 1983. An annotated bibliography and review of Australian fossil sponges. *Association of Australasian Palaeontologists Memoir* 1:93–120, 13 fig.
- Pickett, J. W. 1985a. Correlation of a mid to late Ordovician section near Parkes, New South Wales. In R. Cooper, ed., *Hornibrook Symposium, extended abstracts.* New Zealand Geological Survey, Record 9:77.
- Pickett, J. W. 1985b. *Vaceletia*, a living archaeocyathid. In R. Cooper, ed., *Hornibrook Symposium, extended abstracts.* New Zealand Geological Survey, Record 9:77.
- Pickett, J. W. 2002. Order Heteractinida Hinde, 1887. In J. N. A. Hooper & R. W. M. van Soest, eds., *Systema Porifera: A Guide to the Classification of Sponges*, vol. 2. Kluwer Academic/Plenum Publishers. New York, Boston, Dordrecht, London, & Moscow. p. 1121–1139, 13 fig.
- Pickett, J. W., & P. A. Jell. 1983. Middle Cambrian Sphinctozoa (Porifera) from New South Wales.

- Memoirs of the Association of Australasian Palaeontologists 1:83–92, 4 fig.
- Pickett, J. W., David Och, & Evan Leitch. 2009. Devonian marine invertebrate fossils from the Port Macquarie Block, New South Wales. Proceedings of the Linnean Society of New South Wales 130:193–216.
- Pickett, J. W., & I. G. Percival. 2001. Ordovician faunas and biostratigraphy in the Gunningbland area, central New South Wales, Australia. Alcheringa 25:9–52, 14 fig., 5 table.
- Pickett, J. W., & Susanne Pohler. 1993. The Alaskan Devonian sphinctozoan *Hormospongia* (Porifera) in eastern Australia. Alcheringa 17(1–2):158.
- Pickett, J. W., & J. K. Rigby. 1983. Sponges from the Early Devonian Garra Formation, New South Wales. Journal of Paleontology 57:720–741, 9 fig., 1 table.
- Pielou, E. C. 1966. The measure of diversity in different types of biological conditions. Journal of Theoretical Biology 13:131–144.
- Pillola, G. L., F. Leone, J. A. Gámez-Vintaned, E. Liñán, M. P. Dabard, & J.-J. Chauvel. 1994. The Lower Cambrian ichnospaces *Astrapolichnus hispanicus*: Palaeoenvironmental and palaeogeographic significance. In R. Matteucci, M. G. Carboni, & J. S. Pignatti, eds., Studies on Ecology and Paleoecology of Benthic Communities. Bollettino della Società Paleontologica Italiana, special volume 2:253–267, 6 fig., 2 pl.
- Pitcher, Max. 1964. Evolution of Chazyan (Ordovician) reefs of eastern United States and Canada. Bulletin of Canadian Petroleum Geology 12:632–691, 49 fig., 3 pl.
- Pitcher, Max. 1971. Middle Ordovician reef assemblages. Proceedings of the North American Paleontological Convention (Chicago) Part J:1341–1357.
- Playford, P. E. 1980. Devonian “Great Barrier Reef” of Canning Basin, Western Australia. Bulletin of the American Association of Petroleum Geologists 64:814–840.
- Playford, P. E., & A. E. Cockbain. 1989. Devonian reef complexes, Canning Basin, Western Australia: A review. Memoir of the Association of Australasian Palaeontologists 8:401–412.
- Playford, P. E., & D. C. Lowry. 1966. Devonian reef complexes of the Canning Basin, Western Australia. Bulletin of the Geological Survey of Western Australia 18:1–150.
- Plummer, J. T. 1843. Suburban geology, or rocks, soil and water, about Richmond, Wayne County, Indiana. American Journal of Science and Arts 44:281–313, 14 fig.
- Plusquellec, Y. 1968. Commensaux des tabulés et stromatoporoïdes du Dévonien améracain. Annales de la Société Géologique du Nord 88:47–56.
- Pohler, S. M. L., & N. P. James. 1989. Reconstruction of a Lower/Middle Ordovician carbonate shelf margin: Cow Head Group, western Newfoundland. Facies 21:189–262.
- Polan, K. P., & C. W. Stearn. 1984. The allochthonous origin of the reef facies of the Stuart Bay Formation (Early Devonian), Bathurst Island, arctic Canada. Canadian Journal of Earth Sciences 21:657–669.
- Pomel, A. 1872. Paléontologie ou description des animaux fossiles de la Province d’Oran, Zoophytes, fascicule 5, Spongaires. Tipographie et Lithographie Ad. Perrier. Oran. 256 p., 36 pl.
- Pouliquen, L., & J. Vacelet. 1970. Nouvelles observations sur des Eponges Pharétronides Minchinellidae de Méditerranée. Téthys 2(2):437–442.
- Poulsen, C. 1941. The Silurian faunas of North Greenland. II. The Fauna of the Offley Island Formation, part 1. Coelenterata. Meddelelser om Gronland 72(2):1–28, 6 pl.
- Powell, J. H. 1991. The association between the stromatoporoid *Diplostroma javorskyi* Nestor and calcareous algae from the Wenlock Limestone, England. Lethaia 24:289–299.
- Pratt, B. R. 1989. Lower Devonian stromatoporoid reefs, Formosa Reef Limestone (Detroit River Group) of southwestern Ontario. In H. H. J. Geldsetzer, N. P. James, & G. E. Tebbutt, eds., Reefs Canada and adjacent areas. Canadian Society of Petroleum Geologists, Memoir 13:506–509.
- Pratt, B. R., & N. P. James. 1982. Cryptalgal-metazoans bioherms of Early Ordovician age in the St George Group, western Newfoundland. Sedimentology 29:543–569, 29 fig.
- Pratt, B. R., & N. P. James. 1989. Early Ordovician thrombolite reefs, St. George Group, Western Newfoundland. In H. H. J. Geldsetzer, N. P. James, & G. E. Tebbutt, eds., Reefs, Canada and adjacent areas. Canadian Society of Petroleum Geologists, Memoir 13:231–240, 9 fig.
- Pratt, B. R., B. R. Spincer, R. A. Wood, & A. Yu. Zhuravlev. 2001. Ecology and evolution of Cambrian reefs. In A. Yu. Zhuravlev & R. Riding, eds., The Ecology of the Cambrian Radiation. Columbia University Press. New York. p. 254–274, 4 fig.
- Preciado, Isakum, & Manuel Maldonado. 2005. Reassessing the spatial relationships between sponges and macroalgae in sublittoral rocky bottoms: A descriptive approach. Helgoland Marine Research 59:141–150.
- Preobrazhenskiy, B. V. 1968. Pozdneordovikskiy desmidoporoïdy Omulevskikh gor (basseyen r. Kolymy) [Late Ordovician desmidopores from the Ormulev Mountains (Kolyma River basin)]. Paleontologicheskiy Zhurnal 1968(4):89–93.
- Prosh, E. C. 1995. Reply: Early Devonian age of the Detroit River Group inferred from Arctic stromatoporoids. Canadian Journal of Earth Sciences 32:1073–1077.
- Prosh, E. C., & C. W. Stearn. 1993. Early Devonian age of the Detroit River Group, inferred from Arctic stromatoporoids. Canadian Journal of Earth Sciences 30:2465–2474.
- Prosh, E. C., & C. W. Stearn. 1996. Stromatoporoids from the Emsian (Lower Devonian) of Arctic Canada. Bulletins of American Paleontology 109(349):1–66.
- Puce, S., B. Calcinai, G. Bavestrello, C. Cerrano, C. Gravili, & F. Boero. 2005. Hydrozoa (Cnidaria) symbiotic with Porifera: A review. Marine Ecology 26:73–81.
- Qi Wentong, & C. W. Stearn. 1993. Stromatoporoids of the Slave Point Formation (Givetian) at Evie

- Lake, northeast British Columbia, Canada. *Acta Scientiarum Naturalium* [Peiching ta hsueh hsueh pao] 29:725–728.
- Quenstedt, F. A. 1858. Der Jura. H. Laupp'schen Buchhandlung, Tübingen. 842 p., 100 pl.
- Quenstedt, F. A. 1878. Petrefactenkunde Deutschlands. Erste Abteilung, fünfter Band: Korallen. Die Schwämme. Leipzig. 612 p., 142 pl.
- Racki, Grzegorz. 1998. Frasnian-Famennian biotic crisis: Under valued tectonic control. *Paleogeography, Palaeoclimatology, Palaeoecology* 141:177–188.
- Racki, Grzegorz, 2005. Towards understanding Late Devonian global events: Few answers, many questions. In D. J. Over, J. R. Morrow, & P. B. Wignall, eds., Understanding Late Devonian and Permo-Triassic Biotic and Climatic Events: Towards an Integrated Approach. Elsevier B.V. Amsterdam. p. 5–36.
- Racki, Grzegorz, & Małgorzata Sobstel. 2004. Very large stromatoporoid indicating early Frasnian reef core (Holy Cross Mts., Poland). *Geological Quarterly* 48:83–88.
- Radoičić, Rajka. 1966. Microfacies du Jurassique des Dinarides Externes de la Yougoslavie. *Geologija* 9:5–377, 165 pl.
- Radugin, K. V. 1936. Nekotorye tselenteraty iz nizhnego silura Gornoj Shorii [Some coelenterates from the Lower Silurian of Gornaya Shoria]. Materialy po geologii Zapadno-Sibirs'kogo kraia [Records of the geology of the West-Siberian region] 35:89–106, 2 pl. In Russian, with English abstract, p. 105.
- Radugin, K. V. 1962. O rannikh formakh arkheotsiat [On early forms of archaeocyaths]. In L. N. Kraevskiy & A. R. Anan'ev, eds., Novye Dannye po Paleontologii i Stratigrafi Zapadnoj Sibiri [New Data on the Paleontology and Stratigraphy of Western Siberia]. Materialy po Geologii Zapadnoj Sibiri 63. Tomskiy Universitet, Tomsk. p. 7–10, 1 fig.
- Radugin, K. V. 1964. O novoy gruppe drevneyshikh zhivotnykh [On a new group of the oldest animals]. *Geologiya i Geofizika* 1:145–149, 1 fig., 1 pl.
- Radugin, K. V. 1966. Problema Pozdnego Proterozoya (Materialy k Izucheniyu Geologii Pozdnego Dokembriya Sibiri). Chast' 1: Primitivnye Arkheotsiaty Pozdnego Proterozoya [The Problem of the Late Proterozoic (Materials for the Study of the Geology of the Late Precambrian of Siberia). Part 1: Primitive Archaeocyaths of the Late Proterozoic]. Tomskiy Universitet, Tomsk. 140 p., 7 pl.
- Rafinesque, C. E. 1819. De 70 nouveaux genres d'animaux découverts dans l'intérieur des États-Unis d'Amérique, durant l'année 1818. *Journal de Physique de Chimie, d'Histoire Naturelle et des Arts Élémentaires*, Paris 88:417–429.
- Ramos, A., & D. Turnsek. 1984. Lower Carnian reef build-ups in the northern Julian Alps (Slovenia, NW Yugoslavia). *Razparave* 25(4):1–40, 7 fig., 15 pl.
- Rashidi, Koorosh, & Baba Senowbari-Daryan. 2011. Sponges from a section of the Upper Triassic Nayband Formation, northeast of Esfahan, central Iran. *Annalen Naturhistorischen Museum Wien* (series A) 113:309–371.
- Rasmussen, K. A., & C. E. Brett. 1985. Taphonomy of Holocene cryptic biotas from St. Croix, Virgin Islands: Information loss and preservational biases. *Geology* 13:551–553.
- Rauff, H. 1893. Palaeospongologie: Erster oder allgemeiner Theil und zweiter Theil, erste Hälfte. *Palaeontographica* 40:1–232, fig. 1–48.
- Rauff, H. 1938. Über einig Kalkschwämme aus der Trias der peruanischen Kordillere, nebst einem Anhang über *Stellispongia* und ihre Arten. *Palaeontologische Zeitschrift* 20:177–214, 10 fig., pl. 18–21.
- Raup, D. M., & G. E. Boyajian. 1988. Patterns of generic extinction in the fossil record. *Paleobiology* 14(2):109–125.
- Raup, D. M., & J. J. Sepkoski, Jr. 1982. Mass extinctions in the marine fossil record. *Science* 215:1501–1503.
- Raup, D. M., & J. J. Sepkoski, Jr. 1984. Periodicity of extinctions in the geologic past. *Proceedings of the National Academy of Science of the United States of America* 81:801–805.
- Rauscher-Chernoussova, D. M. 1950. Fatsii verkhnekarkonovykh i artinskikh otlozhennii v Sterlitamak-Ishimbayevskoi oblasti Predural'ja [Facies of the Upper Carboniferous and Artinskian deposits in the Sterlitamak-Ishimbayev region of the Pre-Urals]. Akademiya Nauk SSSR, Instituta Geologicheskij Nauk, Trudy 119(43):1–108.
- Ravn, J. P. J. 1899. Et par danske Kridtspongen. *Meddelelader fra Dansk Geologisk Forening* 1(5):23–32, 1 pl.
- Raymond, P. E. 1914. A *Beatricea*-like organism from the Middle Ordovician. *Canada Geological Survey Museum Bulletin* 5:1–19, pl. 1–4.
- Raymond, P. E. 1924. The oldest coral reef. In G. H. Perkins, Report of the State Geologist on the Mineral Industries and Geology of Vermont, 1923–1924 [14th biennial report]. Free Press Printing, Burlington, p. 72–76.
- Raymond, P. E. 1931a. The systematic position of the Archaeocyathinae. In P. E. Raymond, Notes on invertebrate fossils, with descriptions of new species, Part 2. *Museum of Comparative Zoology, Bulletin* [Geological Series 9(6)] 55(6):172–177, pl. 1–2.
- Raymond, P. E. 1931b. Further notes on *Beatricea*-like organisms. In P. E. Raymond, Notes on invertebrate fossils, with descriptions of new species, Part 3. *Museum of Comparative Zoology, Bulletin* [Geological Series 9(6)] 55(6):177–184, pl. 2–3.
- Reed, J. K. 1981. *In situ* growth rates of the scleractinian coral *Oculina varicose* occurring with zooxanthellae on 6-m reefs and without on 80-m banks. *Proceedings of the Fourth International Coral Reef Symposium* 2:201–206.
- Rees, M. N., B. R. Pratt, & A. J. Rowell. 1989. Early Cambrian reefs, reef complexes, and associated lithofacies of the Shackleton Limestone, Transantarctic Mountains. *Sedimentology* 36:341–361, 22 fig.
- Reid, R. E. H. 1967. Spicules in the skeleton of *Tremacystia* d'Orbigny (Hinde). *Nature* 15:875–876, 1 fig.
- Reid, R. E. H. 1968. *Tremacystia*, *Barroisia* and the status of Sphinctozoida (Thalamida) as Porifera. *The University of Kansas Paleontological Contributions Paper* 34:1–10, 4 fig.

- Reid, R. E. H. 2004. Mesozoic and Cenozoic hexactinellid sponges: Lyssacinosa and Hexactinosa. In R. L. Kaesler, ed., Treatise on Invertebrate Paleontology. Part E, Porifera (revised), vol. 3. The Geological Society of America & The University of Kansas. Boulder, Colorado, & Lawrence, Kansas. p. 449–556, fig. 296–364.
- Reid, R. E. H., & J. K. Rigby. 2003. Glossary of Morphological Terms. In R. L. Kaesler, ed., Treatise on Invertebrate Paleontology, Part E (Revised), vol. 2. The Geological Society of America & The University of Kansas. Boulder & Lawrence. p. 177–190.
- Reid, R. P. 1986. Discovery of Triassic phylloid algae: Possible links with the Paleozoic. Canadian Journal of Earth Science 23:2068–2071.
- Reimold, W. U., S. P. Kelley, S. C. Sherlock, H. Henkel, & C. Koeberl. 2005. Laser argon dating of melt breccia from the Siljan impact structure, Sweden: Implications for a possible relationship to late Devonian extinction. Meteoritics and Planetary Science 40:591–607.
- Reimold, W. U., & C. Koeberl. 2000. Critical comment on A. J. Mory et al. “Woodleigh, Carnarvon Basin, western Australia: A new 120 km diameter impact structure.” Earth and Planetary Science Letters 184(1):353–357.
- Reinke, T., & D. Barthel. 1997. Silica uptake kinetics of *Halichondria panicea* in Keil Bight. Marine Biology 129:591–593.
- Reinhardt, J. W. 1988. Uppermost Permian reefs and Permo-Triassic sedimentary facies from the southeastern margin of Sichuan Basin, China. Facies 18:231–288, 36 fig., pl. 29–38.
- Reiswig, H. M. 1971. *In situ* pumping activities of tropical Demospongiae. Marine Biology 9:38–50, 14 fig.
- Reiswig, H. M. 1974. Water transport, respiration and energetics, of three tropical marine sponges. Journal of Experimental Marine Biology and Ecology 14:231–249.
- Reiswig, H. M. 1975. The aquiferous system of three marine Demospongiae. Journal of Morphology 145:493–502.
- Reiswig, H. M. 1981. Partial carbon and energy budgets of the bacteriosponge *Verongia fistularis* (Porifera: Demospongiae) in Barbados. Marine Ecology 2:273–293.
- Reitlinger, E. A. 1948. Kembriyskie foraminifery Yakutii [Cambrian foraminifers of Yakutia]. Moskovskoe Obshchestvo Ispytatelei Prirody, Byulleten', Otdel geologicheskiy 23(2):77–81, 1 pl.
- Reitner, Joachim. 1987a. *Euzkadiella erenoensis*, n. gen. n. sp. ein Stromatopore mit spikulärem Skelett aus dem Oberapt von Ereño (Prov. Guipuzcoa, Nordspanien) und die systematische Stellung der Stromatoporen. Palaeontologisches Zeitschrift 61(3/4):203–222, 11 fig.
- Reitner, Joachim. 1987b. A new calcitic sphinctozoan sponge belonging to the Demospongiae from the Cassian Formation (Lower Carnian; Dolomites, northern Italy) and its phylogenetic relationship. Geobios 20(5):571–589, 1 fig., 3 pl.
- Reitner, Joachim. 1987c. Phylogenie und Konvergenzen bei rezenten und fossilen Calcarea (Porifera) mit einem kalkigen Basalskelett (“Inozoa,” Pharetronida). Berliner Geowissenschaftliche Abhandlungen, Reihe A (Beiträge zur Paläontologie) 86:87–125, 8 fig., 8 pl.
- Reitner, Joachim. 1987d. Mikrofaziale, paläokolotische und paläontologische Analyse ausgewählter Vorkommen flachmaringer Karbonate im Basko-Kantabrischen Strike Slip Fault-Becken-System (Nordspanien) an der Wende von der Unterkreide zur Oberkreide. Documenta Naturae 40:1–239.
- Reitner, Joachim. 1989. Lower and mid-Cretaceous coralline sponge communities of the boreal and tethyan realms in comparison with the modern ones: Palaeoecological and palaeogeographical implications. In J. Wiedmann, ed., Cretaceous of the Western Tethys. Proceedings of the 3rd International Cretaceous Symposium, Tübingen. E. Schweizerbart'sche Verlagsbuchhandlung. Stuttgart. p. 851–878.
- Reitner, Joachim. 1990. Polyphyletic origin of the sphinctozoans. In K. Rützler, ed., New Perspectives in Sponge Biology. Smithsonian Institution Press. Washington, D.C. p. 33–42, 13 fig.
- Reitner, Joachim. 1991a. Phylogenetic aspects and new descriptions of spicule-bearing hadromerid sponges with a secondary calcareous skeleton (Tetractinomorpha, Demospongiae). In Joachim Reitner & Helmut Keupp, eds., Fossil and Recent Sponges. Springer-Verlag. Berlin & Heidelberg. p. 179–211, 15 fig.
- Reitner, Joachim. 1991b. Tetraxone spicules in Attabanian Archaeocyatha? On the oldest known demosponge tetractinellids. In K. Oekentorp, ed., Abstracts, Sixth International Symposium on Fossil Cnidaria including Archaeocyatha and Porifera. Münster. p. 71.
- Reitner, Joachim. 1992. “Coralline Spongién”: Der Versuch einer phylogenetisch-taxonomischen Analyse. Berliner Geowissenschaftliche Abhandlungen, Reihe E, Band 1:1–352 p., 90 fig., 62 pl.
- Reitner, Joachim, & Theo Engeser. 1983. Contributions to the systematics and the paleoecology of the family Acanthochaetidae (order Tabulospongida, class Sclerospongiae). Geobios 16(6):773–779.
- Reitner, Joachim, & Theo Engeser. 1985. Revision der Demospongier mit einem Thalamiden, aragonitischen Basalskelett und trabeculärer Internstruktur (“Sphinctozoa” pars). Berliner Geowissenschaftliche Abhandlungen, Reihe A (Beiträge zur Paläontologie) 60:151–193, 10 fig., 6 pl.
- Reitner, Joachim, & Theo S. Engeser. 1987. Skeletal structures and habitats of Recent and fossil *Acanthochaetes* (subclass Tetractinomorpha, Demospongiae, Porifera). Coral Reefs 6:13–18, 15 fig.
- Reitner, Joachim, & Theo S. Engeser. 1989a. *Chaeotosclera klipsteini* n. gen. n. sp. (Halichondrida, demospongiae) aus dem Unterkarn der Cassianer-Schichten (Dolomiten, Italien). Mitteilungen der Geologisch-Paläontologische Institut der Universität Hamburg 68:159–165, 1 pl.
- Reitner, Joachim, & T. Engeser. 1989b. Coralline Demospongiae (Porifera) aus dem Campan von Pobla de Segur (Pyrenäen, Nordspanien). Mitteilungen aus dem Geologisch-Paläontologischen Institut der Universität Hamburg 68:167–177, 2 pl.
- Reitner, Joachim, & P. Gautret. 1996. Skeletal formation in the modern but ultraconservative chaetetid

- sponge *Spirastrella (Acanthochaetetes) wellsi* (Desmospongiae, Porifera). *Facies* 34:193–207.
- Reitner, Joachim, & Dorte Mehl. 1995. Early Paleozoic diversification of sponges: New data and evidences. *Geologica Paläontologica Mitteilungen Innsbruck* 20:335–347, 1 fig., 2 pl.
- Reitner, Joachim, & Felix Schlagintweit. 1990. *Calcisuberites stromatoporoides* n. gen. n. sp., ein neues taxon der Hadromeridae (Desmospongiae, Porifera) mit einem kalkigen basalskelett aus der tethyalen Unterkreide. *Berliner Geowissenschaftliche Abhandlungen (Reihe A)* 124:247–257, 2 fig., 2 pl.
- Reitner, Joachim, & Gert Wörheide. 2002. Non-lithistid fossil Demospongidae: Origins of their palaeobiodiversity and highlights in history of preservation. In J. N. A. Hooper & R. W. M. van Soest, eds., *Systema Porifera: A Guide to the Classification of Sponges*, vol. 1. Kluwer Academic/Plenum Publishers. New York, Boston, Dordrecht, London, & Moscow. p. 52–68, 22 fig.
- Reitner, Joachim, Gert Wörheide, Robert Lange, & Gabriela Schumann-Kindel. 2001. Coralline demosponges: A geobiological portrait. *Bulletin of the Tohoku University Museum* 1:219–235, 7 fig.
- Reitner, Joachim, Gert Wörheide, Robert Lange, & Volker Thiel. 1997. Biomineralisation of calcified skeletons in three Pacific coralline demosponges: An approach to the evolution of basal skeletons. *Courier Forschungsinstitut Senckenberg* 201:371–383, 3 pl.
- Renne, P. R., W. U. Reinhold, C. Koeberl, R. Hough, & P. Claeys. 2002. Comment on K-Ar evidence from illitic clays of a Late Devonian age for the 120 km diameter Woodleigh impact structure, southern Carnarvon Basin, western Australia: Discussion and Reply. *Earth and Planetary Science Letters* 201(1):247–252.
- Repina, L. N., V. V. Khomentovskiy, I. T. Zhuravleva, & A. Yu. Rozanov. 1964. *Biostratigrafiya Nizhnego Kembriya Sayano-Altayskoy Skladchatoy Oblasti* [Lower Cambrian Biostratigraphy of the Sayan-Altay Fold Belt]. Nauka. Moscow. 365 p., 56 fig., 48 pl., 20 tables.
- Reshetkin, M. 1926. *Pseudomonotrypa* n. gen. iz verchnejurskikh otlozenij Krymo. *Zapiski Krymsk. Obshch. Estestvoisp i eyubit Prirody* 9:7, 2 pl. In Russian.
- Reuss, A. E. 1846. Die Versteinerungen der Böhmischen Kreideformation, part 2. E. Schweizerbart. Stuttgart. 148 p., pl. 4–51.
- Riabinin, V. N. 1915. Rifoobrazovateli kamenoungol'nykh otlozenii Urala i Timana [Notes on Silurian stromatoporoids]. Izvesti Geologicheskogo Komiteta [Transactions of the Geological Committee] Leningrad 47:1041–1054.
- Riabinin, V. N. 1936. O paleozoiskikh stromatoporoideikakh raiona reki Kolomy [On the Paleozoic Stromatoporoidea from the region of the Kolyma River]. In *Paleozoiskie fauny Kolomy* [The Paleozoic faunas of the Kolyma]. Gostrest Dalstroj, Materialy po izucheniiu Okhotsko-Kolymskogo Kraia [The State Trust Dalstroj, Contributions to the Knowledge of the Okhotsk-Kolyma Land], Seriia 1, Geologiia i Geomorfologija 4:29–35, 1 pl.
- Riabinin, V. N. 1937. Silurijskie stromatoporoidei Mongoli i Tuvy [The Silurian Stromatoporoidea of Mongolia and Tuva]. Akademija Nauk SSSR, Nauchno-issledovatel'skaja Komissija MNR, Trudy Mongol'skoi Komissii 31(7):1–36, 4 pl.
- Riabinin, V. N. 1939. Paleozoiskie stromatoporoidei Pechorskogo kraja i Priural'ja [Paleozoic Stromatoporoidea of the Pechora Land and Ural Region]. Trudy Severnogo Geologicheskogo Upravlenija [Transactions of the Northern Geological Service] 2:1–60, 12 pl.
- Riabinin, V. N. 1941. Stromatoporoidei glavnogo devonskogo polja [Stromatoporiads of the main Devonian field]. In M. A. Batalina, E. Z. Bulvanker, R. T. Hecker, E. M. Lutkevich, V. N. Riabinin, D. V. Nalivkin, B. B. Tchernyshev & N. N. Yavovlev, eds., Fauna glavnogo devonskogo polja [Fauna of the main Devonian field]. Akademija Nauk SSSR, Paleontologicheskij Institut 1:85–112, 5 pl.
- Riabinin, V. N. 1951. Stromatoporoidei Èstonskoi SSR (silur i verkhi ordovika) [Stromatoporooids of Estonian SSR (Silurian and uppermost Ordovician)]. Trudy Vsesojuznogo Neftianogo Nauchno-Issledovatel'skogo Geologo-Razvedochnogo Instituta (VNIGRI) (new series) 43:68 p., 43 pl., 1 table.
- Riabinin, V. N. 1953. Silurijskie stromatoporoidei Podolii [Silurian stromatoporoids of Podolia]. Trudy Vsesojuznogo Neftianogo Nauchno-Issledovatel'skogo Geologo-Razvedochnogo Instituta (VNIGRI) (new series) 67:1–67, pl. 1–26. In Russian.
- Richardson, L., & A. G. Thacker. 1920. On the stratigraphical and geographical distribution of the sponges of Inferior Oolite of the West of England. *Proceedings of the Geologists Association, London* 31:161–186, pl. 12–13.
- Riding, Robert. 1974a. Stromatoporoid diagenesis: Outline of alteration effects. *Geological Magazine* 111:143–148.
- Riding, Robert. 1974b. The Devonian genus *Keega* (Algae) interpreted as a stromatoporoid basal layer. *Palaeontology* 17:565–577.
- Riding, Robert. 1975. *Girvanella* and other algae as depth indicators. *Lethaia* 8:173–179.
- Riding, Robert. 1981. Composition, structure and environmental setting of Silurian bioherms and biostromes in Northern Europe. In D. F. Toomey, ed., *European Fossil Reef Models*. SEPM (Society for Sedimentary Geology) Special Publication 30:41–83.
- Riding, Robert. 1990. Organic reef categories. 13th International Sedimentological Congress, Nottingham, U.K. Abstracts, p. 458.
- Riding, Robert. 1993. *Shamovella obscura*: The correct name for *Tubiphytes obscurus* (fossil). *Taxon* 42:71–73.
- Riding, Robert. 2001. Calcified Algae and Bacteria. In A. Yu. Zhuravlev & R. Riding, eds., *The Ecology of*

- the Cambrian radiation. Columbia University Press. New York. p. 445–473, 1 fig., 3 tables.
- Riding, Robert. 2004. *Solenopora* is a chaetetid sponge, not an alga. *Palaeontology* 47:117–122.
- Riding, Robert, & S. Barkham. 1999. Temperate water *Shamovella* from the lower Permian of West Timor, Indonesia. *Alcheringa* 23:21–29.
- Riding, Robert, & Stephen Kershaw. 1977. Nature of stromatoporoids. *Nature* 268:178, doi: 10.1038/268178a0.
- Riding, Robert, & Guo Li. 1992. Affinity of *Tubiphytes*. *Palaeontology* 35(1):37–49.
- Riding, Robert, & N. R. Watts. 1991. The Lower Wenlock reef sequence of Gotland: Facies and lithostratigraphy. *Geologiska Föreningens i Stockholm Förhandlingar* 113:343–372.
- Riding, Robert, & A. Yu. Zhuravlev. 1995. Structure and diversity of oldest sponge-microbe reefs: Lower Cambrian, Aldan River, Siberia. *Geology* 23:649–652, 4 fig.
- Ridley, S. O., & A. Dendy. 1886. Preliminary report on the Monaxonida collected by H. M. S. "Challenger." *Annals and Magazine of Natural History* (series 5) 1(8):325–351, 470–493.
- Riedel, Peter. 1990. Riffbiotope im Karn und Nor (Obertrias) der Tethys: Entwicklung, Einschnitte und Diversitätsmuster. Unpublished Ph.D. thesis. University of Erlangen. Erlangen. p. 1–96, 36 fig., 15 pl.
- Riedel, Peter, & Baba Senowbari-Daryan. 1988. *Amblysiphonella gradinarui* n. sp. (Porifera) aus der Obertrias (Lac 1-2) des Vascan-Plateaus (Rumänien). *Geologija* 30:23–29, 2 fig., 1 pl.
- Riedel, Peter, & Baba Senowbari-Daryan. 1989. *Colospongia ramosa* n. sp ("Sphinctozoa," Porifera) aus karnischen Riffkalken der Westkarpaten (Ungarn) und den Pantokratorkalken der Insel Hydra (Griechenland). *Paläontologische Zeitschrift* 63(3/4):183–191, 5 fig., 1 pl.
- Riedel, Peter, & Baba Senowbari-Daryan. 1991. Pharetronida in Triassic Reefs. In Joachim Reitner & Helmut Keupp, eds., *Fossil and Recent Sponges*. Springer-Verlag. Berlin & Heidelberg. p. 465–476, 4 fig.
- Riedel, Peter, Baba Senowbari-Daryan, S. Kovacs, & P. Pelikan. 1988. The age of the Banya-Hegy Reef limestone (Bükk-Mts, NE Hungary). M. All. Földtani Intezet Evi Jelentez Az 1986:105–115, 3 fig., 1 pl.
- Rietschel, Siegfried. 1977. Receptaculitids are calcareous algae, but not dasyclads. In Erik Flügel, ed., *Fossil Algae*. Springer-Verlag. Berlin, Heidelberg, & New York. p. 212–214.
- Rigby, J. K. 1958. Two new Upper Paleozoic hydrozoans. *Journal of Paleontology* 32:583–586.
- Rigby, J. K. 1984. Permian sponges from Western Venezuela. *Journal of Paleontology* 58(6):1436–1462, 4 fig.
- Rigby, J. K. 1991. Evolution of Paleozoic heteractinid calcareous sponges and demosponges: Patterns and records. In Joachim Reitner & Helmut Keupp, eds., *Fossils and Recent Sponges*. Springer-Verlag. Berlin, Heidelberg, & New York. p. 83–101, 15 fig.
- Rigby, J. K. 2004a. Classification. In R. L. Kaesler, ed., *Treatise on Invertebrate Paleontology*. Part E, Porifera (revised), vol. 3. The Geological Society of America & The University of Kansas Paleontological Institute. Boulder, Colorado, & Lawrence, Kansas. p. 1–8.
- Rigby, J. K. 2004b. Unrecognizable supposed sponges. In R. L. Kaesler, ed., *Treatise on Invertebrate Paleontology*. Part E, Porifera (revised), vol. 3. The Geological Society of America & The University of Kansas Paleontological Institute. Boulder, Colorado, & Lawrence, Kansas. p. 765–773.
- Rigby, J. K., & G. L. Bell, Jr. 2006. Sponges from the Reef Trail Member of the Upper Guadalupian (Permian) Bell Canyon Formation, Guadalupe Mountains National Park, Texas. *Journal of Paleontology* 80 (special paper 66):1–42, 13 fig.
- Rigby, J. K., & R. B. Blodgett. 1983. Early Middle Devonian sponges from the McGrath Quadrangle of west-central Alaska. *Journal of Paleontology* 57(4):773–786, 4 fig.
- Rigby, J. K., G. E. Budd, R. A. Wood, & F. Debrenne. 1993. Porifera. In M. J. Benton, ed., *The Fossil Record 2*. Chapman & Hall. London. p. 71–99, fig. 5.1–5.8.
- Rigby, J. K., & B. D. E. Chatterton. 1999. Silurian (Wenlock) demosponges from the Avalanche Lake area of the Mackenzie Mountains, southwestern District of Mackenzie, Northwest Territories, Canada. *Palaeontographica Canadiana* 16:1–43, 2 fig., 10 pl.
- Rigby, J. K., Fan Jiasong, & Han Nairen. 1995. Upper Permian silicified sponges from central Guangxi and western Hubei, South China. *Journal of Paleontology* 69(2):232–250, 10 fig., 1 table.
- Rigby, J. K., Fan Jiasong, & Zhang Wei. 1988. The sphinctozoan sponge *Intrasporeocoelia* from the Middle and Late Permian of China; re-examination of its filling structures. *Journal of Paleontology* 62:747–753, 6 fig.
- Rigby, J. K., Fan Jiasong, & Zhang Wei. 1989a. Sphinctozoan sponges from the Permian reefs of South China. *Journal of Paleontology* 63(4):404–439, 20 fig.
- Rigby, J. K., Fan Jiasong, & Zhang Wei. 1989b. Inozoan calcareous Porifera from the Permian reefs in South China. *Journal of Paleontology* 63(6):778–800, 13 fig.
- Rigby, J. K., Fan Jiasong, & Zhang Wei, Wang Shenghai, & Zhang Xiaolin. 1994. Sphinctozoan and inozoan sponges from the Permian reefs of South China. Brigham Young University, Geology Studies 40:45–111, 15 fig., 15 pl.
- Rigby, J. K., & R. A. Gangloff. 1987. Phylum Archaeocyatha. In R. S. Boardman, A. H. Cheetham, & A. J. Rowell, eds., *Fossil Invertebrates*. Blackwell. Palo Alto. p. 107–115, 10 fig.
- Rigby, J. K., S. M. Karl, R. B. Blodgett, & J. F. Baichtal. 2005. Ordovician "Sphinctozoan" sponges from the Prince of Wales Island, Southeastern Alaska. *Journal of Paleontology* 79(5):862–870, 5 fig.
- Rigby, J. K., G. A. Linder, & C. H. Stevens. 2004. A new occurrence of the "Hydrozoan" *Radiotrabeculopora reticulata* Fan, Rigby, and Zhang, 1991 in the Permian of California. *Journal of Paleontology* 78(2):410–413, 2 fig.
- Rigby, J. K., & R. H. Mapes. 2000. Some Pennsylvanian and Permian sponges from southwestern

- Oklahoma and north-central Texas. Brigham Young University, Geology Studies 45:25–67, 6 fig., 6 pl.
- Rigby, J. K., & D. J. C. Mundy. 2000. Lower Carboniferous sponges from the Craven Reef Belt of North Yorkshire. Proceedings of the Yorkshire Geological Society 53(2):119–128, 5 fig.
- Rigby, J. K., & M. H. Nitecki. 1975. An unusually well preserved heteractinid sponge from the Pennsylvanian of Illinois and a possible classification and evolutionary scheme for the Heteractinida. Journal of Paleontology 49:329–339, 3 fig., 1 pl.
- Rigby, J. K., M. H. Nitecki, C. M. Soja, & R. B. Blodgett. 1994. Silurian aphrosalpingid sphinctozoans from Alaska and Russia. Acta Palaeontologica Polonica 39(4):341–391, 14 fig.
- Rigby, J. K., & A. W. Potter. 1986. Ordovician sphinctozoan sponges from the eastern Klamath Mountains, northern California. Journal of Paleontology (Supplement II) [Paleontological Society Memoir 20] 60(4):1–47, 11 fig., 1 table.
- Rigby, J. K., & A. W. Potter, & R. B. Blodgett. 1988. Ordovician sphinctozoan sponges of Alaska and Yukon Territory. Journal of Paleontology 62(5):731–746, 5 fig.
- Rigby, J. K., & Baba Senowbari-Daryan. 1995. Permian sponge biogeography and biostratigraphy. In P. A. Scholle, R. M. Peryt, & D. S. Ulmer-Scholle, eds., The Permian of Northern Pangea, vol. 1. Springer Verlag, Berlin. p. 153–166, 7 fig.
- Rigby, J. K., & Baba Senowbari-Daryan. 1996a. Upper Permian Inozoid, Demospongida, and Hexactinellid Sponges from Djebel Tebagha, Tunisia. University of Kansas Paleontological Contributions (new series) 7:1–130, 37 fig., 81 pl.
- Rigby, J. K., & Baba Senowbari-Daryan. 1996b. *Gigantospongia*, new genus, the largest known Permian sponge, Capitan Limestone, Guadalupe Mountains, New Mexico. Journal of Paleontology 70:347–355, 4 fig.
- Rigby, J. K., Baba Senowbari-Daryan, & Ali Hamedani. 2005. First reported occurrence of wewokellid sponges from the Permian of central Iran. Facies 51:516–521, 3 fig.
- Rigby, J. K., Baba Senowbari-Daryan, & Huaibao Liu. 1998. Sponges of the Permian Upper Capitan Limestone Guadalupe Mountains, Texas and New Mexico. Brigham Young University, Geology Studies 43:19–117, 19 fig., 13 pl.
- Rigby, J. K., & B. D. Webby. 1988. Late Ordovician sponges from the Malongulli Formation of central New South Wales, Australia. Palaeontographica Americana 56:147 p., 24 fig., 44 pl.
- Rigby, J. K., Wu Xichun, & Fan Jiasong. 1998. Triassic hexactinellid sponges and associated trace fossils from patch reefs in north-central Sichuan, People's Republic of China. Brigham Young University, Geology Studies 43:119–165, 4 fig., 11 pl.
- Riisgard, H. U. 1993. Fluid motion and particle retention in the gills of *Mytilus edulis*. Marine Biology 116:61–71, 13 fig.
- Rino, S., Y. Kon, W. Sato, S. Maruyama, M. Santosh, & D. Zhao. 2008. The Grenvillian and Pan-African orogens: World's largest orogenies through geologic time, and their implications on the origin of superplume. Gondwana Research 14:51–72, 15 fig.
- Rios, J. M., & Y. A. Almela. 1944. Un chaetetido del Eoceno español. Notas y Comunicaciones Instituto Geológico y Minero de España 12:19–37.
- Risk, M. J., S. E. Pagani, & R. J. Elias. 1987. Another internal clock: Preliminary estimates of growth rates based on cycles of algal boring activity. Palaios 2:323–331.
- Risso, A. 1826. Histoire naturelle des principales productions de l'Europe méridionale et particulièrement de celles des environs de Nice et des Alpes maritimes, vol. 5. F. G. Levrault. Paris & Strasbourg. p. i–vii, 1–403, pl. i–x.
- Rodríguez, Sergio. 2004. Taphonomic alterations in upper Viséan dissepimented rugose corals from the Sierra del Castillo Unit (Carboniferous, Cordoba, Spain). Palaeogeography, Palaeoclimatology, Palaeoecology 214:135–153.
- Rodríguez, Sergio, I. D. Somerville, I. Said, & P. Cázar. 2011. Late Viséan coral fringing reef at Tiouinine (Morocco): Implications for the role of rugose corals as building organisms in the Mississippian. In M. Aretz, S. Delculée, J. Denayer, & E. Poty, eds., Abstracts, 11th Symposium on Fossil Cnidaria and Sponges, Liège, Belgium August 19–29. Kölner Forum für Geologie und Paläontologie 19:147–148.
- Roemer, C. F. 1876–1880. Lethaea geognostica oder Beschreibung und Abbildungen der für die Gebirgs-Formationen bezeichnendsten Versteinerungen, I Theil. Lethaea Palaeozoica. Zweite Lieferung. p. 324–543, fig. 62–126, Atlas, 1876.
- Roemer, F. A. 1839. Nachtrag zu Versteinerungen der Norddeutschen Oolithen Gebirges. Hahn'schen Hofbuchhandlung, Hannover. p. 1–59.
- Roemer, F. A. 1840. Die Versteinerungen der norddeutschen Kreide-Gebirges, lief. 1. Hahn'schen Hofbuchhandlung, Hannover. p. 1–48, pl. 1–8.
- Roemer, F. A. 1864. Die Spongitarien der norddeutschen Kreide-Gebirge. Palaeontographica 13(1–2):1–64, 19 pl.
- Rohde, R. A., & R. A. Muller. 2005. Cycles in fossil diversity. Nature 434:208–210.
- Röhl, Ursula, Thierry Dumont, Ulrich von Rad, Rossana Martini, & Louise Zaninetti. 1991. Upper Triassic Tethyan carbonates of northwest Australia (Wombat Plateau, ODP Leg 122). Facies 25:211–252, 20 fig., pl. 56–62.
- Romanenko, E. V. 1968. Kembriyskie gubki otryada Heteractinellida Altaya [Cambrian sponges of the order Heteractinellida from the Altay]. Paleontologicheskiy Zhurnal 1968(2):134–137, 3 fig.
- Rosell, D., & M. J. Uriz. 1997. Phylogenetic relationships within the excavating Hadromerida (Porifera), with a systematic revision. Cladistics 13(4):349–366.
- Rosen, F. B. 1867. Über die Natur der Stromatoporen und über die Erhaltung der Hornfaser der Spongiens im fossilen Zustande. Verhandlungen der Russisch-Kaiserlichen Mineralogischen Gesellschaft zu St.-Petersburg (series 2) 4:1–98, 12 fig., 11 pl.

- Rosenheim, B. E., P. K. Swart, & S. R. Thorrold. 2005. Minor and trace elements in sclerosponge *Ceratoporella nicholsoni*: Biogenetic aragonite near the inorganic end member. *Palaeogeography, Palaeoclimatology, Palaeoecology* 228(1–2):109–129.
- Rosenheim, B. E., P. K. Swart, S. R. Thorrold, A. Eisenhauer, & Philippe Willenz. 2005. Salinity change in the subtropical Atlantic: Secular increase and teleconnections to the North Atlantic Oscillation. *Geophysical Research Letters* 32(2):145–148.
- Rosenheim, B. E., P. K. Swart, S. R. Thorrold, Philippe Willenz, Lorraine Berry, & Christopher Latkoczy. 2004. High-resolution Sr/Ca records in sclerosponges calibrated to temperature in situ. *Geology* 32(2):145–148.
- Rowland, S. M. 1981. Archaeocyathid reefs of the southern Great Basin, western United States. In M. E. Taylor, ed., *Short papers for the Second International Symposium on the Cambrian System 1981*. United States Geological Survey, Open-File Report 81-743:193–197, 3 fig.
- Rowland, S. M. 1984. Were there framework reefs in the Cambrian? *Geology* 12:181–183, 4 fig.
- Rowland, S. M. 2001. Archaeocyaths: A history of phylogenetic interpretation. *Journal of Paleontology* 75(6):1065–1078, 7 fig.
- Rowland, S. M., & R. A. Gangloff. 1988. Structure and paleoecology of Lower Cambrian reefs. *Palaios* 3:111–135, 18 fig.
- Rowland, S. M., & R. S. Shapiro. 2002. Reef patterns and environmental influences in the Cambrian and earliest Ordovician. In Wolfgang Kiessling, Erik Flügel, & Jan Golonka, eds., *Phanerozoic reef patterns*. SEPM (Society of Sedimentary Geology) Special Publication 72:95–128, 15 fig., 4 table.
- Rozanov, A. Yu. 1960a. Novye dannye ob arkheotsiatakh Gornoy Shorii [New data on the archaeocyaths of the Mountainous Shoria]. Akademiya Nauk SSSR, Doklady 131:663–666, 1 fig.
- Rozanov, A. Yu. 1960b. O novykh predstaviteleyakh arkheotsiat semeystva Dokidocyathidae [On new representatives of the archaeocyathan family Dokidocyathidae]. *Paleontologicheskiy Zhurnal* 1960(3):43–47, 2 fig., 1 pl.
- Rozanov, A. Yu. 1969. Nekotorye voprosy sistematiki arkheotsiat (Novye dannye ob arkheotsiatakh Olenyokskogo podnatiya) [Some problems in the systematics of archaeocyaths (New data on archaeocyaths of the Olenyok Uplift)]. In I. T. Zhuravleva, ed., *Problemy Paleontologii i Biostratigrafi Nizhnego Kembriya Sibiri i Dal'nego Vostoka* [Problems of Lower Cambrian Paleontology and Biostratigraphy of Siberia and the Far East]. Nauka. Novosibirsk. p. 106–113, 1 fig., pl. 40–42, 3 tables.
- Rozanov, A. Yu. 1973. Zakonomernosti morfologicheskoy evolyutsii arkheotsiat i voprosy yarusnogo raschleneniya nizhnego kembriya [Regularities in the morphological evolution of archaeocyaths and problems of Lower Cambrian stage division]. *Geologicheskiy Institut, Akademiya Nauk SSSR, Trudy* 241:164 p., 142 fig., 22 pl., 11 tables.
- Rozanov, A. Yu. 1974. Homological variability of archaeocyathans. *Geological Magazine* 111:107–120, 7 fig., 2 tables.
- Rozanov, A. Yu. 1979. Nekotorye problemy izucheniya drevneyshikh skeletnykh organizmov [Some problems in the study of the oldest skeletal organisms]. *Moskovskoe Obschestvo Ispytatelei Prirody, Byulleten'*, Otdel geologicheskiy 54(3):62–69, 2 fig.
- Rozanov, A. Yu. 1980. Tsentry proiskhozhdeniya kembriyskikh faun [Centers of origin of Cambrian faunas]. In B. S. Sokolov & A. I. Zhamoidea, eds., *Mezhdunarodnyy Geologicheskiy Kongress, XXVI Sessiya. Doklady Sovetskikh Geologov. Paleontologiya. Stratigrafiya* [International Geological Congress, 26th Session. Papers of Soviet Geologists. Paleontology. Stratigraphy]. Nauka. Moscow. p. 30–34, 2 fig.
- Rozanov, A. Yu. 1984. Some aspects of studies on bio- and paleogeography of the Cambrian. In *Proceedings of the 27th International Geological Congress, Moscow 4–14 August 1984. Volume 2, Paleontology*. VNU Science Press. Utrecht. p. 143–157, 3 fig.
- Rozanov, A. Yu., & Roland Gangloff. 1979. O nekotorykh sluchayakh patologicheskikh izmeneniy skeleta u arkheotsiat [On some cases of pathological skeletal development in archaeocyaths]. *Institut Geologii i Geofiziki, Sibirskoe Otdelenie, Akademiya Nauk SSSR, Trudy* 406:57–58, pl. 11–12.
- Rozanov, A. Yu., & K. Łydka, eds. 1987. *Palaeogeography and Lithology of the Vendian and Cambrian of the Western East-European Platform*. Wydawnictwa Geologiczne. Warsaw. 114 p., 34 fig., 5 pl.
- Rozanov, A. Yu., & V. V. Missarzhevskiy. 1966. Biostratigrafiya i fauna nizhnikh gorizontov kembriya [Biostratigraphy and fauna of the lower horizons of the Cambrian]. *Geologicheskiy Institut, Akademiya Nauk SSSR, Trudy* 148:126 p., 68 fig., 13 pl., 2 tables.
- Rozanov, A. Yu., V. V. Missarzhevskiy, N. A. Volkova, L. G. Voronova, I. N. Krylov, B. M. Keller, I. K. Korolyuk, K. Lendzion, R. Mikhnyak, N. G. Pykhova, & A. D. Sidorov. 1969. Tommotiskiy yarus i problema nizhney granitys kembriya [The Tommotian stage and the Cambrian lower boundary problem]. *Geologicheskiy Institut, Akademiya Nauk SSSR, Trudy* 206:380 p., 79 fig., 55 pl., 15 tables.
- Rozanov, A. Yu., & T. A. Sayutina. 1982. Microstructure of certain algae, archaeocyathids and cribriocyathids. *Proceedings of the 3rd North American Paleontological Convention* 2:453–455.
- Rozanov, A. Yu., & A. Yu. Zhuravlev. 1992. The Lower Cambrian fossil record of the Soviet Union. In J. E. Lippa & P. W. Signor, eds., *Origin and early evolution of the Metazoa*. Plenum Press. New York. p. 205–282, 27 fig.
- Rüffer, Thomas, & Valeria Zamparelli. 1997. Facies and biota of Anisian to Carnian carbonate platforms in the northern Calcareous Alps (Tyrol and Bavaria). *Facies* 37:115–136, 6 fig., pl. 26–31.
- Rukhin, L. B. 1938. Nizhnepaleozoiskie korally i stromatoporoidei verkhnei chasti basseina r. Kolymy [The lower Paleozoic corals and stromatoporoids of

- the upper reaches of the Kolyma river basin]. Materialy po Izucheniiu Kolymsko-Indigirskogo kraia. Serii 2. Geologija i Geomorfologija 10:1–119, 28 pl.
- Rush, P. F., & H. S. Chafetz. 1988. HMC as precursor mineral for stromatoporoids: Evidence from diagenetic fabrics in Lower Devonian Helderberg Group, New York State. Abstracts SEPM (Society for Sedimentary Geology) Annual Meetings 5:47.
- Rush, P. F., & H. S. Chafetz. 1991. Skeletal mineralogy of Devonian stromatoporoids. *Journal of Sedimentary Petrology* 61:364–369.
- Russo, Franco. 1981. Nuove spugne calcaree triassiche di Campo (Cortina d'Ampezzo, Belluno). *Bollettino della Società Paleontologica Italiana* 20:3–17, 4 pl.
- Russo, Franco, A. A. Mastandrea, & A. Baracca. 1994. Microstructure, biomineralization and diagenesis of the halichondrid stromatoporoid *Stromatowendtia triassica* n. gen., n. sp. *Memorie de Scienze Geologiche* 46:245–253, 2 fig.
- Russo, Franco, C. Neri, A. A. Mastandrea, & G. Laghi. 1991. Depositional and diagenetic history of the Alpe de Secie (Seelandalpe) fauna (Carnian, Northeastern Dolomites). *Facies* 25:187–210, 5 fig., pl. 49–55, 10 tables.
- Rützler, Klaus. 1965. Systematik und ökologie der Poriferen aus littoral-schattengebieten der Nordadria. *Zeitschrift für Morphologie und Ökologie der Tiere* 55:1–82.
- Rützler, Klaus. 1970. Spatial competition among Porifera: Solution by epizoism. *Oecologia* 5:85–95.
- Rützler, Klaus. 1971. Bredin-Archbold-Smithsonian Biological survey of Dominica: Burrowing sponges, genus *Siphonodictyon* Bergquist, from the Caribbean. *Smithsonian Contributions to Zoology* 77:37 p.
- Rützler, Klaus. 1990. Association between Caribbean sponges and photosynthesis. In Klaus Rützler, ed., *New Perspectives in Sponge Biology*. Smithsonian Institution Press. Washington, D.C. p. 455–466.
- Rützler, Klaus. 2002. Family Spirastrellidae Ridley & Dendy, 1886. In J. N. A. Hooper & R. W. M. van Soest, eds., *Systema Porifera: A Guide to the Classification of Sponges*, vol. 1. Kluwer Academic/Plenum Publishers. New York, Boston, Dordrecht, London, & Moscow. p. 220–223.
- Rützler, Klaus, & Jean Vacelet. 2002. Family Acanthochaetidae Fischer, 1970. In J. N. A. Hooper & R. W. M. van Soest, eds., *Systema Porifera: A Guide to the Classification of Sponges*, vol. 1. Kluwer Academic/Plenum Publishers. New York, Boston, Dordrecht, London, & Moscow. p. 275–278.
- Sadler, P. M., & R. A. Cooper. 2004. Calibration of the Ordovician Timescale. In B. D. Webby, Florentine Paris, M. L. Droser, & I. G. Percival, eds., *The Great Biodiversification Event*. Columbia University Press. New York. p. 48–51, 1 fig., 1 table.
- Sadler, P. M., R. A. Cooper, & M. Melchin. 2009. High-resolution, early Paleozoic (Ordovician-Silurian) time scales. *GSA Bulletin* 121:887–906.
- Saltzman, M. R. 2005. Phosphorus, nitrogen, and the redox evolution of the Paleozoic oceans. *Geology* 33:573–576.
- Sandberg, C. A., J. R. Morrow, & Willi Ziegler. 2002. Late Devonian sea-level changes, catastrophic events, and mass extinction. In Christian Koeberl & K. G. MacLeod, eds., *Catastrophic Events and Mass Extinctions: Impacts and Beyond*. Geological Society of America Special Paper 356:473–487.
- Sandberg, P. A. 1983. A oscillating trend in Phanerozoic non-skeletal carbonatic mineralogy. *Nature* 305:19–22.
- Sandberg, P. A. 1984. Recognition criteria for calcitized skeletal and non-skeletal aragonites. *Palaeontographica Americana* 54:272–281.
- Sandberg, P. A. 1985. Nonskeletal aragonite and pCO_2 in the Phanerozoic and Proterozoic. In E. T. Sundquist & W. S. Broecker, eds., *The Carbon Cycle and Atmospheric CO_2 : Natural Variations, Archean to Present*. Geophysical Monograph 32. American Geophysical Union. Washington, D.C. p. 585–594.
- Sando, W. J. 1975. Coelenterata of the Amsden Formation (Mississippian and Pennsylvanian) of Wyoming. United States Geological Survey, Professional Paper 848-C:30 p., 6 fig., 10 tables.
- Sandström, Olof. 1998. Sediments and stromatoporoid morphotypes in Ludfordian (Upper Silurian) reefal sea stacks. *GFF* 120(4):365–371.
- Sandström, Olof, & Steve [Stephen] Kershaw. 2008. Palaeobiology, ecology, and distribution of stromatoporoid faunas in biostromes of the mid-Ludlow of Gotland, Sweden. *Acta Palaeontologica Polonica* 53(2):293–302.
- Sano, Hiroyoshi. 2006. Impact of long-term climate change and sea-level fluctuation on Mississippian to Permian mid-oceanic atoll sedimentation (Akiyoshi Limestone Group) Japan. *Palaeogeography, Palaeoclimatology, Palaeoecology* 236:169–189.
- Sano, Hiroyoshi, S. Fujii, & F. Matsuura. 2004. Response of Carboniferous-Permian mid-oceanic seamount-capping buildup to global cooling and sea-level change: Akiyoshi, Japan. *Palaeogeography, Palaeoclimatology, Palaeoecology* 213:187–206.
- Santavy, D. L., P. Willenz, & R. R. Colwell. 1990. Phenotypic study of bacteria associated with the Caribbean sclerosponge, *Ceratoporella nicholsoni*. *Applied and Environmental Microbiology* 56(6):1750–1762.
- Sara, M., & J. Vacelet. 1973. Ecologie des Demosponges. In P.-P. Grassé, ed., *Traité de Zoologie Anatomie, Systematique, Biologie, Tome III: Spongaires, Fascicule 1, Anatomie, Physiologie, Systematique, Ecologie*. Masson et Cie. Paris. p. 462–576.
- Sars, M. 1857. Bidrag til Kundskaben om Middelhavets Littoral-Fauna, Reisebemaerkningen fra Italien. *Nyt Magazin for Naturvidenskaberne* 9(2):110–164, 2 pl.
- Saunders, W. B., & C. W. Thayer. 1987. A cryptic intertidal brachiopod/sclerosponge community in Palau, W. Caroline Islands. *Geological Society of America Abstracts with Programs* 19:829.
- Savarese, Michael. 1992. Functional analysis of archaeocyathan skeletal morphology and its paleobiological implications. *Paleobiology* 18:464–480, 8 fig., 1 table.

- Savarese, Michael. 1995. Functional significance of regular archaeocyathan central cavity diameter: A biomechanical and paleoecological test. *Paleobiology* 21:356–378, 9 fig., 6 tables.
- Savelle, J. M. 1979. Upper Silurian stromatoporoids from Somerset Island, Arctic Canada. *Canadian Journal of Earth Sciences* 16:364–372, 3 pl.
- Sayutina, T. A. 1980. Rannekembriiskoe semeistvo Khasaktiidae fam. nov., vozmozhnye stromatoporatory [Early Cambrian family Khasaktiidae, n. fam., possible stromatoporoids]. *Paleontologicheskiy Zhurnal* 1980(4):13–28, 6 fig., pl. 3–4.
- Sayutina, T. A. 1983. K voprosu o skhodstvye i razlichii nekotorykh arkheotsiat s vozmozhnymi stromatoporatami iz nizhnego kembriya [On the question of similarity and differences among some Lower Cambrian archaeocyathas and stromatoporids]. *Institut Geologii i Geofiziki, Sibirskoe Odlenie, Akademiya Nauk SSSR, Trudy* 538:149–151, pl. 30–31.
- Sayutina, T. A. 1985. K revizii rody *Yakovlevites* Korde, 1979 [On revision of the genus *Yakovlevites* Korde, 1979]. *Institut Geologii i Geofiziki, Sibirskoe Odlenie, Akademiya Nauk SSSR, Trudy* 632:70–74, 2 fig., pl. 26–27.
- Schäfer, Priska. 1979. Fazielle Entwicklung und paläokologische Zonierung zweier obertriassischer Riffstrukturen in den Nördlichen Kalkalpen (“Oberrhät”-Riff-Kalke, Salzburg). *Facies* 1:3–245, 46 fig., pl. 1–21, 18 tables.
- Schäfer, Priska, & Baba Senowbari-Daryan. 1982. The Upper Triassic Pantokrator Limestone of Hydra (Greece): An Example of a prograding Reef Complex. *Facies* 6:147–164, 7 fig., pl. 19–21, 1 table.
- Schiavonotto, F. 1984. Il genere *Stylothalamia* Ott 1967 (Sphinctozoa: Porifera nel Lias dell'Appenino Centrale). Atti della Società Toscana Scienze Naturalisti e Matematici (series A) 91:305–326.
- Schindewolf, O. H. 1954. Über die möglichen Ursachen den grossen erdgeschichten faunenschritte. *Neues Jahrbuch für Geologie und Paläontologie Monatshefte* 1954:457–465.
- Schlagintweit, Felix. 2004. *Murania reitneri* n. sp., a new sclerosponge from the Upper Jurassic of the Northern Calcareous Alps (Plassen Formation, Austria and Germany). *Austrian Journal of Earth Sciences* 95/96:37–45.
- Schlüter, Clemens. 1880. *Calamopora crinalis* n. sp. Naturhistorischen Vereins Preussischen Rheinlande und Westfalens, Verhandlungen, Sitzungsberichte der Niederrheinische Gesellschaft für Natur- und Heilkunde 37:281–282.
- Schlüter, Clemens. 1885. Über einige neue Anthozoen aus dem Devon. Naturhistorischen Vereins Preussischen Rheinlande und Westfalens, Verhandlungen, Sitzungsberichte der Niederrheinische Gesellschaft für Natur- und Heilkunde, Jahrgang 42:144–151.
- Schlüter, Clemens. 1886. *Archaeocyathus* in russischem Silur? Zeitschrift der Deutschen Geologische Gesellschaft, Band 38(Heft 4):899–909.
- Schlüter, Clemens. 1889. Anthozoen des rheinischen Mittel-Devon. Abhandlungen zur Geologischen Spezialkarte von Preussen und den Thüringischen Staaten 8(4):259–465, 16 pl. Reprint pagination: p. i–ix + 1–207.
- Schmid, D. U., & Winfried Werner. 2005. *Sobralispongia densespiculata*, a new coralline sponge from the Upper Jurassic of Portugal. *Geobios* 38:653–666.
- Schmidt, O. 1862. Die Spongiens des adriatischen Meeres. Wilhelm Engelmann. Leipzig. p. i–viii, 1–88, pl. 1–7.
- Schmidt, O. 1870. Grundzüge einer Spongiens-Fauna des atlantischen Gebietes. Wilhelm Engelmann. Leipzig. p. iii–iv, 1–88, pl. I–VI.
- Schneider, K. A., & W. I. Ausich. 2002. Paleoecology of framebuilders in Early Silurian reefs (Brassfield Formation, southwestern Ohio). *Palaios* 17:237–248.
- Schnorf, Alice [see also Alice Schnorf-Steiner & Alice Steiner]. 1960a. Quelques Hydrozoaires du Sénonien de Martigues (Bouches-du-Rhône). *Eclogae Geologicae Helveticae* 53:427–437, pl. 1.
- Schnorf, Alice [see also Alice Schnorf-Steiner & Alice Steiner]. 1960b. *Disparistromaria*, un Actinostromariidae nouveau du Valanginien d'Arzier (Jura vaudois). *Eclogae Geologicae Helveticae* 53:439–442.
- Schnorf-Steiner, Alice [see also Alice Schnorf & Alice Steiner]. 1958. A propos de *Stromatoporella haugi* Dehorne et de quelques formes voisines du Sénonien de Martigues (bouches du Rhône). *Eclogae Geologicae Helveticae* 51:452–474, pl. 1.
- Schnorf-Steiner, Alice [see also Alice Schnorf & Alice Steiner]. 1963. Sur quelques “Chaetetidae” du Valanginien du Jura. *Eclogae Geologicae Helveticae* 56:1117–1129, pl. 1–8.
- Scholle, P. A., & D. S. Ulmer-Scholle. 2002. A color guide to the petrography of carbonate rocks: Grains, textures, porosity, diagenesis. *American Association of Petroleum Geologists Memoir* 77:474 p.
- Scholz, G. 1972. An Anisian Wetterstein limestone reef in North Hungary. *Acta Mineralogica et Petrologica* 20(2):337–362, 4 fig., 11 pl.
- Schrammen, Anton. 1903. Zur Systematik der Kiesel-spongien. Mittelungen aus dem Roemer Museum, Hildesheim 19:21 p.
- Schrammen, Anton. 1924. Die Kieselspongien der oberen Kreide von Nordwestdeutschland, III, und letzter Teil. Monographien zur Geologie und Paläontologie (series 1) 2:159 p., 17 pl.
- Schrammen, Anton. 1937. Die Kieselspongien des oberen Jura von Süddeutschland. *Palaeontographica* (Abteilung A) 85:1–114, pl. 1–17 (11–27).
- Schroeder, Rolf. 1984. Revision von *Stylothalamia columnaris* (Le Maitre 1935) (Sphinctozoa, Porifera) aus dem Lias von Marokko. *Paläontologische Zeitschrift* 58(1–2):33–39, 2 fig., 1 table.
- Schroeder, Rolf, & H. Willems. 1983. Chaetetiden, Sphinctozoen und Stromatoporiden aus dem Caniego-Kalk (Ober-Alb) des Valle de Mena (Prov. Burgos, N-Spanien). *Senckenbergiana Lethaea* 64(2–4):337–362, 2 fig., 6 pl., 2 tables.
- Schuchert, Charles. 1919. The proper name for the fossil hydroid *Beatricea*. *American Journal of Science* (series 4) 47:293–296, 1 fig.
- Schuhmacher, H., & M. Plewka. 1981. Mechanical resistance of reefbuilders through time. *Oecologia* 49:279–282.

- Schulz, E. 1883. Die Eifelkalkmulde von Hillesheim, nebst einem paleontologischen Anhang. Königliche Preussische geologische Landesanstalt und Bergakademie zu Berlin. Jahrbuch für 1882:158–250.
- Schulze, F. E. 1877. Untersuchungen über den Bau und die Entwicklung der Spongien. Dritte Mitt-heilung. Die Familie der Chondrosidae. Zeitschrift für wissenschaftliche Zoologie 29:87–122, pl. vii–ix.
- Schulze, F. E. 1887. Über den Bau und das System der Hexactinelliden. Abhandlungen der königlichen preussischen Akademie der Wissenschaften zu Berlin, physikalisch-mathematische Classe 1886:1–97.
- Schweigger, A. F. 1819. Beobachtungen auf natur-historischen Reisen. Reimer. Berlin. xii + 127, 8 pl., 12 tables.
- Scotese, C. R. 1986. Phanerozoic reconstructions: A new look at the assembly of Asia. University of Texas Institute for Geophysics Technical Report 66:1–54.
- Scotese, C. R. 2001. Digital Paleogeographic Map Archive on CD-ROM, PALEOMAP Project. Arlington, Texas.
- Scotese, C. R., & W. S. McKerrow. 1990. Revised World maps and introduction. In W. S. McKerrow & C. R. Scotese, eds., Palaeozoic Palaeogeography and Biogeography. Geological Society Memoir 12:1–21, 22 fig., 1 table.
- Scrivastava, Prem, C. W. Stearn, & E. W. Mountjoy. 1972. A Devonian megabreccia at the margin of the Ancient Wall Carbonate Complex, Alberta. Bulletin of Canadian Petroleum Geology 20:412–438.
- Scrutton, C. T. 1977a. Reef facies in the Devonian of eastern South Devon, England. Memoirs de Bureaux de Recherche Géologie Minéraux 89:125–135.
- Scrutton, C. T. 1977b. Facies variations in the Devonian limestones of eastern South Devon. Geological Magazine 114:165–248.
- Scrutton, C. T. 1979. Early fossil cnidarians. In M. R. House, ed., The Origin of Major Invertebrate Groups. Springer-Verlag. Berlin. p. 161–207.
- Scrutton, C. T. 1993. Growth-form variation and control in two British Silurian species of *Propora*. Courier Forschungsinstutit Senckenberg 164:273–281.
- Scrutton, C. T. 1994. A ternary plotting routine for the representation of growth forms in corals and stromatoporoids. Courier Forschungsinstutit Senckenberg 172:429–430.
- Scrutton, C. T. 1997. The Palaeozoic corals, I: Origins and relationships. Proceedings of the Yorkshire Geological Society 51(3):177–208, 22 fig., 5 tables.
- Scrutton, C. T. 1998. The Palaeozoic corals, II: Structure, variation and palaeoecology. Proceedings of the Yorkshire Geological Society 52(1):1–57, 33 fig., 4 tables.
- Scudder, S. H. 1882. Nomenclator Zoologicus: U.S. National Museum Bulletin 19, I., Supplemental list, xix + 376 p.; II, Universal index to genera in zoology, 340 p.
- Seely, H. M. 1904. The Stromatoceria of Isle La Motte, Vermont. Report of the State Geologist, Vermont 4:144–152, tables 70–74.
- Segars, M. T., & W. D. Liddell. 1988. Microhabitat analyses of Silurian stromatoporoids as substrata for epibionts. Palaios 3:391–403.
- Seguenza, Giuseppe. 1864. Disquisizione paleontologiche intorno ai corallari fossili delle rocce terziarie del distretto di Messina. Memorie della Reale Accademia delle Scienze di Torino (series 2) 21:399–560, 15 pl.
- Seilacher, Adolf. 1962. Die Sphinctozoa, eine Gruppe fossiler Kalkschwämme. Akademie der Wissenschaften und der Literaturen in Mainz, Abhandlungen der mathematisch-naturwissenschaftlichen Klasse (Jahrgang 1961) 10:721–790, 8 fig., 9 pl.
- Seilacher, Adolf, & Edith Seilacher-Drexler. 1986. Sekundäre Weichbodenbewohner unter den Cirripediern. Paläontologische Zeitschrift 60:75–92, 9 fig.
- Selby, David, & R. A. Creaser. 2005. Direct radiometric dating of the Devonian-Mississippian time scale boundary using Re-Os black shale geochronometer. Geology 33:345–548.
- Selg, Matthias. 1986. Algen als Faziesindikatoren: Bioherme und Biostrome im Unter-Kambrium von SW-Sardinien. Geologische Rundschau 75:693–702, 4 fig., 2 tables.
- Semeniuk, Vic. 1971. Subaerial leaching in the limestones of the Bowan Park Group (Ordovician) of central-western New South Wales. Journal of Sedimentary Petrology 41:939–950.
- Sengör, A. M. C., & B. A. Natal'in. 1996. Palaeotectonics of Asia: Fragments of a synthesis. In A. Yin & T. M Harrison, eds., The Tectonic Evolution of Asia. Cambridge University Press. Cambridge. p. 486–640.
- Sennikov, N. V., Z. E. Petrunina, E. A. Yolkin, & A. M. Obut. 1988. Western Altai-Sayan folded region. In R. J. Ross Jr. & J. Talent, eds., The Ordovician System in most of Russian Asia. International Union of Geological Sciences, Publication 26:53–83.
- Sennikov, N. V., A. Yu. Kazansky, K. Iwata, O. T. Obut, Y. Sugai, V. A. Zybin, & T. V. Khlebnikova. 2004. Comparative position of Bateny and Biya-Katun' terrains (Altai Sayan Folded Area, Russia) in Cambrian based on combined paleomagnetic, lithologic and paleontological data. Gondwana Research 7:833–841, 4 fig.
- Senowbari-Daryan, Baba. 1978. Neue Sphinctozoen (segmentierte Kalkschwämme) aus den "oberrätischen" Riffkalken der nördlichen Kalkalpen (Hintersee/Salzburg). Senckenbergiana Lethaea 59:205–227, 4 fig., 3 pl., 2 tables.
- Senowbari-Daryan, Baba. 1980a. Fazielle und paläontologische Untersuchungen in oberrätischen Riffen (Feichtenstein- und Gruberif bei Hintersee, Salzburg, Nördliche Kalkalpen). Facies 3:1–237, 21 fig., pl. 1–29, 21 tables.
- Senowbari-Daryan, Baba. 1980b. Neue Kalkschwämme (Sphinctozoen) aus obertriadischen Riffen von Sizilien. Mitteilungen der Gesellschaft der Geologie und Bergbaustudenten in Österreich 26:179–203, 3 fig., 6 pl., 1 table.
- Senowbari-Daryan, Baba. 1981. Zur Paläontologie eines kleinen Riffes innerhalb der Amphicyclinen-Schichten

- (Lokalität: Huda Juzna, Slowenien). Razprave IV. Razreda Dissertationes Classis IV. Slovenska Akademija Znanosti in Umetnosti 23(3):99–118, 1 fig., 10 pl., 1 table.
- Senowbari-Daryan, Baba. 1982. *Cystothalamia* Girty, eine häufige Schwamm-Gattung aus dem Karn von Slowenien (Jugoslavia) und Hydra (Griechenland). Mitteilungen der Gesellschaft der Geologie und Bergbaustudenten in Österreich 28:77–94, 5 fig., 4 pl., 1 table.
- Senowbari-Daryan, Baba. 1989. Spicula in segmentierten Schwämmen. Berliner Geowissenschaftliche, Abhandlungen (Reihe A) 106:473–515, 5 fig., 14 pl.
- Senowbari-Daryan, Baba. 1990. Die systematische Stellung der thalamiden Schwämme und ihre Bedeutung in der Erdgeschichte. Münchne Geowissenschaftliche, Abhandlungen, Reihe A, Geologie und Paläontologie 21:1–326, 70 fig., 63 pl., 18 tables.
- Senowbari-Daryan, Baba. 1991. "Sphinctozoa": An Overview. In Joachim Reitner & Helmut Keupp, eds., Fossil and Recent Sponges. Springer-Verlag. Berlin. p. 224–241, 8 fig.
- Senowbari-Daryan, Baba. 1994a. Segmentierte Schwämme ("Sphinctozoen") aus der Obertrias (Nor) des Taurus-Gebirges (S-Türkei). Abhandlungen der Geologischen Bundesanstalt (Festschrift Erik Flügel) 50:415–446, 9 fig., 10 pl.
- Senowbari-Daryan, Baba. 1994b. Mesozoic sponges of the Pucará Group, Peru. Palaeontographica (Abteilung A) 233:57–74, 3 fig., 12 pl.
- Senowbari-Daryan, Baba. 1996. Upper Triassic reefs and reef communities of Iran. In J. Reitner, F. Neuweiller, & F. Gunkel, eds., Global and Regional Controls on Biogenic Sedimentation. Reef Evolution. Research Reports. Göttinger Arbeiten für Geologie und Paläontologie, vol. 2, p. 299–304, 1 fig., 1 pl.
- Senowbari-Daryan, Baba. 1997. Verkalkungsmodus von *Jablonskyia andrusovi* (Jablonsky), einem segmentierten Schwamm aus dem Karn des westlichen Tethysraumes. Geologische Blätter NO-Bayern 47:415–430, 2 fig., pl. 40–42.
- Senowbari-Daryan, Baba. 2003. Peronidellen (Schwämme) aus der Trias und Beschreibung von *Peronidella iranica* n. sp. aus der Obertrias (Nor-Rhät) des Iran und von Österreich. Jahrbuch der Geologischen Bundesanstalt 143(1):63–72, 5 fig., 3 pl.
- Senowbari-Daryan, Baba. 2005a. Hypercalcified sphinctozoan sponges from Upper Triassic (Norian-Rhaetian) reefs of Nayband Formation (Central and East Iran). Jahrbuch der Geologischen Bundesanstalt Wien 145(2):171–277, 26 fig., 32 pl., 8 tables.
- Senowbari-Daryan, Baba. 2005b. Inozoide Schwämme aus obertriassischen (Nor-Rhät) Riffen der Nayband-Formation (NE und Zentraliran). Senckenbergiana Lethaea 85(2):261–299, 8 fig., 11 pl., 1 table.
- Senowbari-Daryan, Baba. 2009. Coralline Schwämme aus dem norisch-rhätischen Dachsteinkalk-Riff des Gosaukammes, Nördliche Kalkalpen, Österreich. Jahrbuch der Geologischen Bundesanstalt Wien 149(1):111–116, 1 fig., 17 pl., 1 table.
- Senowbari-Daryan, Baba, & Benedetto Abate. 1986. Zur Paläontologie, Fazies und Stratigraphie der Karbonate innerhalb der "Formazione Mufara." Naturalista Siciliana (series 4) 10:59–104, 2 fig., 12 pl.
- Senowbari-Daryan, Baba, & Benedetto Abate. 1996. *Barroisia siciliana* n. sp., a thalamid sponge from the Upper Jurassic reefs of the Madonie Mountains, Sicily. Brigham Young University Geology Studies 41:149–153, 1 pl.
- Senowbari-Daryan, Baba, Bernadetto Abate, P. Renda, & M. Tramutoli. 1999. *Lucaniapongia gigantea* n. gen., n. sp., a "sphinctozoan" sponge from the Ladinian of the Apennines, Italy. Mitteilungen der Gesellschaft der Geologie und Bergbaustudenten in Österreich 42:59–65, 3 fig., 2 pl.
- Senowbari-Daryan, Baba, M. Bernecker, L. Kryszyn, & M. Siblik. 1999. Carnian reef biota from a megabreccia of the Hawasina Complex (Al Aqil), Oman. Revista Italiana di Paleontologia e Stratigrafia 105(3):327–342, 10 fig., 4 pl.
- Senowbari-Daryan, Baba, & P. Di Stefano. 1988a. Microfacies and sphinctozoan assemblage of some Lower Permian breccias from the Lercara Formation (Sicily). Rivista Italiana di Paleontologia e Stratigrafia 94:3–34, 3 fig., 8 pl.
- Senowbari-Daryan, Baba, & P. Di Stefano. 1988b. *Amblysiphonella maxima* n. sp., a new sphinctozoan sponge from Upper Triassic reefs in Sicily. Bollettino della Società Paleontologica de Italia 27(1):17–27, 1 fig., 1 pl., 1 table.
- Senowbari-Daryan, Baba, & T. Engeser. 1996. Ein Beitrag zur Nomenklatur sphinctozoider Schwämme (Porifera). Paläontologische Zeitschrift 70(1/2):269–271.
- Senowbari-Daryan, Baba, & Erik Flügel. 1996. A 'problematic fossil' revealed: *Pycnoporidium eomesozoicum* Flügel, 1972 (Late Triassic, Tethys): Not an enigmatic alga but a strophomenid brachiopod (*Gosaukammerella* n. g.). Facies 34:83–100, 3 fig., pl. 21–27.
- Senowbari-Daryan, Baba, Fürisch, F., & Rashidi, K. 2011. Calcispongia from the Middle and Upper Jurassic of the Shotori Mountains, northeast Iran. I. *Mammillopora* Bronn, *Tremospongia* D'Orbigny, *Stellispongia* Goldfuss, *Eaulofungia* Fromentel, and *Dehukia*, ng. gen. Revista Italiana di Paleontologia e Stratigrafia 117(3):423–462.
- Senowbari-Daryan, Baba, & D. C. García-Bellido. 2002a. Fossil "Sphinctozoa": Chambered sponges (polyphyletic). In J. N. A. Hooper & R. W. M. van Soest, eds., Systema Porifera: A Guide to the Classification of Sponges, vol. 2. Kluwer Academic/Plenum Publishers. New York, Boston, Dordrecht, London, & Moscow. p. 1511–1533, 13 fig., 3 tables.
- Senowbari-Daryan, Baba, & D. C. García-Bellido. 2002b. Bibliography of Fossil "Sphinctozoans." In J. N. A. Hooper & R. W. M. van Soest, eds. Systema Porifera: A Guide to the Classification of Sponges, vol. 2. Kluwer Academic/Plenum Publishers. New York, Boston, Dordrecht, London, & Moscow. p. 1534–1538.
- Senowbari-Daryan, Baba, & Ali Hamedani. 1999. Thalamid sponges from the Upper Triassic (Norian-Rhaetian) Nayband Formation near Wali-Abad, SE

- Abadeh, Central Iran. Rivista Italiana di Paleontologia e Stratigrafia 105(1):293–322, 2 fig., 8 pl.
- Senowbari-Daryan, Baba, & Ali Hamedani. 2002. First report of the occurrence of *Amblysiphonella* (thalamid sponge) in Permian of Iran and description of *A. iranica* n. sp. from central Iran. Revue Paléobiologie Genève 21(2):795–801.
- Senowbari-Daryan, Baba, Ali Hamedani, & Koorosh Rashidi. 2007. Sponges from the Permian of Hambast Mountains, south of Abadeh, central Iran. Facies 53:575–614, 18 fig.
- Senowbari-Daryan, Baba, & R. Ingavat-Helmcke. 1994. Sponge assemblage of some Upper Permian reef limestones from Phrae province (Northern Thailand). Geologija 36:5–59, 5 fig., 13 pl.
- Senowbari-Daryan, Baba, & Michael Link. 1998. A new thalamid sponge from the Upper Triassic (Norian) reef limestones of the Antalya region (Turkey). Acta Geologica Hungarica 41(3):343–354, 3 fig.
- Senowbari-Daryan, Baba, & Michael Link. 2011. Hypercalcified segmented sponges (“Sphinctozoans”) from the Upper Triassic (Norian) reef boulders of Taurus Mountains (South Turkey). Facies 57:663–693, 13 fig., doi: 10.1007/s10347-010-0253-x.
- Senowbari-Daryan, Baba, Michael Link, & D. C. García-Bellido. 2003. *Fanthalamia kadiri* nov. sp., a new sphinctozoan from the Triassic (Carnian) of Turkey. Studia Universite Babes-Bolyai, Geologia 48(2):125–131, 1 fig., 1 pl., 1 table.
- Senowbari-Daryan, Baba, Dionissios Matarangas, & Myrsini Vartis-Matarangas. 1996. Norian-Rhaetian reefs in Argolis Peninsula, Greece. Facies 34:77–82, 1 fig., pl. 19–20.
- Senowbari-Daryan, Baba, & Florian Maurer. 2008. Upper Triassic (Norian) hypercalcified sponges from the Musandam Peninsula (United Arab Emirates and Oman). Facies 54:433–460, 14 fig., 3 tables.
- Senowbari-Daryan, Baba, Koorosh Rashidi, & Ali Hamedani. 2005. Sponge assemblage from the Permian Reefal limestones of Kuh-e Bagh-e Vang, Shotori Mountains. Geologica Carpathica 56(5):381–406.
- Senowbari-Daryan, Baba, Koorosh Rashidi, & Ali Hamedani. 2006. Two Permian sphinctozoan sponges from the Shotori Mountains (eastern Iran). Geologica Carpathica 57(6):427–432.
- Senowbari-Daryan, Baba, & P. R. Reid. 1987. Upper Triassic sponges (Sphinctozoa) from southern Yukon, Stikinia terrane. Canadian Journal of Earth Sciences 24:882–902, 4 fig., 7 pl.
- Senowbari-Daryan, Baba, & Peter Riedel. 1987. Revision der triadischen Arten von *Solenolmia* Pomel, 1872 (= *Dictyocelia* Ott, 1967) (“Sphinctozoa,” Porifera) aus dem alpin-mediterranen Raum. Mitteilungen der Bayerischen Staatssammlung für Paläontologie und Historische Geologie 27:5–20, 2 fig., 4 pl.
- Senowbari-Daryan, Baba, & J. K. Rigby. 1988. Upper Permian segmented sponges from Djebel Tebaga, Tunisia. Facies 19:171–250, 15 fig., pl. 22–40.
- Senowbari-Daryan, Baba, & J. K. Rigby. 1991. Three additional thalamid sponges from the Upper Permian reefs of Djebel Tebaga (Tunisia). Journal of Paleontology 65(4):623–629, 5 fig.
- Senowbari-Daryan Baba, & J. K. Rigby. 2011. Part E, Revised, Volume 4, Chapter 7: Sphinctozoan and Inozoan Hypercalcified Sponges: An Overview. Treatise Online 28:1–90, 58 fig.
- Senowbari-Daryan, Baba, & Priska Schäfer. 1979. Neue Kalkschwämme und ein Problematikum (*Radionura cautica* n. gen., n. sp.) aus Oberhät-Riffen südlich von Salzburg (Nördliche Kalkalpen). Mitteilungen der Österreichischen geologischen Gesellschaft (1977) 70:17–42, 2 fig., 7 pl., 1 table.
- Senowbari-Daryan, Baba, & Priska Schäfer. 1982. Obertriadische Riffe und Rifforganismen in Sizilein. Facies 6:165–184, 4 fig., pl. 22–24.
- Senowbari-Daryan, Baba, & Priska Schäfer. 1983. Zur Sphinctozoen-Fauna der obertriadischen Riffkalke (“Pantokratorkalke”) von Hydra, Griechenland. Geologica et Palaeontologica 17:179–205, 3 fig., 7 pl., 3 tables.
- Senowbari-Daryan, Baba, & Priska Schäfer. 1986. Sphinctozoen (Kalkschwämme) aus den norischen Riffen von Sizilien. Facies 14:235–284, 9 fig., pl. 44–54, 6 tables.
- Senowbari-Daryan, Baba, Priska Schäfer, & Benedetto Abate. 1982. Obertriadische Riffe und Rifforganismen in Sizilien. Facies 6:165–184, 4 fig., 3 pl.
- Senowbari-Daryan, Baba, K. Seyed-Emami, & A. Aghanabati. 1997. Some inozooid sponges from Upper Triassic (Norian-Rhaetian) Nayband Formation of central Iran. Rivista Italiana di Paleontologia e Stratigrafia 103:293–322, 7 fig., 9 pl., 1 table.
- Senowbari-Daryan, Baba, & G. B. Stanley, Jr. 1988. Triassic sponges (Sphinctozoa) from Hells Canyon, Oregon. Journal of Paleontology 62(3):419–423, 3 fig.
- Senowbari-Daryan, Baba, & G. B. Stanley, Jr. 1994. Lower Jurassic marine carbonate deposits in central Peru: Stratigraphy and paleontology. Palaeontographica 233:43–56, 8 fig., 4 pl.
- Senowbari-Daryan, Baba, & G. B. Stanley, Jr. 2009. Taxonomic affinities and paleogeography of *Stromatomorpha californica* Smith, a distinctive Upper Triassic reef-adapted demosponge. Journal of Paleontology 83(5):783–793, 11 fig.
- Senowbari-Daryan, Baba, G. B. Stanley Jr., & C. Gonzalez-Leon. 2001. A new Triassic sponge from the Antimonio terrane, Sonora, Mexico. Journal of South American Earth Sciences 14(2001):447–452, 4 fig.
- Senowbari-Daryan, Baba, & D. Würm. 1994. *Radiocella prima* n. g., n. sp., der erste segmentierte Schwamm mit tetracladinen Skelett aus den Dachstein-Riffkalken (Nor) des Gosaukammes (Nördliche Kalkalpen, Österreich). Abhandlungen der Geologischen Bundesanstalt (Festschrift Erik Flügel) 50:447–452, 4 fig., 1 pl.
- Senowbari-Daryan, Baba, & Valeria Zamparelli. 1999. Upper Triassic sphinctozoan sponges from Northern Calabria (southern Italy). Rivista Italiana de Paleontologia e Stratigrafia 105:145–154, 1 fig., 3 pl.
- Senowbari-Daryan, Baba, & Valeria Zamparelli. 2003. Upper Triassic (Norian-Rhaetian) new thalamid sponges from Northern Calabria (southern Italy). Studia Universite Babes-Bolyai, Geologia 48(2):113–124, 2 fig., 2 pl.
- Senowbari-Daryan, Baba, Rainer Zühlke, Thilo Bechstädt, & Erik Flügel. 1993. Anisian (Middle Triassic)

- buildups of the northern Dolomites (Italy): The recovery of reef communities after the Permian/Triassic crisis. *Facies* 28:181–256, 17 fig., 25 pl.
- Sepkoski, J. J., Jr. 1986. Phanerozoic overview of mass extinction. In D. M. Raup & David Jablonski, eds., Major evolutionary diversification. Clarendon Press. Oxford. p. 288–304.
- Sepkoski, J. J., Jr. 1990. The taxonomic structure of periodic extinction. In V. L. Sharpton & P. D. Ward, eds., Global catastrophes in Earth history: An interdisciplinary conference on impacts, volcanism, and mass mortality. Geological Society of America Special Paper 247:33–44.
- Sepkoski, J. J., Jr. 2002. A compendium of fossil marine animal genera. *Bulletins of American Paleontology* 363:562 p.
- Shaviv, N. J., & J. Veizer. 2003. Celestial driver of Phanerozoic climate. *Geology Today* 13(7):4–10.
- Shen Jian-wei, & G. E. Webb. 2008. The role of microbes in reef-building communities of the Cannindah limestone (Mississippian), Monto region, Queensland, Australia. *Facies* 54:89–105.
- Shergold, J. H., & Gerd Geyer. 2003. The Subcommission on Cambrian Stratigraphy: The status quo. *Geologica Acta* 1:5–9, chart.
- Shergold, J. H., J. B. Jago, R. A. Cooper, & J. R. Laurie. 1985. The Cambrian System in Australia, Antarctica and New Zealand. Correlation Charts and Explanatory Notes. International Union of Geological Sciences, Publication 19:1–85, 4 fig., 8 charts.
- Signor, P. W., & J. H. Lipps. 1982. Sampling bias, gradual extinction patterns and catastrophes in the fossil record. In L. T. Silver & P. H. Schutz, eds., Geological implications of impact hypothesis of large asteroids and comets on Earth. Geological Society of America, Special Paper 190:283–290.
- Signor, P. W., Michael Savarese, & M. D. Denny. 1989. Archaeocyathans as cantilevers: Some thoughts on the functional morphology of regular archaeocyathans. Geological Society of America Abstracts with Program 21(6):A287.
- Simionescu, Ioan. 1926. Sur quelques fossiles rares, dans le Trias et le Crétacé inférieur de la Roumanie. Académie Roumaine, Section Sciences, Bulletin 10:102–109.
- Simkiss, K. 1977. Biominerization and detoxification. *Calcified Tissue Research* 24:199–200.
- Simkiss, K. 1986. The processes of biominerization in lower plants and animals. An overview. In B. S. C. Leadbeater & Robert Riding, eds., Biominerization in lower plants and animals. Clarendon Press. Oxford. p. 19–23.
- Simon, Wilhelm. 1939. Archaeocyathacea. I. Kritische Sichtung der Superfamilie. II. Die Fauna im Kambrium der Sierra Morena (Spanien). Senckenbergische Naturforschende Gesellschaft, Abhandlungen 448:1–87, 8 fig., 5 pl.
- Simon, Wilhelm. 1941. Archaeocyathacea. III. Ergänzungen zur Taxonomie aus neueren Arbeiten. Senckenbergiana 23(1):1–19.
- Skorlobova, N. A. 2013. Novye arkheotsiatiy iz otlozheniy attabanskogo yarusa Sibirskoy platformy [New Archaeocyatha from the Attabanian Stage of the Siberian Platform]. *Paleontologicheskiy Zhurnal* 47(6):555–560, 9 fig., 1 pl. DOI: 10.1134/S003103011306087.
- Sloss, L. L. 1963. Sequences in the cratonic interior of North America. *Geological Society of America Bulletin* 74:93–111.
- Smith, A. G. 2001. Paleo magnetically and tectonically based global maps for Vendian to mid-Ordovician time. In A. Yu. Zhuravlev & Robert Riding, eds., *The Ecology of the Cambrian Radiation*. Columbia University Press. New York. p. 11–46, 5 fig., 1 table.
- Smith, M. P., & M. Bjerriskov. 1994. A. The Ordovician System in Greenland. In S. H. Williams, ed., *The Ordovician System in Greenland and South Africa: Correlation Charts and Explanatory Notes*. International Union of Geological Sciences, Publication 29:1–46, 4 fig., 1 chart.
- Smith, S. 1932. *Labechia carbonaria*, sp. nov., a Lower Carboniferous stromatoporoid from west Cumberland. Summary of Progress, Geological Survey of Great Britain and Museum of Practical Geology for 1931(2):23–33, 1 pl.
- Soest, R. W. M. van. 1984. Deficient *Merlia normani* Kirkpatrick, 1908, from the Curaçao Reefs, with a discussion on the phylogenetic interpretation of sclerosponges. *Bijdragen tot de Dierkunde* 54:211–219, 7 fig., 1 table.
- Soest, R. W. M. van. 2002a. Family Suberitidae Schmidt, 1870. In J. N. A. Hooper & R. W. M. van Soest, eds., *Systema Porifera: A Guide to the Classification of Sponges*, vol. 1. Kluwer Academic/Plenum Publishers. New York, Boston, Dordrecht, London, & Moscow. p. 227–244.
- Soest, R. W. M. van. 2002b. Family Calcifibrospongidae Hartman, 1979. In J. N. A. Hooper & R. W. M. van Soest, eds., *Systema Porifera: A Guide to the Classification of Sponges*, vol. 1. Kluwer Academic/Plenum Publishers. New York, Boston, Dordrecht, London, & Moscow. p. 918–919.
- Soest, R. W. M. van, Nicole Boury-Esnault, Dorte Janussen, & John Hooper. 2005. World Porifera database. <http://www.vliz.be/vmdcdata/porifera>. Checked January 2010.
- Soest, R. W. M. van, & J. N. A. Hooper. 2002a. Order Halichondrida Gray, 1867, 1928. In J. N. A. Hooper & R. W. M. van Soest, eds., *Systema Porifera: A Guide to the Classification of Sponges*, vol. 1. Kluwer Academic/Plenum Publishers. New York, Boston, Dordrecht, London, & Moscow. p. 721–723.
- Soest, R. W. M. van, & J. N. A. Hooper. 2002b. Order Haplosclerida Topsent, 1928. In J. N. A. Hooper & R. W. M. van Soest, eds., *Systema Porifera: A Guide to the Classification of Sponges*, vol. 1. Kluwer Academic/Plenum Publishers. New York, Boston, Dordrecht, London, & Moscow. p. 831–834.
- Sokolov, B. S. 1939. Stratigraficheskoe znachenie i tipy Chaetidae karbona SSSR [Stratigraphical importance and types of Chaetidae of the Carboniferous of the USSR]. Akademiya Nauk SSSR, Doklady 23(4):409–412.
- Sokolov, B. S. 1947. Novy rod *Fistulimurina* gen. nov. iz gruppy Chaetidae [*Fistulimurina* nov. gen., genus of the group Chaetidae]. Akademiya Nauk SSSR, Doklady 66:957–960.

- Sokolov, B. S. 1950. Khetetidy karbona severo-vostochnoy Ukrayiny i sopredelnykh oblastey [Carboniferous Chaetetidae of southeastern Ukraine and contiguous regions]. Vsesoyuznogo Neftyanogo Nauchno-Issledovatel'skogo Geologo-Razvedochnogo Instituta (VNIGRI), Trudy, Leningrad (new series) 27:144 p.
- Sokolov, B. S. 1955. Tabulyat paleozooya Evropeiskoi chasti SSSR. Vvedenie: Obschchie voprosy sistematiki i istorii razvitiya tabulyat (s kharakteristikoj morfologicheski blizkikh grupp) [Paleozoic Tabulata of the European parts of the USSR: Introduction to the general study of the systematics and development of the tabulates]. Vsesoyuznogo Neftyanogo Nauchno-Issledovatel'skogo Geologo-Razvedochnogo Instituta (VNIGRI), Trudy, Leningrad (new series) 85:527 p.
- Sokolov, B. S. 1962. Gruppa Chaetetida, podklass Tabulata, podklass Heliolitoidea [Group Chaetetida, subclass Tabulata, subclass Heliolitoida]. In Yu. A. Orlov, ed., Osnovy paleontologii [Fundamentals of Paleontology], vol. 2, B. S. Sokolov, ed., Porifera, Archaeocyatha, Coelenterata, Vermes. Izdatel'stvo Akademii Nauk SSSR. Moscow. p. 169–176, 192–285. English translation: Israel Program for Scientific Translations, 1971, Jerusalem, p. 259–270, 293–438.
- Sokolov, B. S. 1965. O sisteme korallov Tabulata. In B. S. Sokolov & V. N. Dubatolov, eds., Tabulyatomorfnye korally ordovika i silura SSSR, Tr. I [On the systematics of the Tabulata]. Vsesoyuznogo simpoziuma poizucheniyu iskopaemykh korallov, pt. 1. Nauka. Moscow. p. 5–9.
- Sokolov, B. S., & N. V. Mironova. 1959. O novom rode ordovikskikh korallov zapadnoy Sibiri i severnogo Kazakhstana [On a new Ordovician coral genus from western Siberia and northern Kazakhstan]. Akademiya Nauk SSSR, Doklady 129:1150–1153.
- Sokolov, B. S., & Yu. I. Tesakov. 1968. Novyy rodtabulyat rannego devona Podolii [New genus of Tabulata from the Early Devonian of Podolia]. Akademiya Nauk SSSR, Doklady 179:202–205.
- Sokolov, B. S., & I. T. Zhuravleva, eds., 1983. Yarusnoe raschlenenie nizhnego kembriya Sibiri. Atlas okamenelostey [Stage subdivision of the Early Cambrian. Atlas of fossils]. Institut Geologii i Geofiziki, Sibirskoe Otdelenie, Akademiya Nauk SSSR, Trudy 558:1–216, 72 pl., 1 table.
- Sollas, W. J. 1875. Sponges. Encyclopedia Britannica, 9th ed. Adam & Charles Black. Edinburgh. p. 427–446, 26 fig.
- Sollas, W. J. 1877. On *Pharetrosporgia strahani* Sollas, a fossil holophrapid sponge. Journal of the Geological Society London 33:242–255.
- Sollas, W. J. 1885. A classification of the sponges. Annals and Magazine of Natural History (series 5) 16(95):395.
- Solomko, E. 1885. Verläufige Mitteilung über die Microstruktur der Stomatoporen. Neues Jahrbuch für Mineralogie, Geologie und Paläontologie 2:168–171.
- Solovjeva, V. V. 1980. Nekotorye novye mezozoiskie khetetidy i ih mikrostruktura [Some new Mesozoic Chaetetidae and their microstructure]. Paleontologicheskiy Zhurnal 1980(4):29–38. English translation: Paleontological Journal 1980(4):32–41.
- Sønderholm, M., & T. L. Harland. 1989. Franklinian reef belt, Silurian, North Greenland. In H. H. J. Geldsetzer, N. P. James, & G. E. Tebbutt, eds., Reefs, Canada and adjacent areas. Canadian Society of Petroleum Geologists, Memoir 13:356–366.
- Sorauf, J. E. 2000. Coralomorphs. In A. J. Wright, G. C. Young, J. A. Talent, & J. R. Laurie, eds., Palaeobiogeography of Australasian faunas and floras. Memoir of the Association of Australasian Palaeontologists 23:38–39.
- Sorauf, J. E., & A. E. H. Pedder. 1986. Late Devonian rugose corals and the Frasnian-Famennian crisis. Canadian Journal of Earth Sciences 23:1265–1287.
- Soshkina, E. D. 1937. Korally verkhnego silura i nizhnego devona vostochnogo i zapadnogo sklonov Urala [Corals of the Upper Silurian and Lower Devonian of the eastern and western slopes of the Urals]. Paleozoologicheskiy Institut, Akademiya Nauk SSSR, Trudy 6(4):1–155, 21 pl., 1 table.
- Soto, Francisco, Isabel Méndez-Bedia, & Esperanza Fernández-Martínez. 1994. Construcciones arrecifales del Devónico de la Cordillera Cantábrica (No de España). Revista Española de Paleontología 9(1):29–36, 4 fig.
- Spencer, J. W. W. 1884. Niagaran Fossils II: Stromatoporidae of the Upper Silurian System. Bulletin of the Museum of the University of Missouri 1:43–52. See also Transactions of the Academy of Science of St. Louis 4:593–610.
- Spizharskiy, T. N., G. Kh. Ergaliev, I. T. Zhuravleva, L. N. Repina, A. Yu. Rozanov, & N. E. Chernysheva. 1983. Yarusnaya shkala kembriyskoy sistemy [The stage scale of the Cambrian System]. Sovetskaya Geologiya 1983(8):57–72, chart.
- Spizharski [Spizharskiy], T. N., I. T. Zhuravleva, L. N. Repina, A. Yu. Rozanov, N. Ye. Tchernysheva, & G. H. Ergaliev. 1986. The stage scale of the Cambrian System. Geological Magazine 123:387–392, 1 table.
- Spjeldnaes, Nils. 1975. Silurian bryozoans which grew in the shade. In S. Pouyet, ed., "Bryozoa 1974." Documents du Laboratoire de Géologie, Faculté des Sciences de Lyon, hors-séries 3 (fascicule 2):415–424.
- Spjeldnaes, Nils. 1982. The Ordovician of the districts around Mjøsa. Paleontological Contributions from the University of Oslo 279:148–163.
- Spjeldnaes, Nils. 1996. Bryozoan colonies as indicators of bottom conditions in the Lower Ordovician. In D. P. Gordon, A. M. Smith, & J. A. Grant-Mackie, eds., Bryozoans in Space and Time. Proceedings of the 10th International Bryozology Conference. National Institute of Water & Atmospheric Research Ltd. Wellington, New Zealand. p. 315–319.
- Spriestersbach, J. 1942. Der Lenneschiefer (Stratigraphie, Fazies und Fauna). Abhandlungen der Reichsstelle für Bodenforschung (new series) 203:1–219, 19 fig., 11 tables.
- Squires, Richard L. 1973. Burial environment, diagenesis, mineralogy, and magnesium and strontium contents of skeletal carbonates in the Buckhorn Asphalt of Middle Pennsylvanian age, Arbuckle Mountains,

- Oklahoma. Doctoral dissertation. California Institute of Technology. Pasadena. 184 p.
- Sremac, Jasenka. 2005. Equatorial shelf of the Paleozoic supercontinent: Cradle of the Adriatic Carbonate Platform. *Geologija Croatica* 55(1):1–19, 4 fig., 5 pl.
- Srivastava, Prem, C. W. Stearn, & E. W. Mountjoy. 1972. A Devonian megabreccia at the margin of the Ancient Wall carbonate complex, Alberta. *Bulletin of Canadian Petroleum Geology* 20(3):412–438.
- St. Jean, Joseph, Jr. 1957. Review: Stromatoporidea, by Marius Lecompte, Treatise of Invertebrate Paleontology, Part F, Coelenterata. *Journal of Paleontology* 31(4):836–838.
- St. Jean, Joseph, Jr. 1962. Morphology of the stromatoporoid genus *Stictostroma* Parks. *Journal of Paleontology* 36:185–200.
- St. Jean, Joseph, Jr. 1967. Maculate tissue in Stromatoporidea. *Micropaleontology* 13:419–444.
- St. Jean, Joseph, Jr. 1971. Paleobiologic considerations of reef stromatoporoids. *Proceedings of the North American Paleontological Convention* 1971:1389–1429.
- St. Jean, Joseph, Jr. 1977. *Stromatoporella* Nicholson 1886 (fossil order Stromatoporoidea), problem of the type specimen of the type species, *Stromatoporella granulata* (Nicholson) 1873. *Bulletin of Zoological Nomenclature* 33:233–240.
- St. Jean, Joseph, Jr. 1986. Lower Middle Devonian Stromatoporoidea from Empire Beach, southern Ontario, Canada. *Journal of Paleontology* 60:1029–1055.
- Stafford, P. T. 1959. Geology of part of the Horsehoe Atoll in Scurry and Kent Counties, Texas. United States Geological Survey, Professional Paper 315-A:20 p.
- Stait, B. A., & C. F. Burrett. 1984. Ordovician nautiloid faunas of central and southern Thailand. *Geological Magazine* 122(1):115–124.
- Stanley, G. D., Jr. 1979. Paleoecology, structure and distribution of Triassic coral buildups in western North America. *The University of Kansas Paleontological Contributions Article* 65:1–58, 11 fig., 10 pl., 13 tables.
- Stanley, G. D., Jr. 1998. A Triassic sponge from Vancouver Island: Possible holdover from the Cambrian. *Canadian Journal of Earth Sciences* 35(9):1037–1043, 3 fig., 1 pl.
- Stanley, G. D., Jr. 2001a. Introduction to reef ecosystems and their evolution. In G. D. Stanley Jr., ed., *The History and Sedimentology of Ancient Reef Systems. Topics in Geobiology*, vol. 17. Kluwer Academic/Plenum Publishers. New York. p. 1–39.
- Stanley, G. D., Jr., ed. 2001b. *The History and Sedimentology of Ancient Reef Systems. Topics in Geobiology*, vol. 17. Kluwer Academic/Plenum Publishers. New York. 458 p.
- Stanley, G. D., Jr., C. Gonzalez-Leon, M. R. Sandy, Baba Senowbari-Daryan, & P. Doyle. 1994. Upper Triassic (Karnian-Norian) invertebrates from the Antimonio Formation, Sonora, Mexico. *Journal of Paleontology, Memoir* 30:1–33, 18 fig.
- Stanley, G. D., Jr., & Baba Senowbari-Daryan. 1999. Upper Triassic reef fauna from the Quesnel Terrane, central British Columbia, Canada. *Journal of Paleontology* 73(5):780–795, 7 fig.
- Stanley, S. M. 2006. Influence of seawater chemistry on biomineralization throughout Phanerozoic time: Paleontological and experimental evidence. *Palaeogeography, Palaeoclimatology, Palaeoecology* 232:214–236.
- Stanley, S. M., & L. A. Hardie. 1998. Secular variations in carbonate mineralogy of reef-building and sediment-producing organisms driven by tectonically forced shifts in seawater chemistry. *Palaeogeography, Palaeoclimatology, Palaeoecology* 144:3–19.
- Stanley, S. M., & L. A. Hardie. 1999. Hypercalcification: Paleontology links plate tectonics and geochemistry in sedimentology. *GSA Today* 9(2):1–7.
- Stanley, S. M., J. B. Reis, & L. A. Hardie. 2002. Low-magnesium calcite produced by coralline algae in seawater of Late Cretaceous composition. *Proceedings of the National Academy of Sciences of the United States of America* 99:15,323–15,326.
- Stanton, R. J., Jr., W. M. Connolly, & L. L. Lambert. 1994. Paleoecology of Upper Carboniferous *Chonetes*: Morphology, growth style, and spatial distribution. In P. Oekentorp-Küster, ed., *Proceedings of the VI International Symposium on Fossil Cnidaria and Porifera, Munster Cnidarian Symposium volume 2*. Courier Forschungsinstitut Senckenberg 172:365–372.
- Stearns, C. W. 1956. Stratigraphy and palaeontology of the Interlake Group and Stonewall Formation of southern Manitoba. *Geological Survey of Canada Memoir* 281:162 p.
- Stearns, C. W. 1961. Devonian stromatoporoids of the Canadian Rocky Mountains. *Journal of Paleontology* 35:932–948, 3 fig., pl. 105–107.
- Stearns, C. W. 1962. Stromatoporoid fauna of the Waterways Formation (Devonian) of northeastern Alberta. *Geological Survey of Canada Bulletin* 92:1–23.
- Stearns, C. W. 1963. Some stromatoporoids from the Beaverhill Lake Formation (Devonian) of the Swan Hills area, Alberta. *Journal of Paleontology* 37:651–668.
- Stearns, C. W. 1966. The microstructure of stromatoporoids. *Palaeontology* 9(1):74–124.
- Stearns, C. W. 1972. The relationship of the stromatoporoids to the sclerosponges. *Lethaia* 5:369–388, fig. 1–9.
- Stearns, C. W. 1975a. The stromatoporoid animal. *Lethaia* 8:89–100, 8 fig.
- Stearns, C. W. 1975b. Stromatoporoid assemblages, Ancient Wall reef complex (Devonian), Alberta. *Canadian Journal of Earth Sciences* 12:1631–1667, 9 fig., 5 pl., 2 tables.
- Stearns, C. W. 1977. Studies of stromatoporoids by scanning electron microscopy. *Bureau des Recherches Géologiques et Minières, Mémoire* 89:33–40.
- Stearns, C. W. 1979. Biostratigraphy of Devonian stromatoporoids. In M. R. House, C. T. Scrutton, & M. G. Bassett, eds., *The Devonian System. Palaeontological Association Special Papers in Palaeontology* 23:229–232.
- Stearns, C. W. 1980. Classification of the Paleozoic stromatoporoids. *Journal of Paleontology* 54:881–902, 5 fig.

- Stearn, C. W. 1982a. The unity of the Stromatoporoidea. Proceedings of the Third North American Paleontological Convention, vol. 2. Business and Economic Services. Toronto. p. 511–516, 1 fig.
- Stearn, C. W. 1982b. The shapes of Paleozoic and modern reef builders: A critical review. *Paleobiology* 8:228–241, 3 fig.
- Stearn, C. W. 1983a. Stromatoporoids from the Blue Fiord Formation (Lower Devonian), Arctic Canada. *Journal of Paleontology* 57:539–559, 6 fig.
- Stearn, C. W. 1983b. Stromatoporoids: Growth and form. In J. K. Rigby & C. W. Stearn, eds., *Sponges and spongiomorphs: Notes for a short course*. University of Tennessee Studies in Geology 7:141–148, 7 fig.
- Stearn, C. W. 1983c. Stromatoporoids: Classification, and Affinity with Modern Organisms. In J. K. Rigby & C. W. Stearn, eds., *Sponges and spongiomorphs: Notes for a short course*. University of Tennessee Studies in Geology 7:157–166, 5 fig.
- Stearn, C. W. 1984. Growth forms and macrostructural elements of the coralline sponges. In W. A. Oliver Jr., W. J. Sando, S. D. Cairns, A. G. Coates, I. G. McIntyre, F. M. Bayer, & J. E. Sorauf, eds., *Recent Advances in the Paleobiology and Geology of the Cnidaria*. Proceedings of the Fourth Symposium on Fossil Cnidaria (and Archaeocyathids and Stromatoporoids) held in Washington, D.C., USA, August 1983. *Palaeontographica Americana* 54:315–325.
- Stearn, C. W. 1986. Contemporary phases and the species problem in stromatoporoids. Abstract of Programs of the Geological Society of America 18:69.
- Stearn, C. W. 1987. Effect of the Frasnian-Famennian extinction event on the stromatoporoids. *Geology* 15:677–680.
- Stearn, C. W. 1989a. Intraspecific variability and species concepts in Paleozoic stromatoporoids. Proceedings of 5th International Symposium of Fossil Cnidaria, Brisbane. Memoir of the Association of Australasian Palaeontologists 8:45–60.
- Stearn, C. W. 1989b. Specks in the microstructure of Palaeozoic stromatoporoids. Proceedings of 5th International Symposium of Fossil Cnidaria, Brisbane. Memoir of the Association of Australasian Palaeontologists 8:143–148, 3 fig.
- Stearn, C. W. 1990. Stromatoporoids from the allochthonous reef facies of the Stuart Bay Formation (Lower Devonian), Bathurst Island, Arctic Canada. *Journal of Paleontology* 64(4):493–510, 8 fig.
- Stearn, C. W. 1991. A revision of *Anostylostroma*, *Atelodictyon*, and related genera (Paleozoic Stromatoporoidea). *Journal of Paleontology* 65(4):611–622, 6 fig.
- Stearn, C. W. 1992. *Petridiostroma*, a new name for *Petrostroma* Stearn, 1991, not *Petrostroma* Döderlein, 1892. *Journal of Paleontology* 66:531.
- Stearn, C. W. 1993. Revision of the order Stromatoporida. *Palaontology* 36:201–229.
- Stearn, C. W. 1995a. The type species of *Stictostroma* Parks, 1936 (Porifera, Stromatoporoidea). *Journal of Paleontology* 69:20–27.
- Stearn, C. W. 1995b. *Stictostroma* Parks, 1936 (Porifera, Stromatoporoidea): Proposed conservation and designation of *S. gorriense* Stearn, 1995, as the type species. *Bulletin of Zoological Nomenclature* 52:18–20.
- Stearn, C. W. 1996. Stromatoporoids from the Devonian (Eifelian to lowest Frasnian) of Manitoba, Canada. *Journal of Paleontology* 70:196–217.
- Stearn, C. W. 1997a. Biostratigraphy of the Devonian reef facies of western and arctic Canada based on stromatoporoids. *Boletin de la Real Sociedad Española de Historia Natural* 92:339–348.
- Stearn, C. W. 1997b. Stromatoporoid faunas. In B. S. Norford, ed., *Correlation chart and biostratigraphy of the Silurian rocks of Canada*. International Union of Geological Sciences, Subcommission on Silurian Stratigraphy, Publication 33:26–27.
- Stearn, C. W. 1997c. Intraspecific variation, diversity, revised systematics and type of the Devonian stromatoporoid, *Amphipora*. *Palaeontology* 40:833–854, 11 fig.
- Stearn, C. W. 1998. Easy access to doubtful taxonomic decisions. *Palaeontologia Electronica* 2(1):palaeo-electronica.org/1999_1/tax/issue1_99.htm.
- Stearn, C. W. 2001. Biostratigraphy of Devonian stromatoporoid faunas of Arctic and Western Canada. *Journal of Paleontology* 75:9–23.
- Stearn, C. W. 2010a. Part E, Revised, Volume 4, Chapter 6: Systematic descriptions of the class and order Uncertain: Family Disjectoporidae. *Treatise Online* 3:1–11, fig. 1–7.
- Stearn, C. W. 2010b. Part E, Revised, Volume 4, Chapter 9D: Microstructure and mineralogy of Paleozoic Stromatoporoidea. *Treatise Online* 6:1–25, fig. 1–15.
- Stearn, C. W. 2010c. Part E, Revised, Volume 4, Chapter 9E: Morphologic affinities of the Paleozoic Stromatoporoidea to other fossil and Recent groups. *Treatise Online* 7:1–9.
- Stearn, C. W. 2010d. Part E, Revised, Volume 4, Chapter 9F: Functional morphology of the Paleozoic stromatoporoid skeleton. *Treatise Online* 8:1–26, fig. 1–9.
- Stearn, C. W. 2010e. Part E, Revised, Volume 4, Chapter 11A: Diversity trends of the Paleozoic Stromatoporoidea. *Treatise Online* 9:1–5, 2 fig.
- Stearn, C. W. 2010f. Part E, Revised, Volume 4, Chapter 11B: Extinction patterns of the Paleozoic Stromatoporoidea. *Treatise Online* 10:1–17, 1 table.
- Stearn, C. W. 2010g. Part E, Revised, Volume 4, Chapter 15B: Classification of the Paleozoic Stromatoporoidea. *Treatise Online* 12:1–9.
- Stearn, C. W. 2011a. Part E, Revised, Volume 4, Chapter 9C: Internal morphology of the Paleozoic Stromatoporoidea. *Treatise Online* 18:1–37.
- Stearn, C. W. 2011b. Part E, Revised, Volume 4, Chapter 16E: Systematic descriptions of the Paleozoic Stromatoporoidea: Orders Stromatoporellida, Stromatoporida, Syringostromatida, Amphipora; and genera of uncertain ordinal and familial affinities. *Treatise Online* 19:1–61, 52 fig.
- Stearn, C. W., M. K. Halim-Dihardja, & D. K. Nishida. 1987. An oil-producing patch reef in the Famennian (Devonian) Wabamun Formation, Normandville Field, Alberta. *Palaios* 2:560–570.

- Stearn, C. W., & Claude Hubert. 1966. Silurian stromatoporoids of the Matapedia-Temiscouata area, Quebec. Canadian Journal of Earth Sciences 3:31–48, 2 fig., 5 pl., 1 table.
- Stearn, C. W., & A. J. Mah. 1987. Skeletal microstructure of Paleozoic stromatoporoids and its mineralogical implications. *Palaios* 2:76–84.
- Stearn, C. W., & P. N. Mehrotra. 1970. Lower and Middle Devonian stromatoporoids from northwestern Canada. Geological Survey of Canada Paper 70-13:43 p.
- Stearn, C. W., & J. W. Pickett. 1994. The stromatoporoid animal revisited: Building the skeleton. *Lethaia* 27:1–10, 9 fig.
- Stearn, C. W., & C. W. Stock. 2010. Part E, Revised, Volume 4, Chapter 5: A list of Upper Paleozoic-Mesozoic Stromatoporoid-like Genera, and excluded taxa. Treatise Online 2:1–8.
- Stearn, C. W., B. D. Webby, Heldur Nestor, & C. W. Stock. 1999. Revised classification and terminology of Paleozoic stromatoporoids. *Acta Palaeontologica Polonica* 44(1):1–70, 8 fig.
- Stechow, E. 1921. Neue Genera und Species von Hydrozoen und anderen Envertebraten. *Archiv für Naturgeschichte* (Abteilung A) 87:248–265.
- Steele-Petrovich, H. M. 2011. Replacement name for *Tetradium* Dana, 1846. *Journal of Paleontology* 85(4):802–803.
- Steiner, Alice [see also Alice Schnorf & Alice Schnorf-Steiner]. 1932. Contribution à l'étude des Stromatopores secondaires. *Bulletin des Laboratoire de Géologie, Géographie physique et de Mineralogie et de Paleontologie de l'Université de Lausanne* 50:1–117, pl. 1–14. [An article with the same author, date, and title was repeated in *Mémoires de la Société Vaudoise des Sciences naturelles*, Lausanne 4(26):105–221.]
- Steinmann, Gustav. 1878. Ueber fossile Hydrozoen aus der Familie der Coryniden. *Palaeontographica* 25:101–124, pl. 12–14.
- Steinmann, Gustav. 1882. Pharetronen-Studien. Neues Jahrbuch für Mineralogie und Paläontologie 2:139–191, pl. 6–9.
- Steinmann, Gustav. 1903. Nachtrag zur Fauna Stramberg. II. *Milleporidium*, eine neue Hydrocoralline. Beiträge zur Paläontologie und Geologie Österreich-Ungarns und des Orients 15:1–8, pl. 1–2.
- Stel, J. H. 1976. Paleozoic hard substrate trace fossils *Helicosalpinx*, *Chaetosalpinx*, and *Torquaysalpinx*. Neues Jahrbuch Geologie und Paläontologie Mitteilung 12:726–744.
- Stemmerik, Lars. 1989. Chaetetid bioherm, Upper Carboniferous, Holm Land, eastern North Greenland. In H. H. J. Geldsetzer, N. P. James, & G. E. Tebbutt, eds., Reefs: Canada and adjacent areas. Canadian Society of Petroleum Geologists Memoir 13:688–689, 4 fig.
- Stepanova, M. V. 1986. Zavisimost' sistematicheskogo sastava vodoroslevykh soobchestv ot fatsial'nykh obstanovok na primere stratotipicheskogo razreza nizhnego kembriya Sibirskoy platformy [Dependency of the taxonomic composition of algal communities on facies environments on the example of the Lower Cambrian stratotype section of the Siberian Platform]. In V. D. Krasnov, ed., Paleoekologicheskiy i Litologo-Fatsial'nyy Analyz dlya Obosnovaniya Detal'nosti Regional'nykh Stratigraficheskikh Skhem [Paleoecological and Lithological-Facies Analyses as Grounds for Scrutiny of Regional Stratigraphic Charts]. Sibirskiy Nauchno-Issledovatel'skiy Institut Geologii, Geofiziki i Mineral'nogo Syr'ya. Novosibirsk. p. 22–30, 1 table.
- Stigall Rode, A. L., & B. S. Lieberman. 2005. Using environmental niche modeling to study the Late Devonian biodiversity crisis. In D. J. Over, J. R. Morrow, & P. B. Wignall, eds., Understanding Late Devonian and Permian-Triassic Biotic and Climatic Events: Towards an Integrated Approach. Elsevier B. V. Amsterdam. p. 93–125.
- Stock, C. W. 1979. Upper Silurian (Pridoli) Stromatoporoidea of New York. *Bulletins of American Paleontology* 76(308):289–389, 10 fig., pl. 49–56, 6 tables.
- Stock, C. W. 1981. *Cleifdenella alaskaensis* n. sp. (Stromatoporoidea) from the Middle/Upper Ordovician of Alaska. *Journal of Paleontology* 55(5):998–1005, 1 fig., 1 pl.
- Stock, C. W. 1982. Upper Devonian (Frasnian) Stromatoporoidea of north-central Iowa: Mason City Member of the Shell Rock Formation. *Journal of Paleontology* 56:654–679.
- Stock, C. W. 1983. Stromatoporoids: Geological History. In T. W. Broadhead, ed., Sponges and Spongiomorphs: Notes for a short course. University of Tennessee, Department of Geological Sciences, Studies in Geology 7:167–172.
- Stock, C. W. 1989. Microreticulate microstructure in the Stromatoporoidea. Proceedings of 5th International Symposium of Fossil Cnidaria, Brisbane. Association of Australasian Palaeontologists Memoir 8:149–155.
- Stock, C. W. 1990. Biogeography of the Devonian stromatoporoids. In W. S. McKerrow & C. R. Scotese, eds., Paleozoic paleogeography and biogeography. Memoir of the Geological Society of London 12:257–265.
- Stock, C. W. 1991. Lower Devonian (Lochkovian) Stromatoporoidea from the Manlius Formation of New York. *Journal of Paleontology* 65:897–911.
- Stock, C. W. 1994. Origin, evolution, and classification of the stromatoporoid order Actinostromatida. *Courier Forschungsinstitut Senckenberg* 172:355–363, 5 fig.
- Stock, C. W. 1995. Paleobiogeographical range of North American Devonian stromatoporoids: the roles of global and regional controls. In M. J. Comas-Rengifo, A. Perejón, S. Rodriguez, & W. J. Sando, eds., Seventh International Symposium on Fossil Cnidaria and Porifera, Abstracts volume. Madrid, Spain. p. 89.
- Stock, C. W. 1997a. Lower Devonian (Lochkovian) Stromatoporoidea from the Coeymans Formation of central New York. *Journal of Paleontology* 71:539–553, 6 fig., 13 tables.
- Stock, C. W. 1997b. Paleobiogeographical range of North American Devonian stromatoporoids: Roles of global and regional controls. In A. Perejón & M.

- J. Comas-Rengifo, eds., Proceedings of the VII International Symposium on Fossil Cnidaria and Porifera held in Madrid, Spain, 1995, vol. II. Boletín de la Real Sociedad Española de Historia Natural, Sección Geológica 92:281–288, 8 fig.
- Stock, C. W. 2001. Stromatoporoidea, 1926–2000. *Journal of Paleontology* 75:1079–1089, 5 fig.
- Stock, C. W. 2005. Devonian stromatoporoid origins, extinctions and paleobiogeography: How they relate to the Frasnian-Famennian extinction. In D. J. Over, J. R. Morrow, & P. B. Wignall, eds., Understanding Late Devonian and Permian-Triassic Biotic and Climatic Events: Towards an Integrated Approach. Elsevier, B.V. Amsterdam. p. 71–92.
- Stock, Carl W. 2012. Part E, Revised, Volume 4, Chapter 16D: Actinostromatida. Treatise Online 42:1–12, 10 fig.
- Stock, C. W., & D. J. Benson. 1982. Occurrence and distribution of fossils within and adjacent to Middle Ordovician bioherms in the southern Appalachians of Alabama. Third North American Paleontological Convention Proceedings 2:517–524.
- Stock, C. W., & J. A. Burry-Stock. 1998. Two new genera of Upper Silurian actinostromatid stromatoporoids. *Journal of Paleontology* 72:190–201.
- Stock, C. W., & J. A. Burry-Stock. 2001. A multivariate analysis of two contemporaneous species of the stromatoporoid *Habrostroma* from the Lower Devonian of New York, U.S.A. *Bulletin of Tohoku University Museum* 1:279–284.
- Stock, C. W., & J. A. Burry-Stock. 2003. Originations and extinctions of stromatoporoid genera and their role in the Frasnian-Famennian extinction. Geological Society of America, Abstracts with Programs 35(6):385.
- Stock, C. W., & A. E. Holmes. 1986. Upper Silurian/Lower Devonian Stromatoporoidea from the Keyser Formation at Mustoe, Highland County, West-Central Virginia. *Journal of Paleontology* 60:555–580, 3 fig., 4 pl., 4 tables.
- Stock, C. W., Joseph St. Jean, R. A. Wood, & L. J. Otte. 1992. Annotated checklist of post-Devonian “stromatoporoid” genera and their type species. *Fossil Cnidaria and Porifera Newsletter* 21(1.2):22 p.
- Stock, C. W., Heldur Nestor, & B. D. Webby. 2012. Part E, Revised, Volume 4, Chapter 14: Paleobiogeography of the Paleozoic Stromatoporoidea. Treatise Online 34:1–44, 6 fig., 10 tables.
- Stone, Phillip, M. R. A. Thomson, A. W. A. Rushton. 2012. An Early Cambrian archaeocyath-triblobite fauna in limestone erratics from the Upper Carboniferous Fitzroy Tillite Formation, Falkland Islands. *Earth and Environmental Science Transactions of the Royal Society of Edinburgh* 102:201–225, 10 fig., 2 tables.
- Storey, B. C. 1993. The changing face of late Precambrian and early Palaeozoic reconstructions. *Journal of the Geological Society, London* 150:665–668, 3 fig.
- Stouder, R. E. 1938. Chester rocks of Meade, Hardin, and Breckenridge counties, Kentucky. American Association of Petroleum Geologists Bulletin 22:267–284.
- Stouge, Svende, W. D. Boyce, J. L. Christiansen, D. A. T. Harper, & Ian Knight. 2002. Lower-Middle Ordovician stratigraphy of North-East Greenland. *Geological Survey of Greenland, Bulletin* 191:117–125, 6 fig.
- Strand, Embrik. 1928a [1926a]. Miscellanea nomenclatorica zoologica et palaeontologica. *Achiv für Naturgeschichte (Abteilung A)* 92:1–8.
- Strand, Embrik. 1928b [1926b]. Miscellanea nomenclatorica zoologica et palaeontologica I–II. *Achiv für Naturgeschichte (Abteilung A)* 92(8):30–75.
- Strel, Maurice, M. V. Caputo, Stanislas Leboziak, & J. H. G. Melo. 2000. Late Frasnian-Famennian climates based on palynomorph analyses and the question of the late Devonian glaciations. *Earth Science Reviews* 52:121–173.
- Struve, Alfred. 1898. Ein Beitrag zur Kenntnis des festen Gerüsts der Steinkorallen. *Russisch-Kaiserliche Mineralogische Gesellschaft zu St. Petersburg Verhandlungen* (series 2) 35:43–115.
- Stuckenbergs, A. A. 1895. Korally i Mshanki kamennouglonykh otlozhennii Urala i Timana [Corals and bryozoans of the Carboniferous sediments of Ural and Timan]. *Geologicheskogo Komiteta Trudy [Geological Committee Transactions]* 10(23):178 p. In Russian with German summary, p. 179–244.
- Stumm, E. C. 1938. Upper Middle Devonian rugose corals of the Nevada Limestone. *Journal of Paleontology* 12:478–485, pl. 58–59.
- Suchy, D. R., & R. R. West. 1988. A Pennsylvanian cryptic community associated with laminar chaetetid colonies. *Palaeos* 3:404–412.
- Suchy, D. R., & R. R. West. 2001. Chaetetid buildups in a Westphalian (Desmoinesian) cyclothem in southeastern Kansas. *Palaeos* 16:425–443.
- Sugiyama, Toshio. 1939. Geological and geographical distribution of stromatoporoids in Japan, with notes on some interesting forms. *Yabe Jubilee Publication* 2:427–457, 3 pl., 1 table.
- Sugiyama, Toshio. 1940. Stratigraphical and Paleontological Studies of the Gotlandian Deposits of the Kitakami Mountainland. *Tohoku Imperial University Scientific Reports (Series 2, Geology)* 21:81–146, 6 fig., 21 pl.
- Sugiyama, Toshio, & Koichi Nagai. 1990. Growth forms of auloporidae corals in the Akiyoshi Limestone group, southwest Japan. *Bulletin of the Akiyoshi-dai Museum of Natural History* 25:7–25. In Japanese with English abstract.
- Sugiyama, Toshio, & Koichi Nagai. 1994. Reef facies and paleoecology of reef-building corals in the lower part of the Akiyoshi Limestone Group (Carboniferous), southwest Japan. In P. Oekentorp-Küster, ed., *Proceedings of the VI International Symposium on Fossil Cnidaria and Porifera, Munster Cnidarian Symposium volume 2*. Courier Forschungsinstut Senckenberg 172:231–240.
- Sukhov, S. S. 1997. Cambrian depositional history of the Siberian craton: Evolution of the carbonate platforms and basins. *Sedimentary Facies and Palaeogeography* 17:27–39, 4 fig.
- Sundukov, V. M. 1983. Novye arkheotsiatiy iz nizhnego kembriya Leny i Kotuya [New archaeocyaths

- from the Lower Cambrian of the Lena and Kotuy]. *Paleontologicheskiy Zhurnal* 1983(4):13–17, 1 pl.
- Sundukov, V. M. 1984. Novye vidy arkheotsiat nizhnego kembriya yugo-vostoka Sibirs'koy Platformy [New archaeocyath species from the Lower Cambrian of the southeastern Siberian Platform]. In V. S. Surkov, ed., *Novye Vidы Drevnikh Bespozvonochnykh i Rasteniy Neftegazonosnykh Provintsiy Sibiri* [New Species of Ancient Invertebrates and Plants of the Oil and Gas Provinces of Siberia]. Sibirs'kiy Nauchno-Issledovatel'skiy Institut Geologii, Geofiziki i Mineral'nogo Syr'ya. Novosibirsk. p. 10–15, pl. 2–3.
- Sundukov, V. M., & A. Yu. Zhuravlev. 1989. Pervaya nakhodka kribritsiat v nizhnem kembrii Sibirs'koy platformy [First find of crinoids in the Lower Cambrian of the Siberian Platform]. *Paleontologicheskiy Zhurnal* 1989(3):101–102, 1 fig.
- Surge, D. M., Michael Savarese, J. R. Dodd, & K. C. Lohmann. 1997. Carbon isotopic evidence for photosynthesis in Early Cambrian oceans. *Geology* 25:503–506, 3 fig.
- Sutherland, P. K. 1984. *Chaetetes* reefs of exceptional size in Marble Falls Limestone (Pennsylvanian), central Texas. *Palaeontographica Americana* 54:543–547.
- Swan, A. R. H., & Stephen Kershaw. 1994. A computer model for skeletal growth of stromatoporoids. *Palaeontology* 37(2):409–423.
- Swart, P. K. 1983. Carbon and oxygen fractionation in scleractinian corals: A review. *Earth Science Reviews* 19:51–80.
- Swart, P. K., Michael Moore, Chris Charles, & Florian Böhm. 1998. Sclerosponges may hold new keys to marine paleoclimates. *EOS, Transactions of the American Geophysical Union* 79, issue 52:633–636.
- Swart, P. K., & G. D. Stanley. 1989. Intraskelatal variations in the carbon and oxygen isotopic composition of a late Triassic coral *Toechastraea major*: Implications for the development of symbiotic associations in scleractinian corals. *Geological Society of America Abstracts with Programs* 12:A111.
- Talent, J. A. 1988. Organic reef-building: Episodes of extinction and symbiosis? *Senckenbergiana Lethaea* 69:315–368, 1 fig.
- Tapanila, L. M. 2005. Palaeoecology and diversity of endosymbionts in Palaeozoic marine invertebrates: Trace fossil evidence. *Lethaia* 38:89–99.
- Tapanila, L. M. 2006. Devonian *Entobia* borings from Nevada with a revision of *Topsentopsis*. *Journal of Paleontology* 80(4):760–767.
- Tapanila, L. M., & Paul Copper. 2002. Endolithic fossils in Ordovician-Silurian corals and stromatoporoids. *Acta Geologica Hispanica* 37:15–20.
- Tapanila, L. M., Paul Copper, & Evan Edinger. 2004. Environmental and substrate controls on Paleozoic bioerosion in corals and stromatoporoids, Anticosti Island, eastern Canada. *Palaios* 19:292–306.
- Tapanila, L. M., & A. A. Ekdale. 2004. Impact of an impact: Benthic recovery immediately following the late Devonian Alamo Event. *Geological Society of America, Abstracts with Programs* 36(5):313.
- Tapanila, L. M., & L. S. Holman. 2006. Endosymbiosis in Ordovician and Silurian corals and stromatoporoids: A new lingulid and its trace from eastern Canada. *Journal of Paleontology* 80(4):750–754.
- Tate, Ralph. 1892. The Cambrian fossils of South Australia. Royal Society of South Australia, *Transactions* 15:183–189, pl. 2.
- Taylor, P. D., & M. A. Wilson. 2003. Palaeoecology and evolution of marine hard substrate communities. *Earth-Science Reviews* 62:1–103.
- Taylor, T. G. 1910. The Archaeocyathinae from the Cambrian of South Australia with an account of the morphology and affinities of the whole class. Royal Society of South Australia, *Memoirs* 2:55–188, 51 fig., 16 pl., chart.
- Tchechmedjieva, V. L. 1986. Paléoécologie des Madréporaires du Crétacé supérieur dans le Srednogorié de l'Ouest (Bulgarie occidentale). *Geologica Balcanica* 16(5):55–81.
- Tchuvaschov, B. I. 1973. Morfologiya, ekologiya i sistematicheskoye polozheniye roda *Palaeoaplysina* [Morphology, ecology and systematic position of the genus *Palaeoaplysina*]. *Paleontologicheskiy Zhurnal* 1973(4):3–8.
- Termier, Geneviève, Henri Termier, & Miguel Ramalho. 1985. Spongifaunas du Jurassique supérieur du Portugal. *Comunicações dos Serviços Geológicos de Portugal* 7:197–222, 10 fig., pl. 1–10.
- Termier, Geneviève, Henri Termier, & Daniel Vachard. 1977. Etude comparative de quelques ischyrosponges. *Géologie Méditerranéenne* 4:139–179.
- Termier, Henri, & Geneviève Termier. 1950. Paléontologie marocaine. Invertébrés de l'Ere Primaire (foraminifères, spongaires, coelenterés). Service des Mines et de Carte Géologique du Maroc, Notes et Mémoires 73(2, fascicule 1):218 p., 51 pl.
- Termier, Henri, & Geneviève Termier. 1955. Contribution à l'étude des Spongaires permien du Djebel Tebaga (Extrême Sud Tunisien). *Bulletin de la Société Géologique de France (series 6)* 5:613–630, 10 fig.
- Termier, Henri, & Geneviève Termier. 1973. Stromatoporées, sclérosponges et Pharétrones: Les Ischyrospongia. *Annales des Mines et la Géologie*, Tunis 26:285–297, 1 fig., 3 pl.
- Termier, Henri, & Geneviève Termier. 1974. Spongaires permiens du Djebel Tebaga (Sud Tunisien). *Comptes Rendus Hebdomadaires de l'Académie des Sciences, Paris (series D)* 279:247–249.
- Termier, Henri, & Geneviève Termier. 1976. Spongaires hypercalcifiés et ectoproctes sténolèmes fossiles. *Comptes Rendus de l'Académie des Sciences de Paris (series D)* 282:1269–1272.
- Termier, Henri, & Geneviève Termier. 1977a. Spongia. In Henri Termier, Geneviève Termier, & Daniel Vachard, eds., *Monographie Paléontologique des affleurements Permien du Djebel Tebaga (Sud Tunisien). Palaeontographica (Abteilung A)* 156:25–46.
- Termier, Henri, & Geneviève Termier. 1977b. Structure et évolution des spongaires hypercalcifiés du

- Paleozoique Supérieur. Mémoires de l'Institut Géologique de l'Université de Louvain 29:57–109, 30 fig., 10 pl.
- Termier, Henri, & Geneviève Termier. 1980. Stromatopores, Trépostomes et Tabulatomorphs du Paléozoïque d'Afrique du Nord, rapports avec les Isschyrosponges. Annales Paléontologie des Invertébrés 66(1):1–20.
- Termier, Henri, & Geneviève Termier. 1984. Les Hydroïdes sphériques et *Parkeria sphaerica* Carter, fossile marqueur de la limite Albien/Cénomanien. Annales de Paléontologie (vertébrés–invertébrés) 70:227–246.
- Termier, Henri, & Geneviève Termier. 1985a. Spongaires du Santonien-Campanien de l'Autoroute A10 (France). Cretaceous Research 6:143–155, 8 fig.
- Termier, Henri, & Geneviève Termier. 1985b. Les Spongaires du Crétacé Normand. 1ère Partie, Généralités sur les Spongaires et Isschyrosponges. Bulletin Trimestriel de la Société Géologique de Normandie et des Amis du Muséum du Havre 72(3):8–89, 10 fig., 20 pl.
- Termier, Henri, Geneviève Termier, & Miguel Ramalho. 1985. Sur le Spongifaunes de l'Oxfordien supérieur et du Kimmeridgien du Portugal: Description du Neuroporidé *Periomipora elegantissima* nov. Comptes Rendus des Séances de l'Académie des Sciences, Paris (série 2) 300:975–980.
- Termier, Henri, Geneviève Termier, & Daniel Vachard. 1977. Monographie paléontologique des affleurements permiens du Djebel Tebaga (sud Tunisiens). Palaeontographica (Abteilung A) 156(1–3):109 p., 52 fig., 18 pl.
- Tesakov, Yu. I. 1960. O sistematiceskom polozhenii roda *Desmidopora* Nicholson [On the systematic position of *Desmidopora* Nicholson]. Paleontologicheskiy Zhurnal 1960(4):48–53.
- Tesakov, Yu. I., N. I. Predtechenskii, L. S. Bazarova, A. A. Berger, K. N. Volkova, Y. A. Yolkina, N. M. Zaslavskaya, M. M. Ignatovich, N. I. Kurushin, Y. Y. Latypov, T. V. Lopushinskaya, T. V. Mashkova, A. M. Obut, N. V. Sennikov, G. A. Stukalina, V. G. Khromych, & L. I. Sheshogova. 1980. Silur Sibirskoi Platformy. Opornye razrezy severo-zapada Sibirskoi platformy [Silurian of Siberian Platform. Reference sections of northwestern Siberian Platform]. Akademii Nauk SSSR, Sibirske Otdelenie, Institut Geologii i Geofiziki, Trudy 446:150 p., 26 fig., 33 pl., 2 tables.
- Tesakov, Yu. I., N. I. Predtechenskii, A. A. Berger, V. G. Khromych, L. S. Bazarova, O. K. Bogolepova, K. N. Volkova, M. M. Ignatovich, N. I. Kurushin, Y. Y. Latypov, T. V. Lopushinskaya, T. V. Mashkova, L. I. Sheshogova, A. P. Gubanov, E. A. Yolkina, N. M. Zaslavskaya, V. N. Zinchenko, E. O. Kovalevskaia, G. D. Kulik, T. A. Moskalenko, A. M. Obut, V. S. Pevener, N. V. Sennikov, & G. A. Stukalina. 1985. Opornyi razrez reki Moiero silura Sibirskoi platformy [Reference section of the Moiero River, Silurian of the Siberian Platform]. Akademii Nauk SSSR, Sibirske Otdelenie, Institut Geologii i Geofiziki, Trudy 629:174 p., 32 fig., 12 pl.
- Thayer, C. W. 1975. Morphologic adaptation of benthic invertebrates to soft substrate. Journal of Marine Research 33:117–189.
- Theokritoff, G. 1982. Correlation of the *Elliptocephala asaphoides* fauna of eastern New York. Northeastern Geology 4:131–133, 2 fig.
- Thomas, W. A., & R. A. Astini. 1996. The Argentine Precordillera: A traveler from the Ouachita Embayment of North American Laurentia. Science 273:752–757, 3 fig.
- Ting T. H. 1937. Revision der Archaeocyathinen. Neues Jahrbuch für Geologie, Mineralogie und Paläontologie (Abteilung B) 78:327–379, 12 fig., pl. 9–14.
- Tobin, K. J., & K. R. Walker. 1998. Diagenetic calcite from the Chazy Group (Vermont): An example of aragonite alteration in a greenhouse ocean. Sedimentary Geology 121:277–288.
- Toll, Eduard von. 1899. Beiträge zur Kenntniss des sibirischen Cambrium. I. Académie Impériale des Sciences, St. Pétersbourg, Mémoires (série 8, Classe Physico-Mathématique) 8(10):1–57, 9 fig., 8 pl., 3 tables.
- Toomes, R. F. 1887. On two species of Palaeozoic Madreporaria hitherto not recognised as British. Geological Magazine (new series, decade 3) 4:98–100, 2 fig.
- Toomey, D. F. 1970. An unhurried look at a Lower Ordovician mound horizon, southern Franklin Mountains, west Texas. Journal of Sedimentary Petrology 40:1318–1334, 15 fig., 2 tables.
- Toomey, D. F. 1979. Role of archaeolithophyllid algae within a late Carboniferous algal-sponge community, southwestern United States. Bulletin, Centres de Recherches Exploration-Production Elf-Aquitaine 3(2):843–853, 4 fig., 2 pl.
- Toomey, D. F., & J. A. Babcock. 1983. Precambrian and Paleozoic Algal Carbonates, West Texas–Southern New Mexico and fieldguide. Professional Contributions, number 11. Colorado School of Mines Press. Golden, Colorado. xiii + 345 p., 150 fig.
- Toomey, D. F., & W. E. Ham. 1967. *Pulchrilamina*, a new mound-building organism from Lower Ordovician rocks of west Texas and southern Oklahoma. Journal of Paleontology 41:981–987, 2 fig., pl. 127–128.
- Toomey, D. F., & J. H. Johnson. 1968. *Ungardella americana*, a new red alga from the Pennsylvanian of southeastern New Mexico. Journal of Paleontology 42(2):556–600, pl. 75–76.
- Toomey, D. F., & M. H. Nitecki. 1979. Organic buildups in the Lower Ordovician (Canadian) of Texas and Oklahoma. Fieldiana Geology (new series) 2:i–xvi, p. 1–181, 85 fig.
- Toomey, D. F., & H. D. Winland. 1973. Rock and biotic facies associated with Middle Pennsylvanian (Desmoinesian) algal buildup, Nena Lucia Field, Nolan County, Texas. American Association of Petroleum Geologists Bulletin 57:1053–1074.
- Topsent, Émile. 1894. Une réforme dans la classification des Halichondrina. Mémoires de la Société zoologique de France 7:5–26.

- Topsent, Émile. 1898. Introduction à l'étude monographique des Monaxonides de France, Classification des Hadromerina. Archives de Zoologie expérimentale et générale 4(3):91–113.
- Topsent, Émile. 1928. Spongaires de l'Atlantique et de la Méditerranée provenant des croisières du Prince Albert 1er de Monaco. Résultats des Campagnes Scientifiques du Prince Albert 1er de Monaco 74:1–376, pl. i–xi.
- Tornquist, A. 1900. Beiträge zur Geologie und Paläontologie der Umgebung von Recoaro und Schio, IV: Der Sturia-kalk. Zeitschrift de Deutschen Geologischen Gesellschaft 52:118–153, pl. I–IV.
- Tornquist, A. 1901. Über mesozoische Stromatoporiden. Sitzungsberichte der Königlich Preussischen Akademie der Wissenschaften zu Berlin, Jahrgang 1901:1115–1123.
- Torsvik, T. H., & L. R. M. Cocks. 2009. The Lower Palaeozoic palaeogeographical evolution of the northern and eastern peri-Gondwanan margin from Turkey to New Zealand. Geological Society of London, Special Publication 325:3–21.
- Torsvik, T. H., & L. R. M. Cocks. 2013a. Gondwana from top to base in space and time. *Gondwana Research* 24:999–1030, fig. 1–21.
- Torsvik, T. H., & L. R. M. Cocks. 2013b. New global palaeogeographical reconstructions for the Early palaeozoic and their generation (Chapter 2). In D. A. T. Harper & T. Servais, eds. Early Palaeozoic Biogeography and Palaeogeography. Geological Society, London, Memoir 38:5–24, fig. 2.1–2.21.
- Torsvik, T. H., M. A. Smethurst, J. G. Meert, Rob van der Voo, W. S. McKerrow, M. D. Brasier, B. A. Sturt, & H. J. Walderhaug. 1996. Continental break-up and collision in the Neoproterozoic and Palaeozoic: A tale of Baltica and Laurentia. *Earth-Science Reviews* 40:229–258, 16 fig., 2 tables.
- Trace, R. D., & P. McGrain. 1985. The *Chaetetella* zone in the Kinkaid Limestone (Mississippian): A useful stratigraphic marker along the southern rim of the Eastern Interior (Illinois) Basin. Kentucky Geological Survey Information Circular (series 11) 14:9 p., 4 fig.
- Tripp, K. 1929. Untersuchungen über den Skelettbau von Hydractinien zu einer vergleichenden Betrachtung der Stromatoporen. *Neues Jahrbuch Mineralogie, Geologie und Paläontologie, Beilegung B*62:467–508.
- Tripp, K. 1932. Die Baupläne der Stromatoporen. *Paläontologische Zeitschrift* 14:277–292.
- Tsegelnjuk, P. D., V. P. Gritsenko, L. I. Konstantinenko, A. A. Ischenko, A. F. Abushik, O. V. Bogoyavlenskaya, D. M. Drygant, V. S. Zaika-Novatsky, N. M. Kadlets, G. N. Kiselev, & V. A. Sytova. 1983. The Silurian of Podolia: The Guide to Excursion. Naukova Dumka. Kiev. 222 p., 35 fig., 64 tables.
- Tsien, H. H. 1974. Paleoecology of Middle Devonian and Frasnian in Belgium. In J. Bouckaert & M. Streel, eds., International Symposium on Belgian Micropalaeontological Limits, Namur. Publications of the Geological Survey of Belgium 12:1–53.
- Turnšek, Dragica. 1966. Zgornjejurska hidrozojska favna iz južne Slovenije [Upper Jurassic hydrozoan fauna from southern Slovenia]. Slovenska Akademija Znanosti in Umetnosti, Razprave 9:335–428, pl. 1–19.
- Turnšek, Dragica. 1968. Hidrozoji in korale iz jurskih in krednih skladov v jugozahodni Jugoslaviji [Some hydrozoans and corals from Jurassic and Cretaceous strata of southern Yugoslavia]. Slovenska Akademija Znanosti in Umetnosti, Razprave 11:351–376, pl. 1–9.
- Turnšek, Dragica. 1970. Kredni hidrozoji z Zlatibora v zahodni Srbiji [Cretaceous Hydrozoa from the Zlatibor Mountain in western Serbia]. Slovenska Akademija Znanosti in Umetnosti, Razprave 13:193–208, pl. 1–11.
- Turnšek, Dragica, S. Buser, & B. Ogorelec. 1987. Upper Carnian reef limestone in clastic beds at Perbla near Tolmin (NW Yugoslavia). Razprave Slovenska Akademija Znanosti in Umetnosti, IV Razred za Prirodoslovne Vede 27(3):37–64, 5 fig., 16 pl.
- Turnšek, Dragica, & J. P. Masse. 1973. The Lower Cretaceous Hydrozoa and Chaetetidae from Provence (south-eastern France). Razprave Slovenska Akademija Znanosti in Umetnosti, Razred za Prirodoslovne in Medicinske Vede, Dissertationes 16(6):217–244.
- Twitchell, G. B. 1928–1929. The structure and relationship of the true stromatoporoids. *American Midland Naturalist* 11 (6/7):270–306, 2 fig., pl. 18–26.
- Twitchett, R. J. 2006. The palaeoclimatology, palaeoecology and palaeoenvironmental analysis of mass extinction events. *Palaeogeography, Palaeoclimatology, Palaeoecology* 232(2–4):190–213.
- Uriz, María-J., Xavier Turon, & Mikel A. Becerro. 2003. Silica Deposition in demosponges. In W. E. G. Müller, ed., Silicon Biomineralization: Biology—Biochemistry—Molecular Biology—Biotechnology. Progress in Molecular and Subcellular Biology Series, vol. 33. p. 163–193.
- Uriz, María-J., Xavier Turon, Mikel A. Becerro, & Gemma Agell. 2003. Siliceous spicules and skeleton frameworks in sponges: Origin, diversity, ultrastructural patterns, and biological functions. *Microscopy Research and Technique* 62:279–299.
- Uyeno, T. T. 1974. Conodonts of the Waterways Formation (Upper Devonian) northeastern and central Alberta. *Geological Survey of Canada Bulletin* 232:1–93.
- Uyeno, T. T. 1990. Biostratigraphy and conodont faunas of Upper Ordovician through Middle Devonian rocks, eastern Arctic Archipelago. *Geological Survey of Canada Bulletin* 401:1–211.
- Uyeno, T. T. 1991. Pre-Famennian Devonian conodont biostratigraphy of selected intervals in the eastern Canadian Cordillera. In M. J. Orchard & A. D. McCracken, eds., Ordovician to Triassic conodont paleontology of the Canadian Cordillera. *Geological Survey of Canada Bulletin* 417:129–161.
- Uyeno, T. T., & G. Klapper. 1980. Summary of conodont biostratigraphy of the Blue Fiord and Bird Fiord formations (Lower-Middle Devonian) at the type and adjacent areas, southeastern Ellesmere Island, Canadian Arctic Archipelago. *Current Research, Part C, Geological Survey of Canada Paper* 80-1C:81–93.

- Vacelet, Jean. 1964. Étude monographique de l'éponge calcaire pharétronide de Méditerranée, *Petrobiona massiliiana* Vacelet et Levi: Les pharétronides actuelles et fossiles. Recueil des travaux de la Station Marine d'Endoume 34(50):1–125, 158 fig., 3 pl.
- Vacelet, Jean. 1967a. Descriptions d'éponges Pharétronides actuelles des tunnels obscurs sous-réciaux de Tuléar (Madagascar). Recueil des travaux de la Station Marine d'Endoume supplément 6:37–62.
- Vacelet, Jean. 1967b. Quelques Eponges Pharétronides et "Silico-calcaires" des grottes sous-marines obscures. Recueil des travaux de la Station Marine d'Endoume 42:121–132.
- Vacelet, Jean. 1970. Les Éponges Pharétronides actuelles. In W. G. Fry, ed., *The Biology of the Porifera*. Symposia of the Zoological Society of London, vol. 25. Academic Press. London. p. 189–204.
- Vacelet, Jean. 1975. Etude en microscopie électronique de l'association entre bactéries et spongiaires du genre *Verongia* (Dicyoceratida). Journal de Microscopie et de Biologie Cellulaire 23:271–288, 7 pl.
- Vacelet, Jean. 1977a. Eponges Pharétronides actuelles et Sclérosponges de Polynésie Française, Madagascar et de La Réunion. Bulletin du Muséum National d'Histoire Naturelle, Paris 44:345–366.
- Vacelet, Jean. 1977b. Une nouvelle relique du Secondaire: Un représentant actuel des Eponges fossiles Sphinctozoaires. Compte Rendu Hebdomadaire des Séances de l'Académie des Sciences (D) 285:509–511.
- Vacelet, Jean. 1979a. Quelques stades de la reproduction sexuée d'une éponge sphinctozoaire actuelle. In C. Lévi & N. Boury-Esnault, eds., *Biologie des Spongiaires*, Colloques Internationaux du C.N.R.S 291:95–101.
- Vacelet, Jean. 1979b. Description et affinités d'une éponge sphinctozoaire actuelle. In C. Lévi & N. Boury-Esnault, eds., *Biologie des Spongiaires*, Colloques Internationaux du C.N.R.S 291:483–493, 20 fig.
- Vacelet, Jean. 1980a. Squelette calcaire facultatif et corps de régénération dans le genre *Merlia*, éponges apparentées aux Chaetididae fossiles. Comptes Rendus Hebdomadaire des Séances de l'Académie des Sciences (series D) 290:227–230.
- Vacelet, Jean. 1980b. Les affinités du peuplement de Spongiaires de la Méditerranée. Journées d'études sur la systématique évolutive et la biogéographie en Méditerranée: Cagliari, 13 & 14 Octobre 1980. International Commission for the Scientific Exploration of the Mediterranean Sea. Monaco. p. 29–30.
- Vacelet, Jean. 1981. Éponges hypercalcifiées ("pharétronides," "sclerosponges") des cavités des récifs coralliens de Nouvelle-Calédonie. Bulletin du Muséum National d'Histoire Naturelle (Paris) Zoologie, Biologie et Ecologie Animales 3(2):313–351, 22 fig.
- Vacelet, Jean. 1983. Les éponges calcifiées et les récifs anciens. Pour la Science 68:14–22, 7 fig.
- Vacelet, Jean. 1984. Les éponges dans les récifs actuels et fossiles. Oceanis 10:99–110.
- Vacelet, Jean. 1985. Coralline sponges and the evolution of the Porifera. In S. Conway Morris, J. D. George, R. Gibson, & H. M. Platt, eds., *The Origins and Relationships of the Lower Invertebrates*. Systematics Association Special Publication 28. Oxford University Press. Clarendon. p. 1–13, 2 fig., 2 tables.
- Vacelet, Jean. 1988. Indications de profondeur données par les spongiaires dans les milieux benthiques actuels. Géologie Méditerranéenne 15:13–26.
- Vacelet, Jean. 1990. Storage cells of calcified relict sponges. In K. Rützler, ed., *New Perspectives in Sponges*. Smithsonian Institution Press. Washington, D.C. p. 144–152.
- Vacelet, Jean. 1991. Recent Calcarea with a reinforced skeleton ("pharétronids"). In Joachim Reitner & Helmut Keupp, eds., *Fossil and Recent Sponges*. Springer-Verlag. Berlin & Heidelberg. p. 252–265, 3 fig., 1 table.
- Vacelet, Jean. 2002a. Family Astroscleridae Lister, 1900. In J. N. A. Hooper & R. W. M. van Soest, eds., *Systema Porifera: A Guide to the Classification of Sponges*, vol. 1. Kluwer Academic/Plenum Publishers. New York, Boston, Dordrecht, London, & Moscow. p. 824–830.
- Vacelet, Jean. 2002b. Recent "Sphinctozoa": Order Verticillitida, Family Verticillitidae Steinmann 1882. In J. N. A. Hooper & R. W. M. van Soest, eds., *Systema Porifera: A Guide to the Classification of Sponges*, vol. 1. Kluwer Academic/Plenum Publishers. New York, Boston, Dordrecht, London, & Moscow. p. 1097–1098, 1 fig.
- Vacelet, Jean. 2012. Part E, Revised, Volume 4, Chapter 4C: Hypercalified Extant Calcarea. Treatise Online 49: 1–15, 9 fig.
- Vacelet, Jean, R. Borojevic, N. Boury-Esnault, & M. Manuel. 2002a. Order Murrayonida. In J. N. A. Hooper & R. W. M. van Soest, eds., *Systema Porifera: A Guide to the Classification of Sponges*, vol. 2. Kluwer Academic/Plenum Publishers. New York, Boston, Dordrecht, London, & Moscow. p. 1153–1156.
- Vacelet, Jean, R. Borojevic, N. Boury-Esnault, & M. Manuel. 2002b. Order Lithonida. In J. N. A. Hooper & R. W. M. van Soest, eds., *Systema Porifera: A Guide to the Classification of Sponges*, vol. 2. Kluwer Academic/Plenum Publishers. New York, Boston, Dordrecht, London, & Moscow. p. 1185–1192.
- Vacelet, Jean, N. Boury-Esnault, & H. Zibrowius. 1989. Unexpected deep-water records of calcareous sponges (Calcarea). Deep-Sea Newsletter 15:24–25.
- Vacelet, Jean, J. P. Cuif, Pascale Gautret, M. Massot, B. Richer de Forges, & H. Zibrowius. 1992. Un spongiaire Sphinctozoaire colonial apparenté aux constructeurs de récifs triasiques survivant dans le bathyal de Nouvelle-Calédonie. Académie des Sciences, Paris, Comptes Rendus (série 3) 314:379–385, 1 pl.
- Vacelet, Jean, & Claude Donadey. 1977. Electron microscope study of the association between some sponges and bacteria. Journal of Experimental Marine Biology and Ecology 30:301–314.
- Vacelet, Jean, & R. Garrone. 1985. Two distinct populations of collagen fibrils in a "sclerosponge" (Porifera). In A. Bairati & R. Garrone, eds., *Biology*

- of Invertebrate and Lower Invertebrate Collagen, Series A: Life Sciences 93. Nato ASI Series. Berlin. p. 183–189.
- Vacelet, Jean, & C. Lévi. 1958. Un cas de survivance, en Méditerranée, du groupe d'éponges fossiles des Pharétronides. Compte Rendu Hebdomadaire des Séances de l'Academie des Sciences (2) 246:318–320.
- Vacelet, Jean, & Maria-J. Uriz. 1991. Deficient spiculation in a new species of *Merlia* (Merliida, Dempspongiae) from the Balearic Islands. In Joachim Reitner & Helmut Keupp, eds., Fossil and Recent Sponges. Springer-Verlag. Berlin & Heidelberg. p. 170–178.
- Vacelet, Jean, Philippe Willenz, & W. D. Hartman. 2010. Part E, Revised, Volume 4, Chapter 1: Living hypercalcified sponges. Treatise Online 1:1–16, fig. 1–5.
- Van de Graaf, W. J. E. 1969. Carboniferous sphinctozoa from the Cantabrian Mountains, Spain. Leidse Geologische Mededelingen 42:239–257, 2 pl.
- Varlamov, A. I., N. V. Grigor'yeva, A. Yu. Zhuravlev, I. T. Zhuravleva, L. N. Repina, A. Yu. Rozanov, & Yu. Ya. Shabanov. 1984. Opisanie razrezov [Description of sections]. In A. Yu. Rozanov & B. S. Sokolov, eds., Yarusnoe Raschlenenie Nizhnego Kembriya. Stratigrafiya [Lower Cambrian Stage Subdivision. Stratigraphy]. Nauka. Moscow. p. 20–93, fig. 6–30, table 2–3.
- Vassilyuk, N. P. 1966. Korally i stromatoporoidei [Corals and stromatoporoids]. In D. E. Aizenverg, ed., Fauna nizov turne (zony C₁ta) Donetskogo basseina [Fauna of the Lowest Part of the Tournaisian (Zone C₁ta) in the Donets Basin]. Institut Geologicheskikh Nauk, Akademiia Nauk Ukrainskoj SSR. Kiev. p. 43–56, 124–125, pl. 28–33.
- Vaughan, T. W. 1915. The geologic significance of the growth-rate of the Floridian and Bahaman shoal-water corals. Washington Academy of Science Journal 5:591–600.
- Vavilov, N. I. 1922. The law of homologous series in variation. Journal of Genetics 12:47–89, 2 pl., 1 table.
- Veizer, Ján, Davin Alab, Karen Azmy, Peter Bruck-schen, Dieter Buhl, Frank Bruhn, Giles A. F. Carden, Andreas Diener, Stefan Ebneth, Yves Godderis, Torsten Jasper, Christoph Korte, Frank Pawellek, Olaf G. Podlaha, & Harald Strauss. 1999. $^{87}\text{Sr}/^{86}\text{Sr}$, $\delta^{13}\text{C}$, and $\delta^{18}\text{O}$ evolution of Phanerozoic seawater. Chemical Geology 161:59–88.
- Veizer, Jan, & Jobst Wendt. 1976. Mineralogy and chemical composition of Recent and fossil skeletons of calcareous sponges. Neues Jahrbuch für Geologie und Paläontologie 9:588–573, 8 fig., 1 table.
- Vennin, Emmanuelle, J. J. Álvaro, Elena Moreno-Eiris, & Antonio Perejón. 2003. Early Cambrian coelobiontic community in tectonically unstable crevices developed in Neoproterozoic andesites, Ossa-Morena, southern Spain. Lethaia 36:53–65, 8 fig.
- Veron, J. E. N. 1986. Corals of Australia and the Indo-Pacific. Angus & Robertson Publishers. North Ryde. xii + 644 p.
- Veron, J. E. N., & M. Pichon. 1982. Scleractinia of Eastern Australia. Part IV, Family Poritidae. Australian Institute of Marine Science, Monograph (series 5):159 p.
- Verrill, A. E. 1907. Porifera of the Bermuda Islands. Transactions of the Academy of Arts and Sciences, New Haven 12:330–344.
- Viali, V. 1938. Su talumi fossili liassici Monte Peller. Studi Trentini di Scienze Storiche 19(1):52–68, 2 pl.
- Vidal, Gonzalo, Małgorzata Moczydłowska, & V. R. Rudavskaya. 1995. Constraints on the early Cambrian radiation and correlation of the Tommotian and Nemakit-Daldynian regional stages of eastern Siberia. Journal of the Geological Society, London 152:499–510, 9 fig.
- Vinassa de Regny, P. E. 1901. Trias-Spongien aus dem Bakony. Resultate der Wissenschaftlichen Erforschung des Balatonsees. II. Band 1. Th. Kommission von Ed. Hölzel. Wien. 22 p., 7 fig., 3 pl.
- Vinassa de Regny, P. E. 1908. Neue Schwämme, Tabulaten und Hydrozoen aus dem Bakony. Resultate der Wissenschaften Erforschung der Balatonsees, I, Palaeontologie der Umgebung des Balatonsees, Budapest 1(1):1–17, 1 fig., 4 pl.
- Vinassa de Regny, P. E. 1911. Neue Schwämme, Tabulaten und Hydrozoen aus dem Bakony. In Resultate der Wissenschaftlichen Untersuchungen des Balaton (Plattensee), Anhang I, Band 1911, number 3. Ed. Holzel. Wien. 22 p., 4 pl.
- Vinassa de Regny, P. E. 1915. Triadiische Algen, Spongien, Anthozoen und Bryozoen aus Timor. In J. Wanner, ed., Paläontologie von Timor, Stuttgart 4(8):75–118, 3 fig., pl. 63–72.
- Vinassa de Regny, P. E. 1932. Hydrozoen und Korallen aus der oberen Trias des Karakorum. In E. Trinkler & H. de Terra, eds., Wissenschaftliche Ergebnisse der Dr. Trinklerischen Zentralasien-Expedition, Berlin 2:192–196.
- Vlasov, A. N. 1961. Kembriyskie stromatoporoidei [Cambrian stromatoporoids]. Paleontologicheskiy Zhurnal 1961(3):22–32, 1 pl.
- Vlasov, A. N. 1962. O morfologicheskoy terminologii u arkheotsiat [On morphological terminology in archaeocyaths]. Paleontologicheskiy Zhurnal 1962(3):3–9.
- Voegeli, V. J. 1992. Paleoecology of chaetetids in the Amoret Limestone Member (Desmoinesian) in southeast Kansas. Unpublished Master's thesis. Kansas State University. Manhattan. 287 p.
- Vogel, Steven. 1994. Life in moving fluids: The philosophical biology of flow, 2nd edit. Princeton University Press. New Jersey. 467 p.
- Vogel, Steven. 2003. Comparative biomechanics: Life's physical world. Princeton University Press. New Jersey & Oxford, U.K. 580 p.
- Voigt, O., E. Wülfing, & G. Wörheide. 2012. Molecular phylogenetic evaluation of classification and scenarios of character evolution in calcareous sponges (Porifera, Class Calcarea). PloS One 7(3):e33417.
- Vologdin, A. G. 1928. O novykh svoeobraznykh formakh arkheotsiat iz kembriya Sibiri [On new and unusual forms of archaeocyaths from the Cambrian of Siberia]. Ezhegodnik Russkogo Paleontologicheskogo Obshchestva 7:25–46, 11 fig., pl. 2.

- Vologdin, A. G. 1931. Arkheotsiaty Sibiri. Vypusk 1: Fauna i Flora Izvestnyakov Rayona D. Kameshki i Ul. Bey-Buluk Minusinsko-Khakasskogo Kraya i Okamenelosti Izvestnyakov s r. Nizhney Tersi Kuznetskogo Okruga [Archaeocyaths of Siberia. Volume 1: Fauna and Flora of the Limestones in the Vicinity of Kameshki Village and Bey-Buluk Ulus in the Minusinsk-Khakassiya Region and Fossils of the Limestones in the Lower Ters' River of the Kuznetsk District]. Geologicheskoe Izdatel'stvo Glavnogo Geologo-Razvedochnogo Upravleniya. Moscow, Leningrad. 119 p., 44 fig., 2 tables, 24 pl.
- Vologdin, A. G. 1932. Arkheotsiaty Sibiri. Vypusk 2: Fauna Kembriyskikh Izvestnyakov Altaya [Archaeocyaths of Siberia. Volume 2: Fauna of the Cambrian Limestones of the Altay]. Gosudarstvennoe Nauchno-Tekhnicheskoe Geologo-Razvedochnoe Izdatel'stvo. Moscow, Leningrad. 106 p., 46 fig., 3 tables, 14 pl.
- Vologdin, A. G. 1936. Istorya issledovaniya, morfologiya i stratigraficheskoe znachenie arkheotsiat [History of investigation, morphology and stratigraphic significance of archaeocyaths]. Problemy Sovetskoy Geologii 10:917–918.
- Vologdin, A. G. 1937a. Arkheotsiaty i vodorosli yuzhnogo sklona Anabarskogo Massiva [Archaeocyatha and algae of the southern slope of the Anabar Massif]. Arkticheskiy Institut, Trudy 91:9–66, 13 fig., 3 tables, 12 pl.
- Vologdin, A. G. 1937b. Arkheotsiaty i rezul'taty ikh izucheniya v SSSR [Archaeocyaths and the results of their study in the USSR]. Problemy Paleontologii 2–3:453–500, 24 fig., 4 pl.
- Vologdin, A. G. 1939. Arkheotsiaty i vodorosli srednego kembriya yuzhnogo Urala [Middle Cambrian archaeocyaths and algae of the southern Urals]. Problemy Paleontologii 5:209–276, 12 fig., 12 pl.
- Vologdin, A. G. 1940a. Arkheotsiaty i vodorosli kembriyskikh izvestnyakov Mongoli i Tuvy, Chast' 1 [Archaeocyaths and algae of the Cambrian limestones of Mongolia and Tuva, Part 1]. Akademiya Nauk SSSR, Trudy Mongol'skoy Komissii 34:268 p., 83 fig., 1 table, 54 pl.
- Vologdin, A. G., ed. 1940b. Atlas Rukovodyashchikh Form Iskopaemykh Faun SSSR. Tom 1, Kembriy [Atlas of Characteristic Forms of the Fossil Faunas of the USSR. Volume 1, Cambrian]. Gosgeolizdat. Moscow, Leningrad. 194 p., 94 fig., 4 tables, 49 pl.
- Vologdin, A. G. 1955. O kol'chatykh bezdnnishchevykh arkheotsatakh kembriya severnoy Azii [On the annulate, atabulate archaeocyaths of the Cambrian of northern Asia]. Akademiya Nauk SSSR, Doklady 103:141–143, 3 fig.
- Vologdin, A. G. 1956. K klassifikatsii tipa Archaeocyatha [On the classification of the phylum Archaeocyatha]. Akademiya Nauk SSSR, Doklady 111:877–880.
- Vologdin, A. G. 1957a. Arkheotsiaty i ikh stratigraficheskoe znachenie [Archaeocyaths and their stratigraphic significance]. Acta Palaeontologica Sinica 5:173–222, 22 pl.
- Vologdin, A. G. 1957b. Kembriy Sovetskogo Soyuza [The Cambrian of the Soviet Union]. Acta Palaeontologica Sinica 5:223–282, 8 fig., 7 tables, chart.
- Vologdin, A. G. 1957c. O neskol'kikh vidakh planktonnykh i benthicheskikh arkheotsiat [On some species of planktic and benthic archaeocyaths]. Akademiya Nauk SSSR, Doklady 116:493–496, 4 fig.
- Vologdin, A. G. 1957d. Ob ontogeneze arkheotsiat [On the ontogeny of archaeocyaths]. Akademiya Nauk SSSR, Doklady 117:697–700, 13 fig.
- Vologdin, A. G. 1959a. Verkhne-kembriyskiy arkheotsiaty-korallovyy tsenoz, khr. Tannu-Ola, Tuva [Upper Cambrian archaeocyath-coralline coenosis, Tannu-Ola Range, Tuva]. Akademiya Nauk SSSR, Doklady 129:670–673, 4 fig.
- Vologdin, A. G. 1959b. K onto-filogenezu arkheotsiat [On the ontophylogeny of archaeocyaths]. Institut Morfologii Zhivotnykh, Trudy 27:79–90, 11 fig.
- Vologdin, A. G. 1960. O rode *Ajacycyathus* Bedford et Bedford, 1939 i sem. *Ajacycyathidae* Bedford et Bedford, 1939 [On the genus *Ajacycyathus* Bedford et Bedford, 1939 and the fam. *Ajacycyathidae* Bedford et Bedford, 1939]. Akademiya Nauk SSSR, Doklady 130:421–424, 1 fig.
- Vologdin, A. G. 1961. Arkheotsiaty i ikh stratigraficheskoe znachenie [Archaeocyaths and their stratigraphic significance]. In Mezhdunarodnyy Geologicheskiy Kongress. XX Sessiya, Meksika. Kembriyskaya Sistema, ee Paleogeografiya i Problema Nizhney Granity. Tom 3. Zapadnaya Evropa, Afrika, SSSR, Aziya, Amerika. [International Geological Congress. XX Session, Mexico. The Cambrian System, its Paleogeography and Lower Boundary Problem. Volume 3. Western Europe, Africa, USSR, Asia, America]. Akademiya Nauk SSSR. Moscow. p. 173–199, 2 fig., 3 tables, 1 pl.
- Vologdin, A. G. 1962a. Tip Archaeocyatha. Arkheotsiaty [Phylum Archaeocyatha. Archaeocyaths]. In Yu. A. Orlov, ed., Osnovy Paleontologii. Tom 2, Gubki, Arkheotsiaty, Kishechnopolochnye, Chervi [Fundamentals of Paleontology. Volume 2, Sponges, Archaeocyaths, Coelenterates, Worms]. Akademiya Nauk SSSR. Moscow. p. 89–142, 128 fig., 9 pl.
- Vologdin, A. G. 1962b. Novyy rod odnostennykh arkheotsiat s lozhnym intervallyumom [A new genus of one-walled archaeocyaths with a false intervalum]. Akademiya Nauk SSSR, Doklady 145:419–421, 1 fig.
- Vologdin, A. G. 1962c. Arkheotsiaty i vodorosli kembriya Baykal'skogo nador'ya [Archaeocyaths and algae of the Cambrian of the Baikal Highlands]. Paleontologicheskiy Institut, Akademiya Nauk SSSR, Trudy 93:118 p., 21 fig., 2 tables, 21 pl.
- Vologdin, A. G. 1962d. K anatomii arkheotsiat [On the anatomy of archaeocyaths]. Paleontologicheskiy Zhurnal 1962(2):9–20, 5 fig., 2 pl.
- Vologdin, A. G. 1963. Pozdnesrednekembriyskie arkheotsiaty basseyyna reki Amgi (Sibirskaya platforma) [Late Middle Cambrian archaeocyaths from the Amga River basin (Siberian Platform)]. Akademiya Nauk SSSR, Doklady 151:946–949, 3 fig.
- Vologdin, A. G. 1964a. Kribritsiyat: Novyy klass arkheotsiat [Cribricyaths: A new class of

- archaeocyaths]. Akademiya Nauk SSSR, Doklady 157:1391–1394, 1 fig.
- Vologdin, A. G. 1964b. O slozhnopreregordochnykh arkheotsiatakh verkhnemonokskoy svity kembriya Zapadnogo Sayana [On complexly septate archaeocyaths from the Verkhnemonok Suite of the Cambrian of West Sayan]. Akademiya Nauk SSSR, Doklady 159:357–360, 2 fig.
- Vologdin, A. G. 1966. Kribitsiyat kembriya SSSR [Cribrycaths of the Cambrian of the USSR]. Paleontologicheskiy Institut, Akademiya Nauk SSSR, Trudy 109:64 p., 30 fig., 3 pl.
- Vologdin, A. G. 1967. Ob ostatkakh sifoney iz nizhnego kembriya khreba Tannu-Ola, Tuva [Relics of Siphonae in Lower Cambrian of the Tannu-Ola Mountains, Tuva]. Akademiya Nauk SSSR, Doklady 174 (4):952–955, 2 fig.
- Vologdin, A. G. 1977. Monotsiyat Kembriya SSSR [Monocyaths of the Cambrian of the USSR]. Nauka. Moscow. 156 p., 78 fig., 25 pl.
- Vologdin, A. G., & V. D. Fonin. 1966. Novye odnosteniye tenial'nye arkheotsiati Priargun'ya [New one-walled taenial archaeocyaths of Priargunye]. Akademiya Nauk SSSR, Doklady 167:187–190, 1 fig.
- Vologdin, A. G., & T. V. Jankauskas. 1968. Novye kribitsiyat kembriya Sibiri [New cribrycaths from the Cambrian of Siberia]. Akademiya Nauk SSSR, Doklady 183:200–203, 1 fig.
- Vologdin, A. G., & L. N. Kashina. 1972. Novye original'nye formy arkheotsiat s bugorchatymi tumulami [New original forms of archaeocyaths with multiperforate tumuli]. In I. T. Zhuravleva, ed., Problemy Biostratigrafi i Paleontologii Nizhnego Kembriya Sibiri [Problems of Lower Cambrian Biostratigraphy and Paleontology of Siberia]. Nauka. Moscow. p. 152–154, pl. 20–20a.
- Vologdin, A. G., & M. M. Yazmir. 1966. K otkrytiyu u arkheotsiat kembriya troynoy ocevoy simmetrii [On the discovery of triaxial symmetry in Cambrian archaeocyaths]. Akademiya Nauk SSSR, Doklady 166:947–950, 3 fig.
- Vologdin, A. G., & M. M. Yazmir. 1967. Novoe simeystvo arkheotsiat s shestigrannymi lokulyami v intervallyum [A new family of archaeocyaths with hexagonal loculi in the intervalum]. Akademiya Nauk SSSR, Doklady 175:1375–1377, 2 fig.
- Vologdin, A. G., & I. T. Zhuravleva. 1947. Morfologiya pravil'nykh arkheotsiat [Morphology of regular archaeocyaths]. In Referaty Nauchno-Issledovatel'skikh Rabot za 1945 [Abstracts of Scientific Research for 1945]. Akademiya Nauk SSSR, Otdel Biologicheskikh Nauk. Moscow, Leningrad. p. 227–228.
- Volz, Wilhelm. 1904. Zur Geologie von Sumatra, Beobachtungen und Studien. Geologische un Palaeontologische Abhanglungen Herausgegeben von E. Kokken (new series) 6:85–196.
- Voronin, Yu. I. 1962. Novye arkheotsiyat (ayatsitsiaty) iz kembriya Tuvy [New archaeocyaths (ajacicyathids) from the Cambrian of Tuva]. Paleontologicheskiy Zhurnal 1962(3):24–28, pl. 4.
- Voronin, Yu. I. 1963. O stereoplazmaticheskikh obrazovniyakh septal'nykh arkheotsiat [On stereoplasmatic structures of septate archaeocyaths]. Moskovskoe Obshestvo Ispytatelei Prirody, Byulleten', Otdel geologicheskiy 38(5):149.
- Voronin, Yu. I. 1969. Sistematischeskoe polozhenie roda *Cadniacyathus* Bedford R. et J., 1937 i roda *Inessocystathus* Debrenne, 1964 [The systematic position of the genus *Cadniacyathus* Bedford R. et J., 1937 and the genus *Inessocystathus* Debrenne, 1964]. In I. T. Zhuravleva, ed., Problemy Biostratigrafi i Paleontologii Nizhnego Kembriya Sibiri [Problems of Lower Cambrian Biostratigraphy and Paleontology of Siberia]. Nauka. Moscow. p. 99–105, 3 fig., pl. 39.
- Voronin, Yu. I. 1974. Sistematika semeystva Ajacicyathidae Bedford R. et J., 1939 [Systematics of the family Ajacicyathidae Bedford R. et J., 1939]. In I. T. Zhuravleva & A. Yu. Rozanov, eds., Biostratigrafiya i Paleontologiya Nizhnego Kembriya Evropy i Severnoy Azii [Lower Cambrian Biostratigraphy and Paleontology of Europe and Northern Asia]. Nauka. Moscow. p. 124–137, 2 fig., pl. 6–7, 1 table.
- Voronin, Yu. I. 1979. Ayatsitsiaty SSSR [Ajacicyathids of the USSR]. Paleontologicheskiy Institut, Akademiya Nauk SSSR, Trudy 176:1–148, 27 fig., 14 pl., 13 tables.
- Voronin, Yu. I. 1988. Novye septal'nye arkheotsiyat [New septate archaeocyaths]. Sovmestnaya Sovetskogo-Mongolskaya Paleontologicheskaya Ekspeditsiya, Trudy 33:5–10, pl. 1–2.
- Voronin, Yu. I., L. G. Voronova, N. V. Grigor'yeva, N. A. Drozdova, E. A. Zhegallo, A. Yu. Zhuravlev, A. L. Ragozina, A. Yu. Rozanov, T. A. Sayutina, V. A. Sysoyev, & V. D. Fonin. 1982. Granitsa dokembriya i kembriya v geosinklinal'nykh oblastyakh (opornyy razrez Salany-Gol, MNR) [The Precambrian-Cambrian boundary in the geosynclinal areas (Salaany Gol reference section, MPR)]. Sovmestnaya Sovetskogo-Mongolskaya Paleontologicheskaya Ekspeditsiya, Trudy 18:150 p., 25 fig., 40 pl.
- Voronova, L. G., N. A. Drozdova, N. V. Esakova, E. A. Zhegallo, A. Yu. Zhuravlev, A. Yu. Rozanov, T. A. Sayutina, & G. T. Ushatinskaya. 1987. Iskopameye nizhnego kembriya Gor Makkenzi (Kanada) [Lower Cambrian fossils of the Mackenzie Mountains (Canada)]. Paleontologicheskiy Institut, Akademiya Nauk SSSR, Trudy 224:88 p., 7 fig., 32 pl., 2 tables.
- Vosmaer, G. C. J. 1885a. Spongien (Porifera). In H. G. Brönn, ed., Die Klassen und Ordnungendes des Thierreichs, parts 7–10. Leipzig & Heidelberg. p. 177–320, pl. 19–25. Translated by A. Dendy in Annals and Magazine of Natural History (series 5) 19:249–260.
- Vosmaer, G. C. J. 1885b. Porifera, Part 4. C. F. Winter. Leipzig & Heidelberg. p. 177–368.
- Vosmaer, G. C. J. 1887. Klassen und Ordnungen der Spongien (Porifera). In H. G. Bronn, ed., Die Klassen und Ordnungen des Thierreichs, vol. 2. Leipzig & Heidelberg. xii + 496 p., 34 pl.
- Voultsiadou, Eleni, & Spyros Gkelis. 2005. Greek and the phylum Porifera: A living language for living organisms. Journal of Zoology 267(2):143–157.
- Vyver, G. van de, & M. Buscema. 1985. Diversity of immune reactions in the sponge *Axinella polyploides*.

- In K. Rützler, ed., *New Perspectives of Sponge Biology*. Smithsonian Institution Press. Washington, D.C. p. 96–101, 8 fig.
- Waagen, William, & Joseph Wentzel. 1887. Class Hydrozoa. In William Waagen, ed., Salt Range fossils, VI. Productus limestone fossils. *Palaeontologia Indica*, Geological Survey of India, Memoirs (series 13):925–962, pl. 117–121.
- Waagen, William, & Joseph Wentzel. 1888. Salt-Range Fossils. Productus Limestones: Coelenterata, Amorphozoa, Protozoa. Memoirs of the Geological Survey of India 1(4–5):925–998, pl. 117–128.
- Wagner, W. 1964. Kalkschwämme aus dem Korallenkalk des oberen Malm von Laisacher bei Neuburg a. d. Donau. Mitteilungen der Bayerischen Staatssammlung für Paläontologie und Historische Geologie 4:23–36, 7 fig., pl. 5–7.
- Wahlman, G. P. 2002. Upper Carboniferous–Lower Permian (Bashkirian–Kungurian) mounds and reefs. In Wolfgang Kiessling, Erik Flügel, & Jan Golonka, eds., *Phanerozoic Reef Patterns*. SEPM (Society for Sedimentary Geology) Special Publication 72:271–338, 29 fig.
- Wähner, F. 1903. Das Sonnwendgebirge im Unterinntal, ein Typus eines alpinen Gebirgsbaues. F. Deutikke. Leipzig. Wien. 356 p., 96 fig., 19 pl.
- Walcott, C. D. 1886. Second contribution to the studies on the Cambrian faunas of North America. United States Geological Survey, Bulletin 30:1–369 (731–1095), 10 fig., 33 pl., 8 tables.
- Walcott, C. D. 1889. Descriptive notes of new genera and species from the Lower Cambrian or *Olenellus* zone of North America. United States National Museum, Proceedings 12:33–46.
- Walcott, C. D. 1894. The fauna of the Lower Cambrian or *Olenellus* zone. United States Geological Survey, 10th Annual Report. Washington, D.C. p. 599–602.
- Walker, T. R. 1972. Bioherms in the Minturn Formation (Des Moinesian Age), Vail-Minturn area, Eagle County, Colorado. In R. H. De Voto, ed., *Paleozoic Stratigraphy and Structural Evolution of Colorado*. Quarterly of the Colorado School of Mines 67:249–277.
- Walliser, O. H. 1996. Global events in the Devonian and Carboniferous. In O. H. Walliser, ed., *Global Events and Event Stratigraphy in the Phanerozoic*. Springer Verlag. Berlin. p. 225–250.
- Walter, B. 1969. Les bryozoaires Jurassiques en France. Etude systématique, rapports avec la stratigraphie et la paléoécologie. Documents du laboratoire de la Géologie, Faculté des Sciences, Lyon 35:1–328, 19 pl.
- Walter, M. R. 1980. Adelaidian and Early Cambrian stratigraphy of the southwestern Georgina Basin: Correlation chart and explanatory notes. Bureau of Mineral Resources, Geology and Geophysics, Australia, Report 214:21 p., chart.
- Wang, Kun, C. J. Orth, Moses Attrep, B. D. E. Chatterton, Hongfei Hou, & H. H. J. Geldsetzer. 1991. Geochemical evidence for a catastrophic biotic event at the Frasnian/Famennian boundary in south China. *Geology* 19, number 8:776–779.
- Wang Shenghai, Fan Jaisong, & J. K. Rigby. 1994. The Permian Reefs in Ziyun County, Southern Guizhou, China. Brigham Young University, Geology Studies 40:155–183, 22 fig.
- Wang Shu-bei. 1978a. Stromatoporoidea. In *Atlas of the fossils of southwestern China*, Sichuan volume, Part 1. Sinian to Devonian. Geology Press. Beijing. p. 11–36, 540–544, fig. 1–4, pl. 2–18. In Chinese.
- Wang Shu-bei. 1978b. Stromatoporoidea. In *Atlas of the fossils of southwestern China*, Sichuan volume, Part 2. Carboniferous to Quaternary. Geology Press. Beijing. p. 123–137, 616–618, pl. 35–44. In Chinese.
- Wang Shu-bei. 1978c. Stromatoporoidea. In *Atlas of the fossils of southwestern China*, Guizhou volume, Part 2. Carboniferous to Quaternary. Geology Press. Beijing. p. 98–106, 566–567, pl. 24–28. In Chinese.
- Wang Shu-bei. 1982. Stromatoporoids. In Jin Chun-tai, Ye Shao-hua, He Yuan-xiang, Wan Zheng-quan, Wang Shu-bei, Zhao Yu-ting, Li Shan-ji, Xu Xing-qi, & Zhang Zheng-gui, eds., *The Silurian stratigraphy and paleontology in Guanyinqiao, Qijiang, Sichuan*. People's Publishing House of Sichuan. Chengdu. p. 24–27, 64, 66–67, pl. 1–2. In Chinese with English abstract.
- Wang Shu-bei. 1988. Stromatoporoids. In Hou Hong-fei, ed., *Devonian Stratigraphy, Paleontology and Sedimentary Facies of Longmenshan, Sichuan*. Chengdu Institute of Geology and Mineral Resources, & Institute of Geology, Chinese Academy of Geological Sciences. Geological Publishing House. Beijing. p. 73–77, 159–165, 411–414, pl. 1–16. In Chinese with English abstract.
- Wang S.-B, Dong D.-Y., & Fu J.-H. 1986. Upper Devonian stromatoporoids from Luocheng and Rongan of Guangxi. *Acta Micropalaeontologica Sinica* 3(1):69–80, 5 pl.
- Wang, S. C. 2003. On the continuity of background and mass extinction. *Paleobiology* 29(4):455–467.
- Wang, S. C., & C. R. Marshall. 2004. Improved confidence intervals for estimating the position of mass extinction boundaries. *Paleobiology* 30(1):5–18.
- Wang X.-F, Chen X., Chen X.-H., & Zhu C.-Y. 1996. *Stratigraphical Lexicon of China*. The Ordovician System. Geological Publishing House. Beijing. p. 1–192.
- Watkins, Rodney, & E. C. Wilson. 1989. Paleoenvironmental and biostratigraphic significance of the biostromal organism *Palaeoaplysina* in the Lower Permian McCloud Limestone, eastern Klamath Mountains, California. *Palaeos* 4:181–192.
- Watts, N. R. 1988a. Carbonate particulate sedimentation and facies within the Lower Silurian Högklint patch reefs of Gotland, Sweden. *Sedimentary Geology* 59:93–113.
- Watts, N. R. 1988b. The role of carbonate diagenesis in exploration and production from Devonian pinnacle reefs, Alberta, Canada. *Bulletin of the Geological Society of Malaysia* 22:1–22.
- Webb, G. E., Gert Wörheide, & L. D. Nothdurft. 2003. Rare earth element geochemistry of Paleozoic stromatoporoids and extant sponge skeletons. Ninth International Symposium on Fossil Cnidaria and Porifera, Abstracts, vol. 7. Berichte des Institutes

- für Geologie und Paläontologie der Karl-Franzens-Universität Graz, Austria. Graz. p. 116.
- Webby, B. D. 1969. Ordovician stromatoporoids from New South Wales. *Palaeontology* 12:637–662, pl. 117–129.
- Webby, B. D. 1971. *Alleynodictyon*, a new Ordovician stromatoporoid from New South Wales. *Palaeontology* 14:10–15, 1 fig., pl. 5.
- Webby, B. D. 1976. The Ordovician System in southeastern Australia. In M. G. Bassett, ed., *The Ordovician System*. University of Wales Press & National Museum of Wales. Cardiff. p. 417–446.
- Webby, B. D. 1977. *Labechia aldonensis* sp. nov., an Ordovician stromatoporoid from Scotland. *Geological Magazine* 115:53–56, 1 pl.
- Webby, B. D. 1979a. The Ordovician stromatoporoids. *Proceedings of the Linnean Society of New South Wales* 103:83–121, 10 fig.
- Webby, B. D. 1979b. The oldest Ordovician stromatoporoids from Australia. *Alcheringa* 3:237–251, 6 fig.
- Webby, B. D. 1979c. The Ordovician stromatoporoids from the Mjøsa district, Norway. *Norsk Geologisk Tidsskrift* 59:199–211, 5 fig.
- Webby, B. D. 1980. Biogeography of Ordovician stromatoporoids. *Paleogeography, Palaeoclimatology, Paleoecology* 32:1–19.
- Webby, B. D. 1982. *Cleifdenia*, a new stromatolite and associated girvanellid from the Ordovician of New South Wales. *Alcheringa* 6:185–191, 4 fig.
- Webby, B. D. 1984a. Ordovician reefs and climate: A review. In D. L. Bruton, ed., *Aspects of the Ordovician System*. Universitetsforlaget. Oslo. p. 89–100, 4 fig.
- Webby, B. D. 1984b. Early Phanerozoic distribution patterns of some major groups of sessile organisms. Proceedings of the 27th International Geological Congress, Moscow, vol. 2, *Palaeontology*. VNU Science Press. Moscow. p. 193–208, 2 fig.
- Webby, B. D. 1986. Early stromatoporoids. In A. Hoffman & M. H. Nitecki, eds., *Problematic Fossil Taxa*. Oxford University Press & Clarendon Press. Oxford. p. 148–166, 10 fig.
- Webby, B. D. 1987. Biogeographic significance of some Ordovician faunas in relation to East Australian Tasmanide suspect terranes. In E. C. Leitch & E. Scheibner, eds., American Geophysical Union, *Geodynamics Series* 19:103–117.
- Webby, B. D. 1990. Comments on a paper supposedly giving first evidence of aragonitic mineralogy in tetradiid tabulate corals. *Paläontologische Zeitschrift* 64(3/4):379–380.
- Webby, B. D. 1991. Ordovician stromatoporoids from Tasmania. *Alcheringa* 15:191–227, 16 fig.
- Webby, B. D. 1992. Global biogeography of Ordovician corals and stromatoporoids. In B. D. Webby & J. R. Laurie, eds., *Global Perspectives on Ordovician Geology*. Balkema. Rotterdam. p. 261–276.
- Webby, B. D. 1993. Evolutionary history of Palaeozoic Labechiida (Stromatoporoidea). *Memoirs of the Association of Australasian Palaeontologists* 15:57–67, 3 fig.
- Webby, B. D. 1994. Evolutionary trends in Ordovician stromatoporoids. *Courier Forschungsinstitut Senckenberg* 172:373–380, 3 fig.
- Webby, B. D. 2002. Patterns of Ordovician reef development. In Wolfgang Kiessling, Erik Flügel, & Jan Golonka, eds., *Phanerozoic reef patterns*. SEPM (Society for Sedimentary Geology) Special Publication 72:129–179, 7 fig.
- Webby, B. D. 2004a. Introduction. In B. D. Webby, F. Paris, M. L. Droser, & I. G. Percival, eds., *The Great Ordovician Biodiversification Event*. Columbia University Press. New York. p. 1–37, 1 fig., 3 tables.
- Webby, B. D. 2004b. Stromatoporoids. In B. D. Webby, F. Paris, M. L. Droser, & I. G. Percival, eds., *The Great Ordovician Biodiversification Event*. Columbia University Press. New York. p. 112–118, 2 fig.
- Webby, B. D., compiler. 2010. Part E, Revised, Volume 4, Chapter 8: Glossary of terms applied to the hypercalcified Porifera. *Treatise Online* 4:1–21. [With contributions by F. Debrenne, S. Kershaw, P. D. Kruse, H. Nestor, J. K. Rigby, B. Senowbari-Daryan, C. W. Stearn, C. W. Stock, J. Vacelet, R. R. West, P. Willenz, R. A. Wood, & A. Yu. Zhuravlev.]
- Webby, B. D. 2012a. Part E, Revised, Volume 4, Chapter 17: Class Uncertain, Order Pulchrilaminida, new order. *Treatise Online* 30:1–9, 4 fig.
- Webby, B. D. 2012b. Part E, Revised, Volume 4, Chapter 10: Origins and Early Evolution of the Paleozoic Stromatoporoidea. *Treatise Online* 33:1–22, 2 fig.
- Webby, B. D. 2012c. Part E, Revised, Volume 4, Chapter 16b: Labechiida. *Treatise Online* 41:1–51, 29 fig.
- Webby, B. D., & M. R. Banks. 1976. *Clathrodictyon* and *Ecclimadictyon* (Stromatoporoidea) from the Ordovician of Tasmania. *Papers and Proceedings of the Royal Society of Tasmania* 110:129–137.
- Webby, B. D., R. A. Cooper, S. M. Bergström, & F. Paris. 2004. Stratigraphic framework and time slices. In B. D. Webby, F. Paris, M. L. Droser, & I. G. Percival, eds., *The Great Ordovician Biodiversification Event*. Columbia University Press. New York. p. 41–47, 2 fig.
- Webby, B. D., & Stephen Kershaw. 2011. Part E, Revised, Volume 4, Chapter 9B: External morphology of the Paleozoic Stromatoporoidea: Shapes and growth habits. *Treatise Online* 25:1–73, 44 fig.
- Webby, B. D., & Lin Bayou. 1988. Upper Ordovician clefdenellids (Porifera: Sphinctozoa) from China. *Geological Magazine* 125(2):149–159, 6 fig.
- Webby, B. D., & D. G. Morris. 1976. New Ordovician stromatoporoids from New South Wales. *Royal Society of New South Wales, Journal Proceedings* 109:125–135, 5 fig.
- Webby, B. D., F. Paris, M. L. Droser, & I. G. Percival. 2004. *The Great Ordovician Biodiversification Event*. Columbia University Press. New York. x + 484 p.
- Webby, B. D., I. G. Percival, G. D. Edgecombe, R. A. Cooper, A. H. M. Vandenberg, J. W. Pickett, G. Playford, T. Winchester-Seeto, G. C. Young, Zhen Y.-Y., R. S. Nicoll, J. R. P. Ross, & R. Schallreuter. 2000. Ordovician paleobiogeography of Australasia. *Memoir of the Association of Australasian Palaeontologists* 23:63–126.

- Webby, B. D., & J. K. Rigby. 1985. Ordovician sphinctozoan sponges from central New South Wales. *Alcheringa* 9:209–220, 10 fig.
- Webby, B. D., C. W. Stearn, & Heldur Nestor. 2012. Part E, Revised, Volume 4, Chapter 12: Biostratigraphy of the Paleozoic Stromatoporoidea. Treatise Online 32:1–22, 5 fig.
- Webby, B. D., C. W. Stearn, & Zhen Y. Y. 1993. Lower Devonian (Pragian-Emsian) stromatoporoids from Victoria. Proceedings of the Royal Society of Victoria 105:113–186.
- Webby, B. D., A. H. M. VandenBerg, R. A. Cooper, M. R. Banks, C. F. Burrett, R. A. Henderson, P. D. Clarkson, C. P. Hughes, J. Laurie, B. Stait, M. R. A. Thomson, & G. F. Webers. 1981. The Ordovician System in Australia, New Zealand and Antarctica. Correlation Chart and Explanatory Notes. International Union of Geological Sciences Publication 6:1–64, 4 fig.
- Webby, B. D., D. Wyatt, & C. F. Burrett. 1985. Ordovician stromatoporoids from the Langkawi Islands Malaysia. *Alcheringa* 9:159–166.
- Webby, B. D., & Y. Y. Zhen. 1997. Silurian and Devonian clathrodictyids and other stromatoporoids from the Broken River region, north Queensland. *Alcheringa* 21:1–56, 19 fig.
- Webby, B. D., & Y. Y. Zhen. 2008. Devonian syringostromatid stromatoporoids from the Broken River Region, North Queensland. Records of the Australian Museum 60:215–236.
- Webby, B. D., Y. Y. Zhen, & I. G. Percival. 1997. Ordovician coral- and sponge-bearing associations: Distribution and significance in volcanic island shelf and slope habitats, Eastern Australia. *Boletín de la Real Sociedad Española de Historia Natural (Sección Geológica)* 92:163–175.
- Weidlich, Oliver. 2002. Middle and later Permian reefs: Distributional patterns and reservoir potential. In Wolfgang Kiessling, Erik Flügel, & Jan Golonka, eds., Phanerozoic Reef Patterns. SEPM (Society of Sedimentary Geology) Special Publication 72:339–390, 13 fig.
- Weidlich, Oliver. 2007a. Permian reefs of the Tethys: Tropical vs. cool-water frameworks, Batain area, Sultanate of Oman. In E. Vennin, M. Aretz, F. Boulvain, & A. Munnecke, eds., Facies from Palaeozoic reefs and bioaccumulations. Mémoires du Muséum National d'Histoire Naturelle 195:311–313.
- Weidlich, Oliver. 2007b. Permian reef and shelf carbonates of the Arabian platform and neo-Tethys as recorders of climatic and oceanographic changes. In J. J. Alvaro, M. Aretz, F. Boulvain, A. Munnecke, D. Vachard, & E. Vennin, eds., Palaeozoic Reefs and Bioaccumulations: Climatic and Evolutionary Controls. Geological Society, London, Special Publications 275:229–253.
- Weidlich, Oliver, & M. Bernecker. 2003. Supersequence and composite sequence carbonate platform growth: Permian and Triassic outcrop data of the Arabian platform and neo-Tethys. *Sedimentary Geology* 158:87–116, 16 fig.
- Weidlich, Oliver, & Baba Senowbari-Daryan. 1996. Late Permian “sphinctozoans” from reefal blocks of the Ba’id area, Oman Mountains. *Journal of Paleontology* 70:27–46, 14 fig.
- Weiner, S., & P. M. Dove. 2003. An overview of biomimetic processes and the problems of vital effect. In P. M. Dove, J. J. De Yoreo, & S. Weiner, eds., Biomimetic Reviews in Mineralogy and Geochemistry, vol. 54. Mineralogical Society of America and Geochemical Society. Washington, D.C. p. 1–29.
- Weissermel, Waldermar. 1913. *Diamantopora* n. gen. et sp. In J. Bohm & W. Weissermel, eds., Über tertiäre Versteinerungen von den Bogenfelsen Diamantfeldern, II, Tabulaten und Hydrozoen. Beiträg zur Geologie Erforschung der Deutschen Schutzgebiete 5:111 p.
- Weissermel, Waldermar. 1927. Die Umbildung der Rugosen in Hexacorallen. Preussische Geologische Landesanstalt, Abhandlungen, Jahrbuch, Sitzungsberichte 2:1–17.
- Weissermel, Waldermar. 1937. 5. Coelenterata, a) Anthozoa, Hydrozoa, Scyphozoa. Fortschritte der Paläontologie 1:84–96.
- Weissermel, Waldermar. 1939. Neue Beiträge zur Kenntnis der Geologie, Paläontologie und Petrographie der Umgegend von Konstantinopel, 3. Obersilurische und devonische Korallen, Stromatoporiden und Trepustomme von Prinzelinsel Antirovitha und aus Bithynien. Abhandlungen der Preussischen Geologischen Landesanstalt, Neue Folge 190:131 p., 15 pl.
- Wells, J. W. 1934. A new species of sponges from the Buda Limestone of central Texas. *Journal of Paleontology* 8:167–168, 1 fig., 1 pl.
- Wells, J. W. 1943. Palaeontology of the Harrar Province, Ethiopia, pt. 3. Jurassic Anthozoa and Hydrozoa. *Bulletin of the American Museum Natural History* 82:31–54, pl. 5–9.
- Wells, John W. 1957. Corals. In Joel W. Hedgpeth, ed., Treatise on Marine Ecology and Paleoecology. Geological Society of America Memoir 67(1, Ecology):1087–1108.
- Welter, O. A. 1911 [1910]. Die Pharetronen aus dem Essener Grünsand. *Verhandlungen des Naturhistorischen Vereins der preussischen Rheinlande und Westfalens* 67:1–82, 12 fig., 3 pl.
- Wendt, Jobst. 1974. Der skelettbau aragonitischer Kalkschwämme aus der alpinen Obertrias. *Neues Jahrbuch für Geologie und Paläontologie, Monatshefte* 1974:498–511, 9 fig.
- Wendt, Jobst. 1975. Aragonitische Stromatoporen aus der alpinen Obertrias. *Neues Jahrbuch für Geologie und Paläontologie, Abhandlungen* 150:111–125, 7 fig., 1 table.
- Wendt, Jobst. 1977. Aragonites in Permian reefs. *Nature (London)* 267:335–337, 2 fig., 1 table.
- Wendt, Jobst. 1978. Skelettbau und Entwicklung der massiven Kalkschwämme vom Jungpaläozoikum bis in die Gegenwart. *Neues Jahrbuch für Geologie und Paläontologie, Abhandlungen* 157:91–98, 2 fig.
- Wendt, Jobst. 1979. Development of skeletal formation, microstructure, and mineralogy of rigid calcareous sponges from the Paleozoic to Recent.

- In C. Lévi & N. Boury-Esnault, eds., Biologie des Spongaires, Colloques Internationaux du C.N.R.S. 291:449–457, 2 fig., 1 table.
- Wendt, Jobst. 1980. Calcareous sponges. Development through time. In W. D. Hartman, J. W. Wendt, & F. Wiedenmayer, eds., Living and fossil sponges. Notes for a short course. Comparative Sedimentology Laboratory, Division of Marine Geology and Geophysics, Rosenstiel School of Marine and Atmospheric Science, University of Miami, Miami. Sedimenta 8:169–178, 5 fig.
- Wendt, Jobst. 1984. Skeletal and spicular mineralogy, microstructure and diagenesis of coralline calcareous sponges. *Palaeontographica Americana* 54:326–336, 2 fig., 2 pl.
- Wendt, Jobst. 1990. Corals and coralline sponges. In J. G. Carter, ed., Skeletal Biominerization: Patterns, Processes and Evolutionary Trends. Van Nostrand Reinhold. New York. p. 45–66, 16 fig., pl. 162–169.
- Wentzel, J. 1889. Über fossile Hydrokorallen (*Stromatopora* und ihre Verwandten) nebst einer Anhang. *Lotos* (new series) 9:1–24.
- West, R. R. 1988. Temporal changes in Carboniferous reef mound communities. *Palaios* 3:152–169.
- West, R. R. 1992. *Chaetetes* (Demospongiae): Its occurrence and biostratigraphic utility. Oklahoma Geological Survey Circular 94:163–169.
- West, R. R. 1994. Species in coralline demosponges: Chaetetida. In P. Oekentorp-Küster, ed., Proceedings of the VI International Symposium on Fossil Cnidaria and Porifera, Münster Cnidarian Symposium, vol. 2. Courier Forschungsinstitut Senckenberg 172:399–409.
- West, R. R. 1995. Taphonomy of Porifera: Some taxonomic implications. VII International Symposium on Fossil Cnidaria and Porifera, Abstracts. Madrid. p. 101–103.
- West, Ronald R. 2011a. Part E, Revised, Volume 4, Chapter 2A: Introduction to the fossil hypercalcified chaetetid-type Porifera (Demospongiae). Treatise Online 20:1–79, 52 fig.
- West, R. R. 2011b. Part E, Revised, Volume 4, Chapter 2B: Functional morphology of the fossil hypercalcified chaetetid-type Porifera (Demospongiae). Treatise Online 21:1–38, 9 fig., 9 tables.
- West, R. R. 2011c. Part E, Revised, Volume 4, Chapter 2C: Classification of the fossil and living hypercalcified chaetetid-type Porifera (Demospongiae). Treatise Online 22:1–24, 6 tables.
- West, R. R. 2012a. Part E, Revised, Volume 4, Chapter 2D: Evolution of the hypercalcified chaetetid-type Porifera (Demospongiae). Treatise Online 35:1–26, 6 tables.
- West, R. R. 2012b. Part E, Revised, Volume 4, Chapter 2E: Paleoecology of the hypercalcified chaetetid-type Porifera (Demospongiae). Treatise Online 36:1–68, 46 fig., 6 tables.
- West, R. R. 2012c. Part E, Revised, Volume 4, Chapter 2F: Paleogeography and biostratigraphy of the hypercalcified chaetetid-type Porifera (Demospongiae). Treatise Online 37:1–29, 7 fig., 2 tables.
- West, R. R., & G. R. Clark II. 1983. Chaetetids. In T. W. Broadhead, ed., Sponges and Spongiomorphs: Notes for a Short Course, Organized by J. K. Rigby and C. W. Stearn. University of Tennessee Department of Geological Sciences Studies in Geology 7:130–140.
- West, R. R., & G. R. Clark II. 1984. Palaeobiology and biological affinities of Palaeozoic chaetetids. *Palaeontographica Americana* 54:337–348, 3 fig., 2 pl.
- West, R. R., & Stephen Kershaw. 1991. Chaetetid habitats. In Joachim Reitner & Helmut Keupp, eds., Fossil and Recent Sponges. Springer-Verlag, Berlin & Heidelberg. p. 445–455.
- West, R. R., F. K. McKinney, J. A. Fagerstrom, & Jean Vacelet. 2010. Biological interactions among extant and fossil clonal organisms. *Facies*, 57:351–374, published online 13 November 2010, 24 p., doi: 10.1007/s10347-010-0250-0.
- West, R. R., Koichi Nagai, & Tetsuo Sugiyama. 2001. Chaetetid substrates in the Akiyoshi organic reef complex, Akiyoshi-dai, Japan. *Bulletin of Tohoku University Museum* 1:134–143.
- West, R. R., & S. M. Roth. 1991. Siliciclastic content of chaetetid habitats: Preliminary results. Geological Society of America, Abstracts with Programs 23(5):A343.
- West, R. R., Jean Vacelet, Rachel A. Wood, Phillippe Willenz, & Willard D. Hartman. 2013. Part E, Revised, Volume 4, Chapter 4A–B: Hypercalcified extant and fossil chaetetid-type and Post-Devonian stromatoporoid-type Demospongiae: Systematic descriptions. Treatise Online 58:1–93, 75 fig.
- Wiedenmayer, Felix. 1977. Shallow-water sponges of the western Bahamas. *Experientia Supplementum* 28:1–287, pl. 1–43.
- Wiedenmayer, Felix. 1994. Contributions to the knowledge of post-Palaeozoic neritic and archibenthal sponges (Porifera): The stratigraphic record, ecology, and global distribution of intermediate and higher taxa. *Schweizerische Paläontologische Abhandlungen* 116:1–147, 36 fig., 5 tables.
- Wilckens, O. 1937. Beiträge zur Paläontologie des Ostindischen Archipels, XIV. Korallen und Kalkschwämme aus dem obertriadischen Pharetronenkalk von Seran (Molukken). *Neues Jahrbuch für Mineralogie, Geologie und Paläontologie* (Abteilung B) 77:171–211, pl. 6–13.
- Wildish, David, & David Kristmanson. 1997. Benthic Suspension Feeders and Flow. Cambridge University Press. Cambridge, U.K. 409 p.
- Wilkinson, C. R. 1987. Productivity and abundance of large sponge populations on Flinders Reef flats, Coral Sea. *Coral Reefs* 5:183–188.
- Wilkinson, C. R., & D. A. Evans. 1989. Sponge distribution across Davies Reef, Great Barrier Reef, relative to location, depth and water movement. *Coral Reefs* 8:1–7, 5 fig.
- Willenz, Philippe, & W. D. Hartman. 1985. Calcification rate of *Ceratoporella nicholsoni* (Porifera: Sclerospongiae): An *in situ* study with calcein. *Proceedings of the 5th International Coral Reef Congress*. Tahiti. p. 113–118.
- Willenz, Philippe, & Willard D. Hartman. 1989. Micromorphology and ultrastructure of Carib-

- bean sclerosponges: I. *Ceratoporella nicholoni* and *Stromatospongia norae* (Ceratoporellidae: Porifera). *Marine Biology* 103:307–402.
- Willenz, Philippe, & W. D. Hartman. 1994. Skeletal reaction of the Caribbean coralline sponge *Calcifibrospongia actinostromariooides* Hartman toward an epizoic zoanthidean. In R. W. M. van Soest, T. M. G. van Kempen, & J. C. Braekman, eds., *Sponges in Time and Space: Biology, Chemistry, Paleontology*. A. A. Balkema, Rotterdam, p. 279–288.
- Willenz, Philippe, & W. D. Hartman. 1999. Growth and regeneration rates of the calcareous skeleton of the Caribbean coralline sponge *Ceratoporella nicholoni*: A long term survey. In J. N. A. Hooper, ed., *Proceedings of the Fifth International Sponge Symposium “Origin and Outlook.”* Queensland Museum Memoirs 44:675–685, 10 figs., 4 tables.
- Willenz, Philippe, & W. D. Hartman. 2004. Storage cells and spermatic cysts in the Caribbean coralline sponge *Goreauella auriculata* (Astroscleridae, Agelasida, Demospongidae): A relationship? *Bollettino dei Musei e Degli Istituti Biologici dell’Università di Genova* 68:673–681.
- Willenz, Philippe, & S. Pomponi. 1996. A new deep sea coralline sponge from Turks and Caicos Islands: *Willardia caicosensis* gen. et sp. nov. (Demospongidae: Hadromerida). *Bulletin de l’Institut Royal des Sciences Naturelles de Belgique* 66(Supplément):205–218.
- Wilsens, M. 1996. Flecken-riffe in den kalken der “Formacion de Altamira” (Cenoman, Cobreces/Tonanes-Gebiet, Prov. Kantabrien, Nord-Spanien): Stratigraphische position, fazielle rahmenbedingungen und sequenzstratigraphie. Berliner Geowissenschaftliche Abhandlungen (Reihe E) Band 18:353–373.
- Wilson E. C., R. H. Waines, & A. H. Coogan. 1963. A new species of *Komia* Körde and the systematic position of the genus. *Paleontology* 6:246–253.
- Wilson, J. L. 1975. Carbonate Facies in Geologic History. Springer-Verlag, Berlin. 471 p.
- Winchell, A. N. 1866. The Grand Traverse Region: A Report on the Geological and Industrial Resources of the counties of Antrim, Grand Traverse, Benzie, and Leelanaw in the Lower Peninsula of Michigan. Dr. Chase’s Steam Printing, Ann Arbor, Michigan. 97 p.
- Winchell, A. N. 1867. Stromatoporidae: Their structure and zoological affinities. *Proceedings of the American Association for the Advancement of Science* 15:91–99.
- Winchell, N. H. & Charles Schuchert. 1895. Sponges, graptolites, and corals from the Lower Silurian of Minnesota. In N. H. Winchell & others, *The Geology of Minnesota*, Vol. 3, Part 1 of the Final Report: Paleontology. Minnesota Geological Survey. Minneapolis. p. 55–59.
- Winston, D. 1963. Stratigraphy and carbonate petrology of the Marble Falls Formation, Mason and Kimble counties, Texas. PhD dissertation. University of Texas, Austin. 344 p.
- Witzke, B. J. 1990. Palaeoclimatic constraints for Palaeozoic palaeolatitudes of Laurentia and Euramerica. In W. S. McKerrow & C. R. Scotese, eds., *Palaeozoic Palaeogeography and Biogeography*, Geological Society of London Memoir 12:57–73.
- Wolfart, Reinhard. 1983. The Cambrian System in the Near and Middle East. Correlation chart and explanatory notes. International Union of Geological Sciences, Publication 15:72 p., 1 fig., chart.
- Wolfenden, E. B. 1958. Paleoecology of the Carboniferous reef complex and shelf limestones in northwest Derbyshire, England. *Geological Society of America Bulletin* 69:871–898, 12 fig., 3 tables.
- Wolniewicz, Paweł. 2010. Stromatoporoid biometrics using image analysis software: A first order approach. *Computers & Geosciences* 36:550–558, 8 fig., 4 tables.
- Wolniewicz, Paweł. 2013. The limited value of traditional morphometric features in stromatoporoid taxonomy. *Paleontology* 56(5):947–959, 2 fig., 5 tables.
- Wolff, H. 1973. Fazies-Gliederung und Paläogeographie des Ladins in den bayerischen Kalkalpen zwischen Wendelstein und Kampenwand. *Neues Jahrbuch für Geologie und Paläontologie, Abhandlungen* 143(2):246–274, 7 fig.
- Wongwanich, T., C. F. Burrett, D. J. Wyatt, & B. A. Stait. 1983. Correlations between the Ordovician of Tarutao Island, Satun Province (Thailand) and Langkawi Islands (Malaysia). In P. Nutalaya, ed., *Stratigraphic Correlations between Thailand and Malaysia*. Geological Society of Thailand, Bangkok, p. 77–95.
- Wood, R. A. 1987. Biology and revised systematics of some late Mesozoic stromatoporoids. *Special Papers in Paleontology* 37:1–89, 31 fig.
- Wood, R. A. 1989. Problematic reef-building sponges. In S. Conway Morris & Alberto Simonetta, eds., *Early Evolution of Metazoa and the Significance of Problematic Taxa*. Proceedings, International Symposium Università degli Studi di Camerino. Dipartimento di Biologia Molecolare, Cellulare e Animal. Cambridge University Press, Cambridge, UK, p. 113–124.
- Wood, R. A. 1990a. Position of Mesozoic stromatoporoids in the Porifera. In K. Rutzler, ed., *New Perspectives in Sponge Biology*. Smithsonian Institution Press, Washington, D.C. p. 25–32, 6 fig., 2 tables.
- Wood, R. A. 1990b. Reef building sponges. *American Scientist* 78:224–235, 10 fig.
- Wood, R. A. 1991a. Problematic reef-building sponges. In A. Simonetta & S. Conway Morris, eds., *The Early Evolution of Metazoa and the Significance of Problematic Taxa*. Cambridge University Press, Cambridge, UK, p. 113–124, 5 fig., 1 table.
- Wood, R. A. 1991b. Non-spicular biomimetic mineralization in calcified demosponges. In Joachim Reitner & Helmut Keupp, eds., *Fossil and Recent Sponges*. Springer-Verlag, Berlin & Heidelberg, p. 322–340, 9 fig., 1 table.
- Wood, R. A. 1993. Nutrients, predation and the history of reef-building. *Palaeos* 8:526–543, 3 fig., 2 tables.
- Wood, R. A. 1995. The changing biology of reef-building. *Palaeos* 10:517–529, 5 fig., 2 tables.
- Wood, R. A. 1998. Novel reef fabrics from the Devonian Canning Basin, Western Australia. *Sedimentary Geology* 121:149–156.

- Wood, R. A. 1999. Reef Evolution. Oxford University Press. Oxford, UK. xi + 414 p.
- Wood, R. A. 2000. Palaeoecology of a Late Devonian back reef: Canning Basin, Western Australia. *Palaeontology* 43:671–703.
- Wood, R. A. 2001. Biodiversity and the history of reefs. *Geological Journal* 36:251–263.
- Wood, R. A. 2011. Part E, Revised, Volume 4, Chapter 3: Introduction to Post-Devonian Hypercalcified Sponges (Stromatoporoid Type). *Treatise Online* 24:1–17, 4 fig.
- Wood, R. A., Paul Copper, & Joachim Reitner. 1990. "Spicules" in halysitids: A reply. *Lethaia* 23:113–114.
- Wood, R. A., J. A. D. Dickson, & B. Kirkland-George. 1994. Turning the Capitan Reef upside down: A new appraisal of the ecology of the Permian Capitan Reef, Guadalupe Mountains, Texas and New Mexico. *Palaios* 9:422–427, 3 fig.
- Wood, R. A., J. A. D. Dickson, & B. Kirkland-George. 1996. New observations on the ecology of the Permian Capitan Reef, Texas and New Mexico. *Palaeontology* 39:733–762, 10 fig., 4 pl., 2 tables.
- Wood, R. A., K. R. Evans, & A. Yu. Zhuravlev. 1992. A new post-early Cambrian archaeocyath from Antarctica. *Geological Magazine* 129:491–495, 3 fig.
- Wood, R. A., & J. Reitner. 1986. Poriferan affinities of Mesozoic stromatoporoids. *Palaeontology* 29:469–473.
- Wood, R. A., & Joachim Reitner. 1988. The Upper Cretaceous "chaetid" demosponge *Stromatoxinella irregularis* n. g. (Michelin) and its systematic implications. *Neues Jahrbuch für Geologie und Paläontologie, Abhandlungen* 177(20):213–224, 9 fig., 1 table.
- Wood, R. A., Joachim Reitner, & R. R. West. 1989. Systematics and phylogenetic implications of the haplosclerid stromatoporoid *Newellia mira* nov. gen. *Lethaia* 22:85–93.
- Wood, R. A., A. Yu. Zhuravlev, & Anaaz Chimed Tseren. 1993. The ecology of Lower Cambrian buildup from Zuune Arts, Mongolia: Implications for early metazoan reef evolution. *Sedimentology* 40:829–858, 16 fig., 2 tables.
- Wood, R. A., A. Yu. Zhuravlev, & Françoise Debrenne. 1992. Functional biology and ecology of Archaeocyatha. *Palaios* 7:131–156, 21 fig., 3 tables.
- Wörheide, Gert. 1998. Reef cave dwelling ultraconservative coralline demosponge *Astrosclera willeyana* Lister, 1900 from the Indo-Pacific. Micromorphology, ultrastructure, biocalcification, isotope record, taxonomy, biogeography, phylogeny. *Facies* 38:1–88.
- Wörheide, Gert. 2006. Low variation in partial cytochrome oxidase subunit I (COI) mitochondrial sequences in the coralline demosponge *Astrosclera willeyana* across the Indo-Pacific. *Marine Biology* 148(5):907–912.
- Wörheide, Gert. 2008. A hypercalcified sponge with soft relatives: *Vaceletia* is a keratose demosponge. *Molecular Phylogenetics and Evolution* 47:433–438.
- Wörheide, Gert., B. M. Degna, J. N. A. Hooper, & Joachim Reitner. 2002. Phylogeography and taxonomy of the Indo-Pacific reef cave dwelling coralline demosponge *Astrosclera willeyana*: New data from nuclear ITS sequences. In K. M. Moosa, S. Soemodihardjo, A. Soegiarto, K. Romimohtarto, A. Nontji, & S. Soekarno, eds., Proceedings of the 9th International coral reef symposium. International Society for Reef Studies. Jakarta. p. 339–346.
- Wörheide, Gert., P. Gautret, J. Reitner, F. Böhm, M. M. Joachimski, V. Thiel, W. Michaelis, & M. Massault. 1997. Basal skeletal formation, role and preservation of intracrystalline organic matrices, and isotopic record in the coralline sponge *Astrosclera willeyana* Lister, 1900. *Bulletin de la Real Sociedad Española de Historia Natural (Sección Geología)* 91(1–4):355–374, 8 fig., 3 pl.
- Wörheide, G., & J. Reitner. 1996. "Living fossil" sphinctozoan coralline sponge colonies in shallow water caves of the Osprey Reef (Coral Sea) and the Astrolable Reefs (Fiji Islands). In J. Reitner, F. Neuweiler, & F. Gunkel, eds., Global and Regional Controls on Biogenic Sedimentation. I. Reef evolution. Research Reports. Göttinger Arbeiten zur Geologie und Paläontologie, Sb2. Göttingen. p. 145–148.
- Wörheide, Gert., Joachim Reitner, & Pascale Gautret. 1996. Biocalcification processes in three coralline sponges from the Lizard Island Section (Great Barrier Reef, Australia): The stromatoporoid *Astrosclera*, the chaetetid *Spirastrella (Acanthochaetetes)*, and the sphinctozoan *Vaceletia* (Demospongiae). In Joachim Reitner, F. Neuweiler, & F. Gunkel, eds., Global and regional controls on biogenic sedimentation: 1, Reef evolution research reports. Geologisch-Palaontologisches Institut der Georg-August Universität, Göttingen. p. 149–153.
- Wörheide, Gert., Joachim Reitner, & Pascale Gautret. 1997. Comparison of biocalcification processes in the two coralline demosponges *Astrosclera willeyana* Lister 1900 and "*Acanthochaetetes*" *wellsi* Hartman & Goreau 1975. Proceedings of the 8th International Coral Reef Symposium, Panama (1966) 2:1427–1432.
- Wörheide, Gert., A. M. Solé-Cava, & J. Fromont. 2004. Population genetics and phylogeography of sponges: A workshop synthesis. *Bollettino dei Musei e degli Istituti biologici dell'Università di Genova* 68:683–688.
- Wörheide, Gert., A. M. Solé-Cava, & J. N. A. Hooper. 2005. Biodiversity, molecular ecology and phylogeography of marine sponges: Patterns, implications and outlooks. *Integrative and Comparative Biology* 45(2):377–385.
- Wray, J. L. 1967. Upper Devonian calcareous algae from the Canning Basin, Western Australia. *Professional Contributions of the Colorado School of Mines* 3:i–ix, 1–76.
- Wray, John L. 1968. Late Paleozoic phylloid algal limestones in the United States. *Proceedings of the 23rd International Geological Congress* 8:113–119.
- Wray, John L. 1970. Algae in reefs through time. *Proceedings of the 1st North American Paleontological Convention* 2:1358–1373, 20 fig.
- Wray, John L. 1977. Calcareous algae. Developments in palaeontology and stratigraphy, vol. 4. Elsevier Scientific Publishing Company. Amsterdam. 185 p., 170 fig.

- Wright, E. P., & Th. Struder. 1889. Alcyonaria. Reports of the Challenger Expedition 31:1–314.
- Wrona, Ryszard, & A. Yu. Zhuravlev. 1996. Early Cambrian archaeocyaths from glacial erratics of King George Island (South Shetland Islands), Antarctica. *Palaeontologica Polonica* 55:9–36, 4 fig., pl. 1–8.
- Wu Xichun, & Xiao Rongwu. 1989. Discovery of Late Triassic sponge fauna in northwestern Sichuan. *Journal of Kunming Institute of Technology* 14(1):12–21, 1 pl. In Chinese with English summary.
- Wu Ya Sheng. 1991. Organisms and communities of Permian reef of Xiangbo, China. International Academic Publications. Beijing. 192 p., 39 fig., 26 pl. In Chinese with English summary.
- Wu Y. Sh. 1995. Characters, terminology and classification of thalamids. *Acta Palaeontologica Sinica* 34(3):382–392, 1 fig. In Chinese with English summary.
- Wulff, J. L. 2006. Ecological interactions of marine sponges. *Canadian Journal of Zoology* 84:146–166.
- Yabe, Hisakatsu. 1903. On a Mesozoic Stromatopora. *Journal of the Geological Society of Japan* 10:1–7, pl. 7.
- Yabe, Hisakatsu. 1910. Bemerkungen über die gattung *Raphidiopora* Nicholson & Foord. *Zentralblatt für Mineralogie, Geologie, Paläontologie*, Stuttgart 1910:4–10.
- Yabe, Hisakatsu, & Toshio Sugiyama. 1930. On some Ordovician stromatoporoids from South Manchuria, North China and Chosen (Corea), with notes on two new European forms. *Tohoku Imperial University Science Reports (series 2, Geology)* 14:47–62, 5 fig., pl. 17–23, 2 tables.
- Yabe, Hisakatsu, & Toshio Sugiyama. 1931a. Note on a new Hydrozoa *Sphaerostromella shikokuensis*, gen. et sp. nov. from the Upper Paleozoic limestone of Shikoku, Japan. *Japanese Journal of Geology and Geography (series 3)* 8:123–124, 1 table.
- Yabe, Hisakatsu, & Toshio Sugiyama. 1931b. Note on a new form of *Lophiostroma* from the Permian of Japan. *Japanese Journal of Geology and Geography* 9(1–2):17–19, 3 fig.
- Yabe, Hisakatsu, & Toshio Sugiyama. 1934. *Amblyphonella* and *Rhabdactinia* gen. and sp. nov. from the Upper Paleozoic Limestone of Mimikiri, near Sakawa-mati. Tosa Province, Sikoku, Japan. *Japanese Journal of Geology and Geography* 11:175–180, pl. 20–22.
- Yabe, Hisakatsu, & Toshio Sugiyama. 1935. Jurassic stromatoporoids from Japan. *Tôhoku Imperial University, Sendai, Science Reports (series 2, Geology)* 14:135–192, pl. 40–71.
- Yabe, Hisakatsu, & Toshio Sugiyama. 1939. *Marinduqueia mirabilis* gen. et sp. nov., a sponge-like fossil from the Eocene limestone of Marinduque Island, Philippine Islands. *Transactions and Proceedings of the Palaeontological Society of Japan* 15:68–71, pl. 20–22.
- Yabe, Hisakatsu, & Toshio Sugiyama. 1941a. Discovery of *Circoporella semiclavata* Hayasaka, from Hokkaido. *Journal Geological Society, Japan* 48:38–42.
- Yabe, Hisakatsu, & Toshio Sugiyama. 1941b. *Tienodictyon zonatum*, a new stromatoporoid from Eastern Yunnan, China. *Proceedings of the Imperial Academy, Tokyo* 17:139–141, 6 fig.
- Yakovlev, V. N. 1956. O nekotorykh nepodcherknutnykh osobennostyakh stroeniya *Archaeolynthus* Taylor i ego vozmozhnoy rodstvennoy syazi s iglokozhimi [On some unemphasized peculiarities in the structure of *Archaeolynthus* Taylor and its possible relationships with the echinoderms]. *Akademiya Nauk SSSR, Doklady* 109:855–857, 1 fig.
- Yakovlev, V. N. 1959. *Chankacyathus strachovii* gen. et sp. nov.: Pervyy predstavitel' novogo semeystva nizhnemembriyskikh arkheotsiat [*Chankacyathus strachovii* gen. et sp. nov.]: First representative of a new family of Lower Cambrian archaeocyaths]. *Dal'nenvostochnyy Filial, Sibirskoe Otdelenie, Akademiya Nauk SSSR, Soobshcheniya* 10:91–93, 1 fig.
- Yang Aihua, & Yuan Kexing. 2012. New archaeocyaths from the early Cambrian of Shaanxi and Guizhou provinces, South China. *Geobios* 45:591–601, 7 fig., 3 tables.
- Yang Aihua, Zhu Maoyan, Françoise Debrenne, Yuan Kexing, Jean Vannier, Zhang Junming, & Li Guoxiang. 2005. Early Cambrian archaeocyathan zonation of the Yangtze Platform and its biostratigraphic implications. *Acta Micropalaeontologica Sinica* 22(supplement):205–210.
- Yang Aihua, Zhu Maoyan, Yuan Kexing, & Françoise Debrenne. 2007. Lower Cambrian archaeocyathan zonation of the Yangtze Platform and biostratigraphic implications. *New York State Museum Bulletin* 510:91.
- Yang J.-Zi, & D.-Y Dong. 1962. *Stromatoporoidea of China*. Science Publishing House. Beijing. p. i–iii, 1–40, 14 pl. In Chinese.
- Yang J.-Z., & D.-Y. Dong. 1979. Devonian stromatoporoids from central and eastern parts of Guangxi, China. *Palaeontologica Sinica (new series B)* 157(14):1–89, 46 pl. In Chinese with English abstract.
- Yang Jing-zhi, & Dong De-yuan. 1980. Discussion on the Early Silurian strata in southwestern Hubei and northeastern Guizhou in light of fossil stromatoporoids. *Acta Paleontologica Sinica* 19(9):393–404, 4 pl. In Chinese; English abstract.
- Yang Shengwu. 1978. Tabulata. In *Atlas of the Fossils of Southwestern China, Guizhou* vol. 2. Part 2. Carboniferous-Quaternary. Geological Press. Beijing. p. 189–229, pl. 62–84. In Chinese.
- Yang Shengwu, Kim [Jin] Chun-tai, & Chow [Zhou] Xiyun. 1978. Tabulata. In *Atlas of the Fossils of Southwestern China, Guizhou* vol. 1, Cambrian-Devonian, compiled and written by the Guizhou [Kweichow] Stratigraphy and Palaeontology work team. Geological Publishing House. Beijing. p. 161–251, pl. 56–93. In Chinese.
- Yaroshevich, V. M. 1957. Noyye predstavitieli arkheotsiat kembriya vostochnogo sklona Kuznetskogo Ala-Tau [New representatives of archaeocyaths in the Cambrian of the eastern flank of the Kuznetsk Ala-Tau]. *Akademiya Nauk SSSR, Doklady* 116:1015–1017, 1 fig.

- Yaroshevich, V. M. 1962. Stratigrafiya siniyikh i kembriyskih otlozheniy Batenevskogo kryazha, khrebeta Azyr-Tal i basseyna reki Belyy Iyus (vostochnyy sklon Kuznetskogo Alatau) [Stratigraphy of the Sinian and Cambrian strata of the Batenev Range, Azyr-Tal Range and Belyy Iyus River basin (eastern flank of the Kuznetsk Alatau)]. Institut Geologii i Geofiziki, Sibirskoe Otdelenie, Akademiya Nauk SSSR, Trudy 17:1-188, 70 fig.
- Yaroshevich, V. M. 1966. Ob'yem roda *Archaeocyathus* i semeystva Archaeocyathidae [Extent of the genus *Archaeocyathus* and the family Archaeocyathidae]. Paleontologicheskiy Zhurnal 1966(1):19-27, pl. 1.
- Yaroshevich, V. M. 1990. O zhivom veshchestve arkheotsiat [On the living matter of archaeocyaths]. Institut Geologii i Geofiziki, Sibirskoe Otdelenie, Akademiya Nauk SSSR, Trudy 783:18-28, 3 fig., pl. 11-14, 4 tables.
- Yavorsky, V. I. 1929. Silurijskie Stromatoporoidea [Silurian Stromatoporoidea]. Ivestiia Geologicheskogo Komiteta 48(1):77-144, pl. 5-12.
- Yavorsky, V. I. 1930. Actinostromidae iz devonikh otlozhenii Urala i okraini Kuznetskogo basseina [Actinostromidae from the Devonian of the Urals and the borders of the Kuznetsk Basin]. Izvestiya Geologicheskogo Komiteta [Transactions of the Geological Committee] 49(4):473-496.
- Yavorsky, V. I. 1931. Nekotorye devoniske Stromatoporoidea iz okrain Kuznetskogo basseina, Urala i drugikh mest [Some Devonian Stromatoporoidea from the margins of the Kuznetsk Basin, the Urals and other localities]. Izvestiya Vsesodznogo Geologo-Razvedochnogo-Ob'edineniiia [Bulletins of the United Geological and Prospecting Service of USSR] 50 (fascicle 94):1387-1415, pl. I-IV.
- Yavorsky, V. I. 1932. Ein Stromatoporenfund im Kambrium. Neues Jahrbuch für Mineralogie, Geologie und Paläontologie (B)12:613-616.
- Yavorsky, V. I. 1947. Nekotorye paleozoiskie i mesozoiskie Hydrozoa, Tabulata i Algae [On some Paleozoic and Mesozoic Hydrozoa, Tabulata, and Algae]. Monografi po Paleontologii SSSR 20(1):44 p., 7 pl. In Russian.
- Yavorsky, V. I. 1950. Devoniske Stromatoporella i ikh znachenie dlja stratigrafi [The Devonian Stromatoporella and their stratigraphic significance]. Leningrad Gosudarstvennyi Universitet, Voprosy Paleontologii 1:243-263, pl. 1-7.
- Yavorsky, V. I. 1951. Nekotorye paleozoiskie stromatoporoidei [Some Paleozoic stromatoporoids]. Vsesoiuznyi Nauchno-Issledovatel'skii Geologicheskii Institut (VSEGEI). Gosgeolizdat. Moscow. 48 p., 6 pl.
- Yavorsky, V. I. 1955. Stromatoporoidea Sovetskogo Soyuza, chast' pervaya, prilozhenie k chasti pervoy [Stromatoporoidea of the Soviet Union, part 1 & supplement to part 1]. Vsesoiuznogo Nauchno-Issledovatel'skogo Geologicheskogo Instituta (VSEGEI), Trudy (new series) 8:173 p., 11 fig., pl. 1-89.
- Yavorsky, V. I. 1957. Stromatoporoidea Sovetskogo Soyuza, chast' vtoraya [Stromatoporoidea of the Soviet Union, part 2]. Vsesoiuznogo Nauchno-Issledovatel'skogo Geologicheskogo Instituta (VSEGEI), Trudy (new series) 18:168 p., pl. 1-43.
- Yavorsky, V. I. 1960. Novyi vid nizhnекаменноугольного stromatoporoidei [A new species of lower Carboniferous stromatoporoid]. Paleontologicheskiy Zhurnal 1960(4):123-133, pl. 13.
- Yavorsky, V. I. 1961. Stromatoporoidea Sovetskogo Soyuza, chast' tret'ya [Stromatoporoidea of the Soviet Union, part 3]. Vsesoiuznogo Nauchno-Issledovatel'skogo Geologicheskogo Instituta (VSEGEI), Trudy (new series) 44:64 p., pl. 1-38.
- Yavorsky, V. I. 1962. Gruppa Stromatoporoidei [Group Stromatoporoidea]. In Yu. A. Orlov, ed., Osnovy paleontologii [Fundamentals of Paleontology], vol. II. Izdatel'stvo Akademii Nauk SSSR. Moscow. p. 157-168, 9 pl. In Russian; complete English translation: Israel Program for Scientific Translation, Jerusalem, 1971, p. 239-258, p. 676-693, 9 pl.
- Yavorsky, V. I. 1963. Stromatoporoidea Sovetskogo Soyuza, chast' chetvertaia [Stromatoporoidea of the Soviet Union, part 4]. Vsesoiuznogo Nauchno-Issledovatel'skogo Geologicheskogo Instituta (VSEGEI), Trudy (new series) 87:95 p., pl. 1-31.
- Yavorsky, V. I. 1965. Nekotorye silurijskie i devoniske stromatoporoidei Pechorskogo basseina [Some Silurian and Devonian stromatoporoids from the Pechora Basin]. In M. V. Kulkov, ed., Biostratigraficheskii Sbornik, Spetsial'nyi vypusk 1 [Biostratigraphic collection, Special issue 1]. Vsesoiuznyi Nauchno-Issledovatel'skii Geologicheskii Institut (VSEGEI), Trudy (new series) 115:218-247, pl. 1-7.
- Yavorsky, V. I. 1967. Stromatoporoidea Sovetskogo Soyuza, chast' piataya [Stromatoporoidea of the Soviet Union, part 5]. Vsesoiuznogo Nauchno-Issledovatel'skogo Geologicheskogo Instituta, Trudy (new series) 148:118 p., 1 fig., 29 pl.
- Yavorsky, V. I. 1968. Die hauptmerkmale das Faserbaus im Coenosteum-Gewebe von Amphipora un Par'amphipora. Neues Jahrbuch für Mineralogie, Geologie und Paläontologie Mitteilungen 9:559-562.
- Yavorsky, V. I. 1969a. K voprosy o rode *Paramphipora* [On the problem of the genus *Paramphipora*]. Paleontologicheskiy Zhurnal 1969(1):129-130.
- Yavorsky, V. I. 1969b. Novyi rod *Intexodictyonella* iz srednego devona Kuznetskogo basseina [A new genus *Intexodictyonella* from the Middle Devonian of the Kuznetsk Basin]. Paleontologicheskiy Zhurnal 1969(4):102-104.
- Yavorsky, V. I. 1971. Pro Domo Sua. Paleontologicheskiy Sbornik [Paleontological papers]. Izdatel'stvo Lvovskogo Universiteta [Lvov University Publishing House] 1(8):65-69.
- Yazmir, M. M., B. A. Dalmatov, & I. K. Yazmir. 1975. Atlas Fauny i Flory Paleozoya i Mezozoya Buryatskoy ASSR. Paleozoy [Atlas of Fauna and Flora of the Paleozoic and Mesozoic of the Buryat ASSR. Paleozoic]. Nedra. Moscow. 181 p., 15 fig., 34 pl.
- Ye J., Yang Y. Y., Xu A. D., Zheng B. Y., Zuo Z. F., Zhou Y., Li J. S., Li Z. X., Song G. C., Guo Z. M., Yong Y. X., Zhang J., & Zhang B. R. 1995. Ordovician reefs in south-western margin of the Ordos Basin. Beijing, Geological Publishing House. p. 1-67. In Chinese with English abstract.

- Yolkin, E. A., N. V. Sennikov, Z. E. Petrunina, N. K. Bakharev, N. G. Izokh, A. G. Klets, A. A. Alekseenko, S. A. Anastasieva, V. D. Ermikov, L. A. Gladkikh, Ya. M. Gutak, T. V. Khlenikova, A. N. Mamlin, O. T. Obut, O. A. Rodina, & V. N. Tokarev. 2001. Ordovician-Lower Carboniferous succession, eustatic (sedimentary) cycles, event levels and palaeogeography of southern West Siberia (Guidebook of Excursion). In E. A. Yolkin, John Talent, & B. D. Webby, eds., Contributions to Siberian IGCP 410/421 Joint Meeting. Institute of Petroleum Geology, Russian Academy of Sciences, Siberian Branch, Novosibirsk, Russia. p. 8–92, 61 fig.
- Yoo, Chan Min, & Lee, Yong Il. 1993. Original mineralogy of Ordovician stromatoporoids. *Carbonates and Evaporites* 8(2):224–229.
- Young, G. A., & Steve Kershaw. 2005. Classification and controls of internal banding in Palaeozoic stromatoporoids and colonial corals. *Palaeontology* 48:623–651.
- Young, G. A., & J. P. A. Noble. 1989. Variation and growth in a syringoporid symbiont species in stromatoporoids from the Silurian of eastern Canada. *Australasian Association of Palaeontologists Memoir* 8:91–98.
- Young, G. A., & C. T. Scrutton. 1991. Growth form in Silurian heliolitid corals: The influence of genetics and environment. *Paleobiology* 17:369–387.
- Young, G. C., & J. Laurie, eds. 1996. An Australian Phanerozoic Time Scale. Oxford University Press. Melbourne, i–vii, 1–279 p., 38 fig., 12 chart.
- Yourassowsky, C., & R. Rasmont. 1983. The differentiation of sclerocytes in fresh-water sponges grown in a silica-poor medium. *Differentiations* 25:5–9.
- Yuan Kexing. 1974. Archaeocyatha. In Nanjing Institute of Geology and Palaeontology, Academia Sinica, eds., A Handbook of the Stratigraphy and Palaeontology in Southwest China. Science Press. Beijing. p. 80–82, pl. 29–30.
- Yuan Kexing, & Zhang Sengui. 1977. Archaeocyatha. In Institute of Geological Sciences, Hubei Province and Bureaux of Geology, Honan, Hubei, Hunan and Guangdong Provinces and Guangxi Autonomous Region, eds., Atlas of Palaeontology in Central and Southern China. Part 1, Lower Palaeozoic. Geological Publishing House. Beijing. p. 4–8, 4 fig., pl. 1–2.
- Yuan Kexing, & Zhang Sengui. 1978. Archaeocyatha. In Three Yangtze Gorges Geological Research Unit, Geological Bureau of Hubei Province, eds., Stratigraphy and Palaeontology of Sinian to Permian in the Eastern Part of the Yangtze Gorge. Geological Publishing House. Beijing. p. 138–141, pl. 16–17.
- Yuan Kexing, & Zhang Sengui. 1980. Lower Cambrian Archaeocyatha of central and southwestern China. *Acta Palaeontologica Sinica* 19:380–391, 4 pl.
- Yuan Kexing, & Zhang Sengui. 1981. Lower Cambrian archaeocyathid assemblages of central and southwestern China. Geological Society of America, Special Paper 187:39–53, 2 fig., 4 pl., 2 tables.
- Yuan Kexing, Zhu Maoyan, Zhang Junming, & H. van Iten. 2001. Biostratigraphy of archaeocyathan horizons in the Lower Cambrian Fucheng section, south Shaanxi province: Implications for regional correlations and archaeocyathan evolution. *Acta Palaeontologica Sinica* 40(supplement):115–129, 3 fig., 3 pl.
- Zadorozhnaya, N. M., D. V. Osadchaya, & L. N. Repina. 1973. Novye dannye po biostratigrafiy nizhnego kembriya okrestnostey pos. Bograd (Batenevskiy kryazh) [New data on the Lower Cambrian biostratigraphy of the environs of Bograd settlement (Batenev Range)]. Institut Geologii i Geofiziki, Sibirske Otdelenie, Akademiya Nauk SSSR, Trudy 49:119–151, 2 fig., pl. 19–24, 3 tables.
- Zamarreño, I. 1977. Early Cambrian algal carbonates in southern Spain. In Erik Flügel, ed., *Fossil Algae*. Springer-Verlag. Berlin & Heidelberg. p. 360–365, 3 fig.
- Zamarreño, I., & Françoise Debrenne. 1977. Sédimentologie et biologie des constructions organogènes du Cambrien inférieur du Sud de l'Espagne. Bureau de Recherches Géologiques et Minières, Mémoire 89:49–61, 1 fig., 5 pl., 1 table.
- Zankl, H. 1969. Der Hohe Göll. Aufbau und Lebensbild eines Dachsteinkalk-Riffes in der Obertrias der nördlichen Kalkalpen. Abhandlungen der Senckenbergischen Naturforschenden Gesellschaft 519:1–123, 74 fig., 15 pl.
- Zapalski, M. K. 2007. Parasitism versus commensalism: The case of tabulate endobionts. *Palaeontology* 50(6):1375–1380.
- Zapalski, M. K., B. Hubert, J.-P. Nicollin, B. Misstaen, & D. Brice. 2007. The palaeobiodiversity of stromatoporoids, tabulates and brachiopods in the Devonian of the Ardennes: Changes through time. *Bulletin de la Société Géologique de France* 178(5):383–390.
- Zeise, O. 1897. Die Spongien der Stramberger Schichten. Palaeontologische Studien über die Grenzschichten der Jura und Kreideformation im Gebiete der Karpathen, Alpen, und Apeninen, VIII. *Palaeontographica*, Supplement 2:i–iv, 289–342, pl. 19–21.
- Zhang Sengui & Yuan Kexing. 1985. Discovery of the genus *Cambrocyathellus* in China. *Acta Palaeontologica Sinica* 24:518–527, 7 fig., 3 pl.
- Zhang Wei. 1983. Study on the sphinctozoans of Upper Permian Changxing Formation from Lichuan area, West Hubei, China. In Collection of theses for Master's degree 1983. Institute of Geology, Academia Sinica. Beijing. p. 1–11, 6 fig.
- Zhang Wei. 1987. A new genus *Neoguadalupia* with notes on connections of interrelated genera in Seborgasiidae, Sphinctozoaa. *Scientia Geologica Sinica* 7:231–238, 4 fig., 1 pl.
- Zhautikov, T. M., L. N. Klenina, I. T. Zhuravleva, & S. S. Rodionov. 1976. Novye dannye ob arkheotsiatakh nizhnego kembriya khrebeta Chingiz [New data on Lower Cambrian archaeocyaths of the Chingiz Range]. Institut Geologii i Geofiziki, Sibirske Otdelenie, Akademiya Nauk SSSR, Trudy 296:127–141, 3 fig., pl. 5–7.
- Zhen Yong Yi, & John Pickett. 2008. Ordovician (early Darriwilian) conodonts and sponges from west of Parkes, central New South Wales. *Proceedings of the Linnean Society of New South Wales* 129:57–82.

- Zhen Yong-Yi, & Ronald R. West. 1997. Symbionts in a stromatoporoid-chaetetid association from the Middle Devonian Burdekin Basin, North Queensland. *Alcheringa* 21:271–280.
- Zhou Y., & Ye J. 1996. Late Ordovician reefs in the region north of the Weihe River, Shaanxi Province, Central China. In Fang J. S., ed., *The Ancient Organic Reefs of China and Their Relations to Oil and Gas*. Ocean Publishing House. Beijing. p. 48–53. In Chinese with English abstract.
- Zhou Z.-Y., & R. A. Fortey. 1986. Ordovician trilobites from North and Northeast China. *Palaeontographica (Abteilung A)* 192:157–210.
- Zhu Zhongde, Liu Bingli, & Li Xiangming. 1993. *Pulchrilamina* found in Early Ordovician reef at Huanghuachang, Yichang, Hubei. *Oil and Gas Geology* 14(4):304–309. In Chinese with English abstract.
- Zhuravlev, A. Yu. 1985. Sovremennye arkheotsiaty? [Recent archaeocyaths?]. Institut Geologii i Geofiziki, Sibirskoe Otdelenie, Akademiya Nauk SSSR, Trudy 632:24–33, 1 fig., pl. 14.
- Zhuravlev, A. Yu. 1986a. Evolution of archaeocyaths and palaeobiogeography of the Early Cambrian. *Geological Magazine* 123:377–385, 3 fig.
- Zhuravlev, A. Yu. 1986b. Radiocyathids. In A. Hoffman & M. H. Nitecki, eds., *Problematic Fossil Taxa*. Oxford Monographs on Geology and Geophysics 5:35–44, 6 fig.
- Zhuravlev, A. Yu. 1988. Arkheotsiaty nizhnego kembriya krainego severo-vostoka SSSR [Lower Cambrian archaeocyaths of the extreme northeast of the USSR]. Institut Geologii i Geofiziki, Sibirskoe Otdelenie, Akademiya Nauk SSSR 720:97–110, 1 fig., pl. 8–12.
- Zhuravlev, A. Yu. 1989. Poriferan aspects of archaeocyathan skeletal function. Association of Australasian Palaeontologists, Memoir 8:387–399, 12 fig.
- Zhuravlev, A. Yu. 1990a. Sistema arkheotsiaty [Systematics of archaeocyaths]. In V. V. Menner, ed., *Sistemmatika i Filogeniya Bespozvonochnykh. Kriterii Vydeleniya Vyschikh Taksonov* [Systematics and Phylogeny of Invertebrates. Criteria for Definition of Higher Taxa]. Nauka. Moscow. p. 28–54, 6 fig.
- Zhuravlev, A. Yu. 1990b. Pravil'nye dnishchevye arkheotsiaty nizhnego kembriya Sibirskej platformy [Regular tabulate archaeocyaths from the Lower Cambrian of the Siberian Platform]. Institut Geologii i Geofiziki, Sibirskoe Otdelenie, Akademiya Nauk SSSR, Trudy 765: 136–147, pl. 8–18, 1 table.
- Zhuravlev, A. Yu. 1993. A functional morphological approach to the biology of the Archaeocyatha. *Neues Jahrbuch für Geologie und Paläontologie, Abhandlungen* 190:315–327, 6 fig.
- Zhuravlev, A. Yu. 1995. Preliminary suggestions on the global Early Cambrian zonation. *Beringeria, Special Issue* 2:147–160, 2 tables.
- Zhuravlev, A. Yu. 1996. Reef ecosystem recovery after the Early Cambrian extinction. In M. B. Hart, ed., *Biotic Recovery from Mass Extinction Events*. Geological Society, Special Publication 102:79–96, 5 fig.
- Zhuravlev, A. Yu. 1998. Early Cambrian archaeocyathan assemblages of Mongolia. In P. Ahlberg, M. Eriksson, & I. Olsson, eds., IV Field Conference of the Cambrian Stage Subdivision Working Group, Sweden, 24–31 August 1998. Lund Publications in Geology 142:24–25.
- Zhuravlev, A. Yu. 1999a. Modul'nost' i stanovlenie kembriiskoi rivoi ekosistemy [The modularity and establishment of the Cambrian reef ecosystem]. *Zhurnal Obshchey Biologii* 60:29–40, 4 fig., 2 tables.
- Zhuravlev, A. Yu. 1999b. A new coral from the Lower Cambrian of Siberia. *Paleontologicheskiy Zhurnal* 1999(5):27–33, 2 fig. English translation: *Paleontological Journal* 33(5):502–508, 2 fig.
- Zhuravlev, A. Yu. 2001a. O nekotorykh kollektsiyah arkheotsiat iz Paleontologicheskogo Instituta RAN [On some archaeocyath collections housed at the Paleontological Institute of the Russian Academy of Sciences]. *Paleontologicheskiy Zhurnal* 2001(6):91–94.
- Zhuravlev, A. Yu. 2001b. Osobennosti raznoobraziya organizmov v kembrii [Features of the diversification of organisms in the Cambrian]. In A. G. Ponomarenko, A. Yu. Rozanov, & M. A. Fedonkin, eds., *Ekosistemnye Perestroyki i Evolyutsiya Biosfery. Vypusk 4* [Ecosystem Restructures and the Evolution of the Biosphere. Issue 4]. Paleontologicheskiy Institut, Rossiyskaya Akademiya Nauk. Moscow. p. 174–183, 2 fig.
- Zhuravlev, A. Yu. 2001c. Paleoecology of Cambrian reef ecosystems. In G. D. Stanley Jr., ed., *The History and Sedimentology of Ancient Reef Systems. Topics in Geobiology*, vol. 17. Kluwer Academic/Plenum Publishers. New York. p. 121–157, 11 fig., 2 tables.
- Zhuravlev, A. Yu., Françoise Debrenne, & J. G. Lafuste. 1993. Early Cambrian microstructural diversification of Cnidaria. *Courier Forschungsanstalt Senckenberg* 164:365–372, 3 fig.
- Zhuravlev, A. Yu., Françoise Debrenne, & R. A. Wood. 1990. A synonymized nomenclature for calcified sponges. *Geological Magazine* 127:587–589, 1 fig., 1 table.
- Zhuravlev, A. Yu., & D. I. Gravestock. 1994. Archaeocyaths from Yorke Peninsula, South Australia and archaeocyathan Early Cambrian zonation. *Alcheringa* 18:1–54, 13 fig., 4 tables.
- Zhuravlev, A. Yu., & P. D. Kruse. 2012. Part E, Revised, Volume 4, Chapter 20B: Cribricyaths and calcareous microfossils of uncertain affinity resembling cribricyaths. *Treatise Online* 55:1–11, 4 fig.
- Zhuravlev, A. Yu., & I. D. Maidanskaya. 1998. Skhodstvo faun i dinamika plit v rannem kembrii [Faunal similarity and plate dynamics in the Early Cambrian]. In V. A. Koroteev, ed., *Paleogeografiya Vendian-Rannego Paleozoya Severnoy Evrazii* [Paleogeography of the Vendian–Early Paleozoic in Northern Eurasia]. Rossiyskaya Akademiya Nauk, Ural'skoe Otdelenie. Ekaterinburg. p. 166–171, 2 fig., 1 table.
- Zhuravlev, A. Yu., & E. B. Naimark. 2005. Alpha, beta, or gamma: Numerical view on the Early Cambrian world. *Palaeogeography, Palaeoclimatology, Palaeoecology* 220:207–225, 3 fig., 5 tables.
- Zhuravlev, A. Yu., & M. H. Nitecki. 1985. O sravnitel'noy morfologii arkheotsiat i retseptakultiv [On the comparative morphology of archaeocyathids

- and receptaculitids]. Paleontologicheskiy Zhurnal 1985(4):121–122.
- Zhuravlev, A. Yu., & Robert Riding. 2001. Introduction. In A. Yu. Zhuravlev & R. Riding, eds., *The Ecology of the Cambrian Radiation*. Columbia University Press. New York. p. 1–7, 2 tables.
- Zhuravlev, A. Yu., & T. A. Sayutina. 1985. Radiotsiaty Mongoli. K revizii “klassa” Radiocyatha [Radiocyaths of Mongolia. On revision of the “class” Radiocyatha]. Institut Geologii i Geofiziki, Sibirske Otdelenie, Akademiya Nauk SSSR, Trudy 632:52–62, 2 fig., pl. 22–24.
- Zhuravlev, A. Yu., & Rachel Wood. 1995. Lower Cambrian reefal cryptic communities. Palaeontology 18:443–470, 9 fig., 3 pl., 3 tables.
- Zhuravlev, A. Yu., & Rachel Wood. 1996. Anoxia as the cause of the mid-Early Cambrian (Botomian) extinction event. Geology 24:311–314, 4 fig.
- Zhuravlev, A. Yu., & R. A. Wood. 2008. Eve of biomineralization: Controls on skeletal mineralogy. Geology 36:923–926, 2 fig.
- Zhuravlev, A. Yu., I. T. Zhuravleva, & V. D. Fonin. 1983. Arkheotsiaty iz nizhnego kembriya Sibiri [Archaeocyaths from the Lower Cambrian of Siberia]. Paleontologicheskiy Zhurnal 1985(2):22–30, 1 fig., pl. 3–4.
- Zhuravleva, I. T. 1949. Nekotorye dannye o stroenii kubka u predstaviteley roda *Rhabdocyathus* Toll [Some data on the structure of the cup in representatives of the genus *Rhabdocyathus* Toll]. Akademiya Nauk SSSR, Doklady 67:547–550, 2 fig.
- Zhuravleva, I. T. 1950. O nakhodke v kembriyskikh otlozheniyakh Tuvy arkheotsiata s kolonial'nym skel'etom [On the find in Cambrian deposits of Tuva of an archaeocyath with colonial skeleton]. Akademiya Nauk SSSR, Doklady 75:855–858, 3 fig.
- Zhuravleva, I. T. 1951. O novom rode arkheotsiat s gribenchayimi dnishchami v kembriyskikh izvestnyakakh Sibiri [On a new archaeocyathan genus with pectinate tabulae from the Cambrian limestones of Siberia]. Akademiya Nauk SSSR, Doklady 81:77–80, 3 fig.
- Zhuravleva, I. T. 1954. Nastavlenie po Sboru i Izucheniyu Arkheotsiat [Manual for the Collection and Study of Archaeocyaths]. Paleontologicheskiy Institut, Akademiya Nauk SSSR. Moscow. 46 p., 25 fig., 4 pl.
- Zhuravleva, I. T. 1955a. Arkheotsiaty kembriya vostochnogo sklona Kuznetskogo Ala-Tau [Cambrian archaeocyaths of the eastern flank of the Kuznetsk Ala-Tau]. Paleontologicheskiy Institut, Akademiya Nauk SSSR, Trudy 56:5–56, 6 fig., pl. 1–6, 1 table.
- Zhuravleva, I. T. 1955b. K poznaniyu arkheotsiat Sibiri [Toward knowledge of the archaeocyaths of Siberia]. Akademiya Nauk SSSR, Doklady 104:626–629, 2 fig.
- Zhuravleva, I. T. 1957. Arkheotsiaty, ikh razvitiye i stratigraficheskoe znachenie [Archaeocyaths, their development and stratigraphic significance]. Moskovskoe Obshchestvo Ispytatelei Prirody, Byulleten', Otdel geologicheskiy 32:174–175.
- Zhuravleva, I. T. 1959. Arkheotsiaty bazaikhskogo gorizonta r. Kii [Archaeocyaths of the Bazaikha Horizon of the R. Kiya]. Akademiya Nauk SSSR, Doklady 124:424–427, 2 fig.
- Zhuravleva, I. T. 1960a. Novye dannye ob arkheotsiatakh sanashtykgol'skogo gorizonta [New data on the archaeocyaths of the Sanashtykgol Horizon]. Geologiya i Geofizika 2:42–46, 1 fig.
- Zhuravleva, I. T. 1960b. Arkheotsiaty Sibirskoy Platformy [Archaeocyaths of the Siberian Platform]. Akademiya Nauk SSSR. Moscow. 344 p., 147 fig., 33 pl., 26 tables.
- Zhuravleva, I. T. 1960c. Arkheotsiaty [Archaeocyaths]. Sibirski Nauchno-Issledovatel'skiy Institut Geologii, Geofiziki i Mineral'nogo Syr'ya, Trudy 19:73–82, fig. 2–15, table 6.
- Zhuravleva, I. T. 1963a. Novye dannye ob arkheotsiatakh vostochnogo sklona yuzhnogo Urala [New data on the archaeocyaths of the eastern flank of the southern Urals]. Paleontologicheskiy Zhurnal 1963(4):116–118, 2 fig.
- Zhuravleva, I. T. 1963b. Arkheotsiaty Sibiri. Odnostennye Arkheotsiaty (Otryady Monocyathida i Rhizacyathida) [Archaeocyaths of Siberia. One-walled Archaeocyaths (Orders Monocyathida and Rhizacyathida)]. Akademiya Nauk SSSR. Moscow. 139 p., 68 fig., 12 pl., 22 tables.
- Zhuravleva, I. T. 1965. Arkheotsiaty verkhnego pododela nizhnego kembriya severa Baykal'skogo nador'ya (solontsovskiy i obruchevskiy gorizonty) [Archaeocyaths of the upper subdivision of the Lower Cambrian of the northern Baikal Highlands (Solontsy and Obruchev Horizons)]. In B. S. Sokolov, ed., Stratigrafiya i Paleontologiya Paleozoya Aziatskoy Chasti SSSR [Paleozoic Stratigraphy and Paleontology of the Asian Part of the USSR]. Nauka. Moscow. p. 3–12, 5 fig., 2 pl.
- Zhuravleva, I. T. 1966. Rannekembriyskie organogennye postroyki na territorii Sibirskoy Platformy [Early Cambrian organogenic buildups on the territory of the Siberian Platform]. In R. F. Gekker, ed., Organizm i Sreda v Geologicheskem Proshlyom [Organism and Environment in the Geological Past]. Nauka. Moscow. p. 61–84, 17 fig., 2 tables.
- Zhuravleva, I. T. 1970. Porifera, Sphinctozoa, Archaeocyathi: Their connections. Symposia of the Zoological Society, London 25:41–59, 8 fig., 1 table.
- Zhuravleva, I. T. 1972a. Rannekembriyskie fatsial'nye kompleksy arkheotsiat (r. Lena, srednee techenie) [Early Cambrian facies assemblages of archaeocyaths (middle Lena River)]. In I. T. Zhuravleva, ed., Problemy Biostratigrafi i Paleontologii Nizhnego Kembriya Sibiri [Problems of Lower Cambrian Biostratigraphy and Paleontology of Siberia]. Nauka. Moscow. p. 31–109, 37 fig., pl. 3–8, 46 tables.
- Zhuravleva, I. T. 1972b. O novom rode *Ijinicyathus* iz nizhnego kembriya Mongolii [On the new genus *Ijinicyathus* from the Lower Cambrian of Mongolia]. In I. T. Zhuravleva, ed., Problemy Biostratigrafi i Paleontologii Nizhnego Kembriya Sibiri [Problems of Lower Cambrian Biostratigraphy and Paleontology of Siberia]. Nauka. Moscow. p. 155–156, pl. 21.
- Zhuravleva, I. T. 1974a. Katalog Rodov Arkheotsiat. Chast' 1 [Catalogue of Archaeocyath Genera. Part 1]. Nauka. Novosibirsk. 228 p., 69 fig.

- Zhuravleva, I. T. 1974b. Katalog Rodov Arkheotsiat. Chast' 2 [Catalogue of Archaeocyath Genera. Part 2]. Nauka Novosibirsk. 215 p., 49 fig.
- Zhuravleva, I. T. 1974c. Biologiya arkheotsiat [Biology of archaeocyaths]. Institut Geologii i Geofiziki, Sibirske Otdelenie, Akademiya Nauk SSSR, Trudy 276:107–124, 7 fig., 4 pl., 2 tables.
- Zhuravleva, I. T. 1980. O nakhodke novoy formy odnostennykh arkheotsiat s dopolnitel'no poristym karkasom (*Butakovicyathus butakovi* gen. et sp. nov.) [On the discovery of a new form of one-walled archaeocyath with supplementary porous carcass (*Butakovicyathus butakovi* gen. et sp. nov.)]. In I. T. Zhuravleva, ed., Kembriy Altay-Sayanskoy Skladchatoi Oblasti [Cambrian of the Altay-Sayan Fold Belt]. Nauka. Moscow. p. 174–176, pl. 30.
- Zhuravleva, I. T. 1981. Paleobiogeografiya rannego kembriya [Paleobiogeography of the Early Cambrian]. In G. Ya. Krymgol's & K. V. Simakov, eds., Paleontologiya, Paleobiogeografiya i Mobilizm [Paleontology, Paleobiogeography and Mobilism]. Vsesoyuznyy Paleontologicheskiy Obshchestvo, Trudy, 21-ya Sessiya. Magadanskoe Knizhnoe Izdatel'stvo. Magadan. p. 43–52, 3 fig.
- Zhuravleva, I. T., & V. N. Elkina. 1974. Arkheotsiaty Sibiri. Etmofilloidnye Arkheotsiaty [Archaeocyaths of Siberia. Ethmophyllum archaeocyaths]. Institut Geologii i Geofiziki, Sibirske Otdelenie, Akademiya Nauk SSSR, Trudy 230:167 p., 33 fig., 29 pl., 15 tables.
- Zhuravleva, I. T., & V. D. Fonin. 1983. Klass Irregularia [Class Irregularia]. Institut Geologii i Geofiziki, Sibirske Otdelenie, Akademiya Nauk SSSR, Trudy 558:47–53, pl. 17–20.
- Zhuravleva, I. T., I. A. Konyaeva, D. V. Osadchaya, & A. S. Boyarinov. 1997a. Biostratigraphy of the Kiya River section. Early Cambrian archaeocyaths and spicular sponges from the Kiya River section (Kuznetsk Alatau). Annales de Paléontologie (Vertébrés-Invertébrés) 83:3–92, 1 fig., 12 pl., 2 tables.
- Zhuravleva, I. T., I. A. Konyaeva, D. V. Osadchaya, & A. S. Boyarinov. 1997b. Biostratigraphy of the Kiya River section. Early Cambrian archaeocyaths and spicular sponges from the Kiya River section (Kuznetsk Alatau). Annales de Paléontologie (Vertébrés-Invertébrés) 83:115–200, 1 fig., 14 pl., 1 table.
- Zhuravleva, I. T., K. N. Konyushkov, & A. Yu. Rozanov. 1964. Arkheotsiaty Sibiri. Dvustennye Arkheotsiaty [Archaeocyaths of Siberia. Two-walled Archaeocyaths]. Nauka. Moscow. 132 p., 75 fig., 16 pl., 12 tables.
- Zhuravleva, I. T., V. I. Korshunov, & A. Yu. Rozanov. 1969. Atdabanskiy yarus i ego obosnovanie po arkheotsiatam v stratotipicheskem razreze [The Atdabanian stage and its justification based on the archaeocyaths of the stratotype section]. In I. T. Zhuravleva, ed., Biostratigrafiya i Paleontologiya Nizhnego Kembriya Sibiri i Dal'nego Vostoka [Lower Cambrian Biostratigraphy and Paleontology of Siberia and the Far East]. Nauka. Moscow. p. 5–59, 1 fig., pl. 1–25, 3 tables.
- Zhuravleva, I. T., P. S. Krasnopoeva, & S. V. Chernysheva. 1960. Tip Archaeocyathi. Arkheotsiaty [Phylum Archaeocyathi. Archaeocyaths]. In L. L. Khalfin, ed., Biostratigrafia Paleozoia Saiano-Altaiskoi Gornoi Oblasti, Tom I: Nizhniy Paleozoi [Paleozoic Biostratigraphy of the Sayan-Altai Mountain Region, vol. I: Lower Paleozoic]. Sibirske Nauchno-Issledovatel'skogo Instituta Geologii, Geofiziki i Mineral'nogo Syr'ia, Trudy 19:97–140, fig. 19–38, pl. Cm1–Cm12.
- Zhuravleva, I. T., & E. I. Myagkova. 1972. Archaeata: novaya gruppa organizmov paleozoya [Archaeata: A new group of Paleozoic organisms]. Mezhdunarodnyy Geologicheskiy Kongress, XXIV Sessiya, Doklady Sovetskikh Geologov 7:7–14, 1 fig., 2 pl.
- Zhuravleva, I. T., & E. I. Myagkova. 1974a. Osnobennosti biotopov v nekotoryh organogenn'kh posroykakh (arkheotsiaty, soanity, afrosalpingidy i sfinktozoa) [Specific features of biotopes in some organogeneous structures (archaeocyathi, soanitesa, aphrosalingides and sphinctozoa)]. In O. A. Betekhtina & I. T. Zhuravleva, eds., Sreda i zhizn' v geologicheskem proshlyom (Paleokologicheskie problem) [Environment and Life in the Geological Past (Paleoecological problems)]. Nauka, Sibirske Otdelenie. Novosibirsk. p. 117–122, 2 fig., 1 table.
- Zhuravleva, I. T., & E. I. Myagkova. 1974b. Sravnitel'naya kharakteristika Archaeata i Stromatoporoidea [Comparative characteristics of Archaeata and Stromatoporoidea]. In B. S. Sokolov, ed., Drevnie Cnidaria, Tom 1 [Ancient Cnidaria, Vol. 1]. Nauka. Novosibirsk. p. 63–70, 10 fig., 2 pl.
- Zhuravleva, I. T., & E. I. Myagkova. 1979. Comparaison entre les Archaeata et les Porifera. In C. Lévi & N. Boury-Esnault, eds., Biologie des Spongiaires. Colloques Internationaux du C.N.R.S. 291:521–526, 4 fig.
- Zhuravleva, I. T., & E. I. Myagkova. 1981. Materialy k izucheniyu Archaeata [Material for the study of Archaeata]. Institut Geologii i Geofiziki, Sibirske Otdelenie, Akademiya Nauk SSSR, Trudy 481:41–74, 17 fig., pl. 13–40, 1 table.
- Zhuravleva, I. T., & E. I. Myagkova. 1987. Nizshie mnogokletchnye fanerozooya [Lower multicellular organisms of the Phanerozoic]. Institut Geologii i Geofiziki, Sibirske Otdelenie, Akademiya Nauk SSSR, Trudy 695:223 p., 79 fig., 32 pl., 6 tables.
- Zhuravleva, I. T., & O. G. Okuneva. 1981. O prirode kribitsiat [On the nature of cribricyaths]. Institut Geologii i Geofiziki, Sibirske Otdelenie, Akademiya Nauk SSSR, Trudy 481:23–30, 5 fig., pl. 3–5.
- Zhuravleva, I. T., L. N. Repina, & V. V. Khomentovskiy. 1967. Skhema biostratigraficheskogo rascenleniya nizhnego kembriya Sayano-Altayskoy skladchatoi oblasti [Scheme for the Lower Cambrian biostratigraphic subdivision of the Sayan-Altay Fold Belt]. In B. M. Keller, D. I. Musatov, & B. S. Sokolov, eds., Stratigrafiya Dokembriya i Kembriya Sredney Sibiri [Stratigraphy of the Precambrian and Cambrian of Central Siberia]. Krasnoyarsk Press. Krasnoyarsk. p. 131–136.
- Zhuravleva, I. T., L. N. Repina, B. V. Yaskovich, T. I. Khayrullina, I. A. Poniklenko, & V. A. Luchinina. 1970. K Poznaniyu Rannego Kembriya Yuzhnogo Tyan'-Shany [On the Study of the Early Cambrian

- in Southern Tien Shan]. FAN Publishing House. Tashkent. 53 p., 8 fig., 35 pl., 3 tables.
- Zhuravleva, I. T., N. M. Zadorozhnaya, D. V. Osadchaya, N. V. Pokrovskaya, N. M. Rodionova, & V. D. Fonin. 1967. Fauna Nizhnego Kembriya Tuvy (Oporny Razrez R. Shivelig-Khem) [Fauna of the Lower Cambrian of Tuva (Key Section, River Shivelig-Khem)]. Nauka. Moscow. 181 p., 39 fig., 70 pl., 13 tables.
- Zhuravleva, I. T., & K. K. Zelenov. 1955. Biogermy pestrotsvetnoy svity Reki Leny [Bioherms of the Pestrotsvet Suite of the River Lena]. Paleontologicheskiy Institut, Akademiya Nauk SSSR, Trudy 56:57–77, 8 fig., 2 pl., 2 tables.
- Ziegler, B. J. 1995. Application of fluid design theory to sponge functional morphology. Unpublished M.S. thesis. Indiana University. Bloomington. 79 p.
- Ziegler, Bernhard, & Siegfried Rietschel. 1970. Phylogenetic relationships of fossil calcisponges. In W. G. Fry, ed., The Biology of the Porifera. Zoological Society of London Symposium 25:23–40, 4 fig.
- Ziegler, W., & G. Klapper. 1985. Stages of the Devonian System. Episodes 8:104–109.
- Zittel, K. A. von. 1878. Studien über fossile Spongien, Zweiter Abtheilung: Lithistidae. Dritte Abteilung: Monactinellidae, Tetractinellidae und Calcispongiae. Abhandlungen der Kaiserlich-Bayerischen Akademie der Wissenschaften 13(2):1(93)–48(138), pl. 11–12.
- Zittel, K. A. von. 1879. Beiträge zur Systematik der fossilen Spongien, Dreitter Theil. Neues Jahrbuch für Mineralogie, Geologie und Paläontologie 1879:1–40, 3 pl.
- Zittel, K. A. von. 1913. Text-Book of Paleontology, vol. 1, 2nd edit., translation by C. R. Eastman. Macmillan & Co. London. 839 p.
- Zonenshain, L. P., M. I. Kuzmin, & M. V. Kononov. 1985. Absolute reconstructions of the Paleozoic oceans. Earth and Planetary Science Letters 74:103–116, 9 fig., 2 tables.
- Zonenshain, L. P., M. L. Kuzmin, & L. N. Natapov. 1990. Geology of the USSR. A Plate-Tectonic Synthesis. American Geophysical Union, Geodynamics Series 21:242 p.
- Zuffardi-Comerci, R. 1931. Corallari e idrozooi del Guirialis della Somalia. Palaeontographia Italica 32:49–76.
- Zukalova, V. 1958. Stromatoporoidea hranického devonu. Sborník Ústředního Ústavu Geologického (oddil Paleontologicky) 24:1–36.
- Zukalova, V. 1971. Stromatoporoidea from the Middle and Upper Devonian of the Moravian Karst. Rozpravy Ústředního Ústavu Geologického 37:1–143, pl. 1–40.
- Zukalova, V. 1974. The Paleozoic basement of the Tertiary in Nitkovice-2 borehole in the Carpathian foredeep in Moravia. Vestnik Ústředního Ústavu Geologického 49(4):193–200.

INDEX

In this index, the names of valid suprageneric taxa are listed in ALL CAPITAL letters, with other suprageneric taxa, as well as valid and invalid genera, shown in Capital and lowercase letters. **Boldface type** is used to highlight page references to taxonomic diagnoses or synonymies and *italic type* to highlight page references to terms in the Glossary.

- Abakanicyathus 1078
Abicyathus 1102
Academiophyllidae 1099
Academiophyllum 1099
ACANTHINOXYATHIDA liii,
1090
ACANTHINOXYATHIDAE liii,
1092, 1093
Acanthinocytina 1090
Acanthinocyathus 1090, 1092,
1093
Acanthochaetes xxiii, 3, 5, 7, 9,
10, 11, 12, 13, 16, 17, 21, 22,
25, 27, 35, 37, 38, 43, 51, 53,
55, 56, 57, 59, 61, 62, 65, 75,
81, 83, 84, 85, 86, 90, 91, 93,
97, 99, 100, 101, 107, 110,
111, 113, 115, 116, 117, 118,
119, 120, 121, 122, 123, 125,
127, 137, 152, 155, 164, 169,
170, 179, 189, 196, 197, 199,
200, 201, 202, 203, 206, 210,
211, 212, 213, 246, 470, 538,
545, 553, 560, 697, 848, 899
ACANTHOCHAETETIDAE
xlviii, 3, 11, 13, 14, 110, 199,
208, 210, 211, 212, 213, 215
Acanthocyathida 1090
Acanthocyathidae 1093
Acanthocyathina 1090
Acanthocyathus 1093
Acanthopora 236
Acanthopyrgidae 1030
Acanthopyrgus 1030
acanthostyle 399
Acantinocytidae 1093
Acantinocytina 1093
Acantochetaetes 210
Achilleum 243, 264
Achorocyathidae 1100
Achorocyathus 1100, 1101
Acoelia 393
Acoeliinae 393
acosmoreticular 399, 524, 542,
591, 774, 775, 776, 777,
779, 813, 814, 818, 819
Acostostroma 680, 777, 778
Acropora 457, 547, 560, 637
Actinacis 310
ACTINODICTYIDAE xlix, 590,
618, 664, 680, 700, 702,
705, 758, 759, 760
Actinodictyinae 705
Actinodictyon 493, 672, 673,
674, 675, 758, 769, 775
Actinospongia 395
Actinostroma 421, 437, 446, 455,
457, 458, 460, 461, 468,
469, 476, 487, 495, 497,
507, 508, 513, 517, 522,
535, 539, 540, 541, 542,
544, 546, 547, 596, 621,
631, 682, 769, 770, 771,
830, 1078
Actinostromacea 704
Actinostromaria 197, 201, 207,
260, 338, 341
Actinostromarianina 196, 198,
200, 201, 205, 207, 260, 261
ACTINOSTROMARIANINIDAE
xlviii, 195, 208, 260, 261
ACTINOSTROMARIIDAE
xlviii, 208, 259, 260
ACTINOSTROMATIDA xxv,
468, 487, 501, 511, 548,
577, 581, 590, 591, 595,
596, 653, 664, 665, 672,
673, 674, 675, 676, 677,
678, 679, 680, 682, 700,
702, 704, 705, 709, 732,
767, 769
ACTINOSTROMATIDAE xl ix,
590, 591, 621, 671, 672,
699, 700, 702, 704, 705,
758, 769, 770, 771, 772
Actinostromella 547, 621, 674,
675, 676, 678, 679, 680,
682, 775, 776
ACTINOSTROMELLIDAE xl ix,
590, 591, 618, 700, 701,
703, 704, 705, 775, 776, 777
Actinostromida xxv
Actinostromidae 769
Actinostromina 308
Actostroma 260, 261
Aculostroma 767, 768
Aculostromatidae 766, 767
Adaeccyathus 1078
Adrianelia 389
Adriatella 308
Afacyathus 861, 912, 947, 950
Agastrocyathus 1058, 1062, 1070
Agelas 206
AGELASIDA xxi, xxiii, xxv, xl viii,
10, 79, 108, 112, 189, 199,
206, 208, 239, 240, 346,
368, 387, 392
Agelasidae 11, 239, 240
AGYREKOCYATHIDAE li,
1003, 1005
Agyrekocyathus 872, 910, 1003,
1005
Ajacyathacea 932
Ajacyathellus 934
AJACICYATHIDA I, 849, 850,
851, 856, 857, 875, 883,
885, 887, 893, 897, 898,
899, 900, 901, 902, 903,
904, 906, 908, 915, 916, 928
AJACICYATHIDAE I, 861, 863,
865, 932, 935, 936, 937
AJACICYATHINA I, 849, 859,
861, 863, 900, 903, 906,
907, 908, 928, 932
Ajacyathoidea 932
Ajacyathus 932, 934, 935, 947,
1037
Aka 11
Akademiophyllacea 1099
AKADEMIOPHYLLIDAE liii,
1098, 1099
AKADEMIOPHYLLOIDEA liii,
1097, 1099
Akademiophyllum 1098, 1099
Aksaeporella 308
Aksporora 312, 313
Aksupora 313
Alaskacoscinus 1061, 1066
Alaskaspongia 372, 387
Alataucyathacea 1033
ALATAUCYATHIDAE lii, 1033,
1035
Alataucyathinae 1033
ALATAUCYATHOIDEA lii,
1033
Alataucyathus 911, 1008, 1033,
1035
Alconeracyathus 1037
Aldanocyathacea 932
Aldanocyathidae 932
Aldanocyathinae 932
Aldanocyathus 934
Alectona 11
Alexandricyathus 965
Aliabadia 356, 393
Alleynodictyon 452, 581, 584,
664, 665, 668, 669, 741, 743
Allonema 441
allotube(s) 399, 487, 493, 502,
511, 513, 545, 546, 561,
797, 802, 812, 824, 831
ALPHACYATHIDAE lii, 1020,
1023
ALPHACYATHOIDEA lii, 1020
Alphacyathus 1020, 1023

- Alpinothalamia 326, 337, 338, 341, 391
ALTAICYATHIDAE liii, 908, 1078, 1083
ALTAICYATHINA liii, 850, 901, 903, 908, 1078
Altacyathus 575, 880, 882, 883, 887, 901, 908, 910, 918, 1078, 1083
 altoid wall 399, 883, 887
 Alveolites 470, 517
 Amadedcyathus 1055
 amalgamate network 434, 546
 amalgamate structure 399, 487, 497, 503, 546, 797, 802, 827
 ambiostium 323, 399
 ambisiphonate 332, 341, 399
 Ambistapis 932
 Ambithalamia 389
 ambitopic (mode of life) 400, 459, 461, 462, 463, 464, 465, 467, 468, 469
Amblysiphonidae 137, 324, 325, 327, 329, 330, 332, 334, 335, 341, 342, 343, 344, 347, 349, 350, 353, 371, 374, 375, 378, 379, 388
Amblysiphonelloides 334, 371, 387
Amnestostroma 704, 796, 797
Amorphospongia 256, 394
 amphiaster 400
 amphiblastula 296, 305, 306, 400
 Amphicyathida 544
 Amphiopora 422, 452, 509, 525, 530, 536, 545, 553, 556, 566, 597, 605, 629, 637, 649, 677, 678, 679, 680, 683, 694, 824, 825, 826, 827, 829
AMPHIPORIDA xxv, l, 443, 452, 468, 548, 597, 654, 677, 678, 679, 680, 683, 700, 703, 781, 824
AMPHIPORIDAE l, 621, 700, 702, 704, 705, 824, 825, 826, 827, 828, 829, 830, 831
 Amphorithalamia 388
 Amphorithalamiidae xlvi, 388
Amsassia 110, 113
Anaptyctocyathacea 1007
ANAPTYCTOCYATHIDAE li, 1007, 1008
 Anaptyctocyathoidea 1007
 Anaptyctocyathus 1007, 1008
 Andalusicyathus 1040
 Angaricyathus 986, 987
 Anguispongia 362, 393
 Angulotohtroma 800
 Angulostroma 800
 Angulostromatidae 797
 Angullongia 338, 371, 372, 387
 Angulloniidae xlvi, 387
 Anisothalamia 387
 Annaecocelia 390
 Annaeceliidae 390
 annulation 324, 400
annuli (*see annulus*)
 Annulocyathacea 973
 Annulocyathella 975, 976
ANNULOCYATHIDAE li, 973, 975, 976
ANNULOCYATHOIDEA li, 973
 Annulocyathus 975, 976
 Annulofungia 975, 976
annulus (pl., *annuli*) 400, 863, 865, 866, 871, 887, 890, 891, 903, 906, 930, 931, 941, 942, 943, 945, 947, 954, 957, 963, 970, 973, 975, 980, 981, 984, 987, 990, 994, 995, 1003, 1016, 1017, 1019
 Anomalophyllidae 1097
 Anomalophyllum 1097
Anostylostroma 493, 501, 522, 530, 618, 629, 682, 703, 765, 766
ANOSTYLOSTROMATIDAE xl ix, 590, 700, 702, 705, 765, 766
 Antalythalamia 387
Antarcticocyathus 1037, 1038
 Anthocyatha 1043
 anthoid wall 400, 883
 Anthomorpha 854, 875, 883, 887, 890, 1044, 1045
 Anthomorphida 1035, 1043
ANTHOMORPHIDAE li, 1043, 1044, 1045
ANTHOMORPHINA lii, 850, 872, 875, 883, 891, 903, 1035, 1043
 Anthomorphinae 1044
ANTHOMORPHOIDEA lii, 1043
 Anthozoa 547
Antoniocoscinus 865, 997, 998
 Anulocyathus 975
 Aphralysis 308
 Aphrosalpingidae xl viii, 388
Aphrosalpinx 322, 325, 373, 374, 388
 Aphyllum 1097, 1099
 apical actine(s) 298, 299, 300, 303, 306, 400
 apochete 319, 400
 Apocyathus 1103
 apopore 319, 400
 apopyle 400
 aporate 323, 325, 327, 329, 333, 335, 336, 338, 344, 400
 aporoze (septum) 400, 854, 857, 858, 859, 871, 872, 887, 903, 905, 912, 914, 923, 932, 934, 935, 938, 940, 941, 942, 943, 945, 947, 951, 954, 959, 963, 975, 978, 999, 1037, 1055, 1056, 1058, 1062, 1064, 1068, 1078, 1081, 1082, 1087, 1106
 Aporosocyathus 866, 980, 982
 Aprutinopora 310
 Aptocyathacea 1020
 Aptocyathella 1022
 Aptocyathidae 1020
 Aptocyathus 910, 1022, 1023
 aquiferous system(s) xviii, xxiii, xxv, xxvi, 293, 294, 296, 303, 306, 400, 418, 553, 903, 906, 915
 aquiferous units 400, 853, 899
 Araneocyathida 1043
 Araneocyathidae 1044
 Araneocyathus 1078
 Araneosustroma 616, 621, 624, 674, 675, 676, 678, 679, 682, 778, 779
 Arbusculana 391
 Archaeata 1086
 Archaeobullatus 1100
ARCHAEOCYATHA xix, xxiv, xxvi, xxvii, l, liii, 322, 346, 575, 845, 847, 848, 887, 891, 896, 907, 910, 923, 1086, 1090, 1095, 1105
 Archaeocyathacea 923, 1051
 archaeocyathan architecture xxvii, 400, 849, 850, 923
 Archaeocyathellidae 987
 Archaeocyathellus 938, 945, 1040, 1078
 Archaeocyathi 923
ARCHAEOCYATHIDA lii, 850, 851, 853, 857, 871, 883, 885, 887, 889, 890, 892, 893, 897, 898, 899, 901, 902, 903, 904, 906, 915, 916, 920, 1035, 1044
ARCHAEOCYATHIDAE liii, 900, 1051, 1055, 1056, 1057, 1059
ARCHAEOCYATHINA lii, 850, 872, 875, 883, 885, 887, 893, 900, 901, 903, 907, 1035, 1044
 Archaeocyathinae 923, 1051, 1055
 Archaeocyathinea 1055
ARCHAEOCYATHOIDEA liii, 875, 1051
 Archaeocyathus 845, 878, 880, 882, 885, 893, 895, 899, 900, 901, 904, 910, 922, 931, 932, 934, 938, 941, 943, 951, 954, 959, 963, 975, 978, 999, 1037, 1055, 1056, 1058, 1062, 1064, 1068, 1078, 1081, 1082, 1087, 1106

- Archaeofungia 1040, 1058
 Archaeofungidae 1055
 Archaeofungiella 1078
 Archaeofungiidae 1055
 Archaeolitoporella 384
 Archaeolynthida 923
 Archaeolynthidae 923
 Archaeolynthus 853, 855, 871,
 876, 895, 913, 923, 924, 926
 Archaeopharetra 877, 885, 1051,
 1052
 Archaeopharetrida 1035
 ARCHAEOPHARETRIDAE liii,
 1051, 1052, 1053, 1054
 Archaeophyllida 1081
 Archaeophyllidae 1081
 Archaeophyllina 1081
 Archaeophyllum 1081
 Archaeoscyphia 900
 Archaeosycon 322, 891, 892, 893,
 1058, 1060
 Archaeosyconiidae 1035, 1044
 ARCHAEOSYCONIDAE liii,
 1058, 1060
 Archaeosyconiina 901, 1044
 Archaeosyconina 1044
 Archeocyathus 845, 1055
 Arcostroma 499, 530, 531, 616,
 683, 808, 810
 Ardrossacyathidae 1037
 Ardrossacyathus 885, 1037, 1038
 Arduorhiza 313, 314
 Argostroma 790
 Argunicyathus 1105
 Arisacyathus 1049
 Arminocyathus 1030
 Aroonacyathus 930
 Arrythmociricus 1056
 Arthrocyathus 1022
 Arturocyathus 975
 Aruntacyathus 871, 1055
 Ascocyathus 934
 Ascosymplegma 391
 Asiphonata 345
 asiphonate 325, 330, 341, 342,
 358, 400
 asiphonate exhalant system 400
 aster 400
 Asterocyathellus 1034
 ASTEROCYATHIDAE li, 865,
 997, 998, 999, 1000
 Asterocyathus 997, 998
 Asterotumulus 1012, 1013
 Astreopora 84, 88
 Astromonaxonellida 209
 Astrophorida 13, 345
 Astroporina 255
 astrorhiza(e) xxiii, 400, 418, 419,
 421, 480, 483, 505, 507, 509,
 511, 513, 520, 545, 546, 547,
 548, 549, 553, 569, 570, 571,
 613, 699, 705, 707, 709, 710,
 714, 715, 723, 724, 729, 732,
 753, 755, 757, 758, 761, 763,
 766, 767, 768, 777, 836, 837,
 838, 880, 849, 877, 880, 882,
 903, 1049, 1078
 astrorhizal canal(s) 320, 330, 343,
 493, 499, 501, 505, 506, 507,
 511, 513, 518, 520, 563, 567,
 569, 570, 571, 572, 753, 797,
 877, 880, 882
 astrorhizal path(s) 400, 505, 508,
 570
 astrorhizal pathways 729, 732
 astrorhizal system 507, 508, 509,
 546, 553, 568
 Astroclera xxv, 3, 5, 7, 9, 10, 11,
 12, 13, 14, 15, 38, 41, 55, 56,
 57, 61, 66, 107, 164, 199,
 201, 202, 206, 240, 241, 242,
 243, 342, 417, 470, 505, 538,
 560, 561, 572, 582, 896
 ASTROSCLERIDAE xxv, xlvi,
 3, 7, 10, 11, 13, 199, 208,
 240, 241, 242, 243, 244,
 245, 246, 247, 248, 249,
 250, 251, 252, 253, 254
 Astrosporgia 395
 Astrostylopsis 308, 309
 astrotube 400
 Ataxocyathus 885, 920, 1068,
 1071
 ATELODICTYIDAE xl ix, 618,
 700, 702, 704, 705, 766, 767
 Atelodictyon 468, 495, 501, 508,
 511, 518, 566, 618, 682,
 750, 767, 768, 836
 Ateloracia 379
 Atelostroma 308
 Atopostroma 503, 621, 683, 704,
 815, 816
 atrium 400, 899
 Atrochaetetes 21, 23, 27, 45, 72,
 110, 111, 115, 116, 117,
 118, 119, 122, 123, 189,
 279, 280, 281
 Atrypoidea 607
 attached microporous sheath(s) 872,
 883, 897, 908, 909, 911, 920,
 924, 959, 962, 1007, 1009,
 1019, 1022, 1028, 1029
 Aulacera 421, 443, 448, 491, 583,
 584, 587, 588, 635, 654,
 655, 657, 659, 660, 661,
 662, 663, 664, 665, 666,
 669, 740, 741, 742, 752, 754
 Aulaceratida 709
 AULACERATIDAE xl ix, 443,
 452, 582, 583, 584, 616,
 700, 702, 705, 740, 742,
 743, 744, 745, 746, 747, 748
 Aulaceridae 703
 Aulopagia 393
 AULISCOCYATHIDAE liii,
 1073, 1077
 AU LIS CO CYATHOIDEA liii,
 1073
 Auliscocyathus 883, 885, 1073, 1077
 Aulopagia 370, 382
 Aulocircus 987, 988
 Aulopora 470
 Auriculospongia 354, 356, 362,
 367, 368, 393
 Auriculospongidae xl viii, 393
 Auriculosponginae 393
 Aurora 769
 autotube(s) 400, 493, 511, 513,
 518, 528, 545, 546, 776,
 777, 802, 812, 813, 818,
 819, 820, 824
 Aviculopecten 171
 axial 305, 400, 722, 723, 735,
 738, 740, 741, 742, 745,
 748, 749
 axial canal(s) 329, 343, 345, 348,
 362, 503, 505, 509, 511,
 552, 722, 723, 757, 758,
 761, 785, 789, 797, 824,
 826, 829, 830, 831
 axial tube(s) 329, 360, 401, 784
 Axicilifungia 861, 947
 Axinellida 235
 Axinellides 235
 Axiotubillina 308
 Axiparietes 110
 Azycrycyathus 1101
 Azycrycyathus 1101
 Azycrycyathus 1101
 Baastadiostroma 308
 Bacatocyathidae 1081
 Bacatocyathus 1081
 Baçatocyathus 1081
 backfill 401
 Bactronella 297, 302
 Bactronellidae 296
 baculi (see *baculus*)
 Baculocyathus 1105
 baculus (pl., baculi) 401, 1095,
 1096, 1097, 1101
 BAERIDA xl ix, 296, 303, 305
 Baeriida 199, 208
 Baeriidae 303
 Baghevangia 387
 Baikalocyathinae 947
 Baikalocyathus 871, 947, 950
 Baikalopectinidae 947
 Baikalopectinus 947
 Balatonia 313, 315
 Barrandeolites 110, 113
 barrel-shaped chamber 324, 401
 Barroisia 322, 332, 337, 341, 353,
 382, 391
 basal calcareous skeleton 294, 305,
 401, 553, 555
 basal layer(s) 298, 303, 401, 463,
 468, 469, 470, 471, 473
 basal phase(s) 401, 471, 469, 473,
 513, 515

- basic wall 401
Batchatocyathidae 1081
Batchatocyathus 1081
Batenevia 1055
Batenevicyathus 1058
Batschatocyathus 1081
Batschkykicyathus 851, 853, 905, 913, 931, 933
Battaglia 390
Battagliinae 389
Baunia 45, 110, 111, 115, 116, 117, 118, 119, 122, 123, 189, 219, 282, 283, 286
Bayleicyathus 1068
Beatricea 741
Beatricidae 740
Beaticidae 740
Bedfordcyathus 1062
Bekhmeia 279
Belemnostroma 618, 682, 765, 766
bellerophontids 171
Beltanacyathacea 1067
BELTANACYATHIDAE liii, 1067, 1068, 1072
BELTANACYATHOIDEA liii, 877, 921, 1067
Beltanacyathus 877, 885, 889, 892, 920, 1068, 1072
Belubulaia 371, 387
Belyaevaspomgia 387
Bephyllum 1099
Beticocyathus 1081
Bicoelia 394
Bicolumnostratum 497, 678, 679, 680, 769, 771
Bicoscinus 1078, 1083
Bicyathidae 1035
Bicyathidae 1081
Bicyathina 1035
Bicyathus 1081
Bifariostroma 499, 621, 682, 770, 772
Bijacoscinus 1105
Bijacyathus 1055
Billingsaria 626
Binatocyathus 1105
BIPALLICYATHIDAE I, 959, 960
Bipallicyathus 866, 959, 960
bisiphonate 401
Bisiphonella 394
Blastasteria 1087, 1088
Blastinoidea 394
Blastochonetetes 3, 14, 15, 45, 46, 47, 55, 110, 111, 115, 116, 117, 118, 119, 121, 122, 123, 124, 125, 189, 197, 205, 207, 261, 284, 285, 286
Blastoporella 35, 37, 43, 91, 111, 115, 116, 117, 118, 122, 182, 189, 261, 262, 263
Blastulospongia 324, 327, 371, 390
Boikothalamia 341, 347, 353, 382, 390
Borocyathus 969
Bortepesia 395
Bosceculcyathacea 962
Bosceculcyathidae 962, 963
Boscekulcyathus 965
Bosceculida 928
Boscekulcyathina 932
Boscekulcyathus 965
Boswellia 45, 59, 110, 111, 114, 115, 116, 117, 118, 122, 123, 182, 189, 218, 219, 220
Botomacyathidae 990
Botomacyathus 990
BOTOMOCYATHIDAE li, 990, 991
Botomocyathus 990, 991
bowl-like cup 401
BOYARINOVICYATHIDAE liii, 1102, 1103
Boyarinovicyathus 1102, 1103
bract(s) 401, 863, 865, 866, 869, 871, 872, 876, 887, 889, 891, 903, 906, 907, 908, 914, 926, 928, 930, 931, 938, 940, 951, 954, 957, 959, 963, 965, 970, 973, 974, 975, 978, 980, 981, 984, 987, 990, 1000, 1003, 1005, 1008, 1009, 1013, 1015, 1016, 1017, 1019, 1022, 1023, 1026, 1028, 1030, 1042, 1049, 1051, 1055, 1056, 1061, 1065, 1068, 1069, 1073, 1074, 1075, 1076
Bractocyathus 1009
branching canal(s) 401, 568, 951
Brevisiphonella 393
Bronchocyathida 928
BRONCHOCYATHIDAE I, 932, 941, 943, 944, 946, 948, 949
BRONCHOCYATHOIDEA I, 932
Bronchocyathus 941, 945
Bryozoa 553
budding 401, 848, 850, 851, 853, 898, 899, 905, 1036, 1043, 1044, 1069
Bugula 86
Bullatella 769
Bullicyathus 1030
bullopore(s) 323, 327
Bullulodictyon 616, 618, 682, 714, 755, 756
Burgundia 195, 197, 207, 278, 279, 281
Burgundides 276
BURGUNDIIDAE liix, 208, 276
Burgundostromaria 308
Buschmannia 1105
Butakovicyathus 924, 925
Butovia 1081
butress(es) 401, 871, 893, 895, 904, 914, 1068
Byssonychia 753
Cadniacyathus 865, 938, 939
Calabrisiphonella 388
Calabrispongia 387
CALCAREA xx, xxi, xxii, xxiii, xxvii, xl ix, 1, 4, 5, 10, 12, 13, 194, 199, 208, 293, 296, 311, 321, 322, 344, 345, 346, 368, 370, 371, 380, 382, 383, 387, 391, 394, 896
CALCARONEA xl ix, 206, 208, 293, 296, 303, 368, 387
Calceola 520
Calcichondrilla 56, 61, 111, 115, 116, 117, 118, 119, 122, 227, 228, 229
Calcfibrospongia xxv, 3, 5, 7, 10, 11, 12, 14, 197, 199, 200, 269, 272, 417, 470, 538, 541, 553, 561
CALCIFIBROSPONGIIDAЕ xxv, xl viii, 10, 199, 208, 269, 272
CALCINEA xl ix, 206, 208, 293, 294, 305, 368, 387, 391, 394
Calcispirastrella 111, 115, 114, 115, 116, 117, 118, 119, 122, 189, 226, 227
Calcispomgia 293, 387
Calcistella 59, 61, 111, 115, 116, 117, 118, 119, 122, 228, 230, 231
Calciuberites 19, 111, 115, 116, 117, 118, 119, 122, 189, 214, 216
Calicia 395
calide(s) 401, 848, 850, 853, 875, 878, 899, 903, 923, 1035, 1069, 1070, 1071
Calmnopora 217
calthrop 401
Calymenospomgia 388
Calyptocoscinacea 1032
CALYPTOCOSCINIDAE lii, 1032, 1034
CALYPTOCOSCINOIDEA lii, 1032
Calyptocoscinus 1033, 1034
Cambrocyathellus 854, 883, 885, 890, 917, 1037, 1039, 1065
Cambrocyathidae 1062
Cambrocyathinae 1062
Cambrocyathus 1062
cambroid wall 401
Cambronanus 1069
Camrostroma 544, 1078
Camptodictyon 493, 499, 501, 581, 589, 655, 664, 665, 667, 668, 669, 672, 673, 758
canal system(s) 294, 296, 311, 313, 320, 327, 330, 332, 342, 343, 345, 360, 401,

- 417, 505, 513, 518, 520,
547, 551, 553, 554, 570,
571, 572, 705, 992, 994
- Cancellatodictyon 781
- Cancellistroma 313, 316
- Capillicyathidae 1101
- Capillicyathus 1103
- Capsolynthidae 923
- Capsolynthus 923
- Capsulicyathidae 1026
- Capsulocyatha xxvii
- CAPSULOCYATHIDA lii, 850,
857, 883, 885, 887, 900, 901,
902, 903, 904, 918, 1025
- Capsulocyathidae 1025
- CAPSULOCYATHINA lii, 850,
861, 907, 1025
- Capsulocyathus 851, 853, 919,
1026, 1027
- carcass 401, 862, 866, 924, 1051,
1058
- Cardiophyllidae 1097
- Cardiophyllina 1097, 1099
- Cardiophyllum 1097, 1099
- CARINACYATHIDAE li, 908,
978, 984, 985
- Carinacyathoidea 978
- Carinacyathus 909, 912, 913,
984, 985
- Carinacyathidae 978, 984
- Carinacyathus 984
- Carnegiae 110, 111
- Carpicyathus 950, 951
- Carta 313
- Carterina 313
- Carterinula 313
- Casearia 322, 336, 349, 353, 379,
382, 392
- Caseariinae 392
- Cassianochaetetes 23, 111, 115,
116, 117, 118, 119, 122,
189, 241, 243, 244
- Cassianopora 111
- Cassianostroma 308, 366
- Cassianothalamia 330, 337, 338,
341, 345, 391
- Cassianothalamiidae 345
- Cassianothalamina 56
- cassulate structure 401, 493,
497, 499, 501, 797, 801
- cateniform 401
- Catenispongia 392
- Catenispongidae xlvi, 392
- catenulate xxvii, 325, 327, 402,
851, 853, 855, 857
- Caucasocoelia 392
- Caulostrepis 169, 170
- Caunopora 515, 824
- cavaedia 402
- Cavocyathus 1069
- Cavusonella 393
- Cellicyathus 854, 880, 1046, 1047
- cellular 309, 402, 495, 502, 503,
513, 524, 526, 527, 530, 533,
- 537, 538, 540, 542, 544, 548,
555, 568, 701, 781, 788, 790,
793, 794, 796, 797, 800, 801,
802, 804, 805, 808, 811, 812,
814, 818, 819, 831, 842
- cellular microstructure 528, 529, 533
- cellules 402, 501, 524, 529, 530,
533, 542, 563, 701, 770,
781, 785
- Celyphia 322, 327, 337, 338,
350, 391
- Celyphiidae 391
- cemented (fused) spicule 402
- central cavity xviii, xxvii, 402,
845, 853, 863, 871, 880,
882, 893, 897, 904, 906,
907, 923, 947, 951, 954,
957, 959, 963, 965, 970,
975, 978, 984, 987, 990,
992, 994, 1003, 1011, 1033
- Ceontella 332, 335, 391
- Ceontellidae 391
- Cephylum 1097, 1099
- Ceractinomorpha 18, 108, 113,
209, 346, 368, 386
- Ceraostroma 308
- Ceratocyathus 1105
- Ceratopora 15, 243
- Ceratoporella xxiii, xxv, 3, 4, 5, 7, 9,
10, 11, 12, 15, 17, 18, 21, 22,
25, 56, 57, 59, 65, 72, 81, 83,
86, 87, 89, 90, 91, 92, 95, 97,
99, 101, 107, 108, 111, 113,
114, 115, 116, 117, 118, 119,
120, 121, 122, 123, 127, 137,
164, 179, 189, 190, 193, 194,
196, 197, 199, 200, 201, 202,
203, 206, 207, 223, 237, 243,
245, 246, 247, 252, 342, 360,
470, 505, 538, 553, 554, 555,
557, 558, 559, 560, 561, 566,
567, 568, 569, 570, 572, 697
- Ceratoporellida 107
- Ceratoporellidae 3, 240, 241, 320
- Cerbicanicyathus 322
- Cercessia 310
- Cerkisia 310
- Chabakovia 917
- Chabakoviyathacea 1025
- CHABAKOVYCYATHIDAE lii,
1025, 1026
- CHABAKOVYCYATHOIDEA
lii, 1025
- Chabakoviyathus 885, 1025,
1026
- Chaetetella 110, 111, 115
- Chaetetes 14, 15, 17, 19, 45, 48,
52, 53, 54, 59, 61, 71, 76, 93,
94, 95, 96, 98, 105, 106, 107,
110, 111, 114, 115, 116, 117,
118, 119, 121, 122, 123, 182,
189, 191, 216, 217, 218, 219,
220, 221, 222, 238, 283, 284,
286, 848
- chaetetid architecture(s) 402, 850,
853, 875
- Chaetetida 105, 106, 107, 108,
109, 110, 112, 115, 322
- Chaetetidae xx, 106, 110
- Chaetetides 217
- Chaetetina 106
- Chaetetinae 105, 110
- Chaetetipora 110, 111, 115, 182,
545
- Chaetetiporella 110, 111, 545
- Chaetetiporinae 110
- Chaetetopsis 45, 46, 59, 111, 112,
115, 116, 117, 118, 119, 122,
123, 189, 221, 223, 224
- Chaeties 216
- Chaetokorallen 105
- Chaetosclera 111, 115, 116, 117,
118, 119, 122, 189, 235, 236
- Chakassicyathus 954, 956
- Chalazodes 750
- Chalinidae 10
- chamber(s) xxiv, 322, 323, 324,
325, 326, 327, 328, 329,
330, 331, 332, 333, 334,
335, 336, 337, 338, 340,
342, 343, 344, 346, 347,
348, 349, 350, 351, 386,
402, 487, 507, 511, 544,
551, 558, 559, 563, 564,
566, 567, 568, 572, 768,
850, 882, 896, 897, 901,
903, 923, 1027, 1030, 1077,
1078, 1096
- chamber shape 322, 330, 402
- chamber walls 324, 326, 327,
328, 329, 332, 333, 336,
340, 342, 347, 349, 351, 402
- Changicyathus 891, 1065, 1068
- CHANKACYATHIDAE lii,
1042, 1043
- CHANKACYATHOIDEA lii,
1042
- Chankacyathus 887, 889, 1042,
1043
- Cheilosporites 390
- Cheilosporitiidae 390
- Chengkoucyathus 1019
- chimney(s) 298, 402, 880, 882,
1046
- Chinaspongia 388
- Chlorophyta 576
- Choanitidae 225
- Chondrilla 61, 227
- CHONDRILLIDAE xlvi, 208,
227, 228, 229, 230, 231
- Chondrissinae 227
- Chondrochaetetes 111, 115
- CHONDROSIDA xxiii, xlvi,
189, 208, 227
- Chondrosidae 227
- Chondrosiidae 217, 227
- Choristida 108
- Chouberticyathida 1044

- Chouberticyathidae 1044
 Chouberticyathina 1044
 Chouberticyathus 887, 889, 1046,
 1047
 Churanocyathus 997
 Cinnabaria 325, 378, 379, 391
 Circophyllum 1097
 Circopora 137, 308, 548
 Circoporella 278, 279
 Cladocoropsis 309
 Cladophragmus 749
 Claraxinellida 235
 CLARUSCOSCINIDAE lii,
 1049, 1050
 Claruscoscinus 875, 880, 910,
 920, 1049, 1050
 Claruscathyiae 1055
 Claruscathus 901, 1055
 Clathcoilona 461
 clathrate wall 402, 869, 875, 914,
 990, 1019
 Clathricoscinacea 1033
 CLATHRICOSCINOIDEA lii,
 1033, 1036
 CLATHRICOSSCINOIDEA lii,
 1033
 Clathricoscinus 347, 861, 874,
 1034, 1036
 Clathricyathellus 992, 993
 Clathricyathus 992, 994
 Clathrinida 368, 387
 Clathrithalamus 875, 990, 991
 Clathrocoilina 433, 465, 468,
 515, 524, 540, 605, 621,
 629, 682, 781, 783, 797
 Clathrocoilonidae 702, 703, 781
 Clathrocyathus 992
 Clathrodictyacea 704
 Clathrodictyella 452, 677, 678,
 679, 680, 826, 827
 CLATHRODICTYIDA xxv, xlix,
 468, 487, 493, 501, 511, 548,
 561, 566, 577, 581, 582, 587,
 589, 590, 635, 664, 665, 671,
 672, 673, 674, 675, 677, 678,
 679, 680, 682, 683, 700, 702,
 703, 704, 705, 709, 712, 714,
 755, 767
 CLATHRODICTYIDAE xlix,
 590, 618, 664, 680, 700,
 702, 705, 755, 756, 757, 761
 Clathrodictyiae 705
 Clathrodictyon 465, 467, 468,
 489, 491, 493, 497, 501,
 513, 515, 517, 523, 544,
 546, 585, 587, 589, 590,
 596, 1078, 618, 622, 624,
 646, 664, 665, 666, 667,
 668, 669, 671, 672, 673,
 674, 675, 676, 677, 678,
 679, 680, 682, 703, 755,
 756, 758, 768, 785
 Clathrodictyonidae 755
 Clathrostroma 704, 761, 762
 Clathrostomatidae 761
 Clavaxinelida 108, 235
 Clavaxinelides 235
 Clavicyathida 1025
 Clavicyathidae 1025
 Clavicyathus 1026
 Clavidictyon 449, 454, 672, 673,
 674, 675, 677, 678, 679,
 829, 832
 clavidisc 402
 Clavulina 209
 Cleifdenellidae 702
 Cleifdenella 329, 334, 371, 372,
 389, 545
 Cleifdenellidae xviii, 389, 703
 Cleifdenidae 517
 Climacostroma 621, 683, 801, 802
 clinogonal microstructure 341,
 366, 402
 clinoreticular 402, 524, 532, 542,
 591, 701, 774, 775, 813,
 814, 816, 818, 819
 Cliona 11, 520
 Clionaidae 225
 Clionolithes 520
 cloaca (*or* cloacal) 402
 Cloudina 920
 Cnidaria 545, 547, 548, 553, 577
 coarsely porous 402, 854, 872,
 875, 878, 880, 906
 Coelenterata xxi, 105, 106, 547,
 577
 coeloblastula 294, 402
 Coelocladilla 169, 178
 Coelocyathus 1084
 Coenellostroma 682, 755, 756
 Coenellostromatidae 702, 755
 coenosteal 402, 487
 Coenostella 308
 Coenostelodictyon 682, 767, 768
 coenosteum 402, 487, 511
 Coenostroma 503, 683, 781, 813,
 814, 816, 819, 830
 COENOSTROMATIDAE I, 311,
 542, 621, 700, 702, 813,
 814, 815, 816, 817, 818,
 819, 820
 coenostrome 402, 487
 Coenostromidae 311, 813
 coenotube(s) 402, 487, 511
 collencyte 402
 colliculus (pl., colliculi) 402, 487,
 495, 497, 501, 701
 Colospongia xxiv, 324, 325, 327,
 330, 332, 337, 340, 341,
 342, 344, 353, 374, 375,
 379, 390
 Colospongiidae 390
 Colospongiinae 390
 Columna 722
 columnar growth 402, 424, 443,
 449, 452, 483, 491, 503
 Columnaria 87
 Columnndictyon 825
 Columnostroma 616, 674, 675,
 683, 816, 817
 comma (pl., commas) 402
 communicating canal(s) 402, 866,
 905, 907, 909, 911, 954,
 965, 978, 987, 992, 995,
 1005, 1010, 1032, 1044
 compensation 403, 908
 completely porous septa 403, 856,
 857, 858, 905
 Complicatocyathidae 1025
 Complicatocyathus 1026, 1027
 Composita 171, 173, 174, 177
 Compositocyathidae 941
 Compositocyathus 866, 942, 943
 compound wall(s) 403, 875, 885
 Conannulofungia 942, 944
 concentrically porous wall(s) 403,
 883
 Concentristroma 313
 conical cup(s) xxvii, 403, 848,
 849, 850, 851, 853, 857, 902
 Conocoelia 394
 Conoidocyathida 1101
 CONOIDOCYATHIDAE liii,
 1100, 1101
 Conoidocyathidea 1101
 CONOIDOCYATHOIDEA liii,
 1101
 Conoidocyathus 1100, 1101
 Conosclera 111
 contemporary phase(s) 403, 499,
 505, 511, 515
 Convexistroma 308
 Cooperina 159, 175, 176
 COPLEYCYATHIDAE liii, 1058,
 1061, 1062, 1063, 1064, 1065
 Copleicyathus 887, 889, 1058,
 1061
 coralline sponges xix, xx, 403
 corallite(s) 403, 470, 576
 Cordilleracyathus 871, 876, 914,
 987, 988
 CORDOBICYATHIDAE I, 929,
 930
 Cordobicyathus 929, 930
 Cornuaspongia 370, 381, 395
 Cornutocyathus 1105
 corolla(s) 403, 853, 1030
 cortex (pl., cortices) 323, 355,
 357, 403
 cortical 294, 297, 298, 299, 303,
 403
 Corticityathus 923
 Corymbospongia 371, 372, 390
 Corymbosponginae 390
 Corynella 359, 379, 380
 Cynospongia 395
 Coscinocyathacea 1032
 Coscinocyathella 1032, 1033
 COSCINOCYATHELLIDAE lii,
 1031, 1032
 Coscinocyathellus 1003, 1031, 1032
 Coscinocyathida 1025, 1030

- COSCINOCYATHIDAE lii,
 900, 1031, 1032
- COSCINOCYATHINA lii, 850,
 859, 875, 900, 901, 903,
 906, 907, 1030
- COSCINOCYATHOIDEA lii,
 1032
- Coscinocyathus 865, 913, 934,
 945, 995, 997, 999, 1000,
 1008, 1009, 1013, 1015,
 1019, 1031, 1032, 1033,
 1034, 1045
- Coscinophyllina 1105
- Coscinophyllum 1105
- Coscinopelta 1013
- Coscinoptya 895, 1013, 1015
- COSCINOPTYCTIDAE li,
 1013, 1015
- COSCINOPTYCTOIDEA li, 1013
- Coscinoteichus 1019
- Cosmoclyathus 962, 1049
- Costophullum 1097
- Costophyllidae 1097
- Costophyllum 1097
- CRASSICOSCINIDAE li, 1003,
 1004
- Crassicoscinus 1003, 1004
- Crassicyathidae 923
- Crassicyathus 923
- craticula 403
- craticular pore 403
- Craticulariidae 392
- crenulate 403, 863
- crenulation(s) 403, 499, 711,
 715, 719
- cribrilla(e) 323, 327, 329, 330,
 340, 403
- CRIBRICYATHA xxvii, liii,
 1096, 1105
- Cribricyathea 1095, 1096
- Cribricyathi 1096
- CRIBRICYATHIDA liii, 1101
- Cribricyathidae 1101
- Cribricyathus 1102
- cribriopore 323, 327, 330, 340, 403
- Cribrocyathea 1096
- Cribrocyathida 1101
- Cribrothalamia 390
- Cribrothalamidae xl ix, 390
- Cricopeltinus 943
- Crimestroma 308
- Crispus 1097
- Crommyocyathina 1081
- Crucicyathus 1003, 1004
- Crumplestroma 678, 679, 770, 772
- Crurithyris 171
- Crymocoelia 389
- Cryptaporocyathidae 1025
- Cryptaporocyathus 1026, 1029
- Cryptocoelia 324, 329, 332, 334,
 342, 387
- Cryptocoeliidae xvii, 387
- Cryptocoeliosis 382, 389
- Cryptolichenaria 110, 113, 587
- Cryptolichenariidae 110
- Cryptophragmus 449, 451, 581,
 584, 660, 661, 662, 664,
 665, 666, 741, 744
- CRYPTOPOROCYATHIDAE
lii, 1025, 1027, 1028
- Cryptoporocyathus 863, 1026,
 1027
- cryptosiphonate 332, 333, 341,
 403
- Cubodictyon 682, 704, 767, 768
- Cubodictyonidae 704
- cyathiform 403
- Cyathocricus 943, 944
- Cyathophyllum 845, 926
- Cyathospingia 923
- Cyclocyathella 945, 946
- Cyclocyathellida 928
- Cyclocyathellidae 941
- Cycloclyathus 945, 947, 1082
- Cyclopodium 310
- Cylincopsis 308, 309
- cylindrical cup 403
- cyst(s) 403, 417, 448, 449, 487,
 489, 490, 491, 493, 497,
 499, 501, 509, 511, 515,
 549, 563, 579, 591, 709,
 710, 712, 714, 715, 719,
 720, 723, 729, 731, 738,
 739, 750, 837, 838
- cyst plate(s) xxv, 403, 443, 448,
 449, 451, 469, 470, 483, 487,
 489, 490, 491, 493, 497, 499,
 501, 511, 534, 547, 563, 575,
 576, 583, 589, 591, 701, 707,
 709, 710, 711, 712, 714, 715,
 719, 720, 722, 723, 724, 725,
 726, 728, 729, 731, 732, 734,
 735, 738, 739, 740, 741, 742,
 745, 748, 749, 752, 753, 775,
 776, 793, 838, 841, 843, 844,
- Cystauletes 389
- Cysticlyathus 916
- Cystistroma 468, 581, 584, 660,
 661, 662, 664, 665, 666,
 668, 725, 727, 754
- Cystocerium 507, 729, 731, 732,
 754
- Cystoidea 847
- Cystostroma 449, 468, 547, 581,
 583, 585, 586, 587, 588,
 589, 618, 657, 659, 660,
 661, 662, 664, 665, 666,
 667, 668, 669, 682, 703,
 712, 714, 754, 838
- Cystostromacea 705
- Cystostromatida 582, 709
- Cystostromatidae 582, 711, 712,
 723
- Cystothalamia 326, 327, 374,
 375, 389
- Cystothalamia 350, 371, 374,
 388
- Dactylocoelia 379, 392
- Daharella 355, 356, 358, 393
- Daharellinae 393
- Dailycyathus 865, 939, 940
- Danaia 217
- Dania 217
- Davidicyathus 933, 935
- Debrennecyathidae 924
- Debrennecyathus 924
- Deceptioncyathus 865, 939, 940
- Degeletcyathellus 951
- Degeletcyathus 951, 952
- Dehornaeoporella 308
- Dehornella xxiii, 125, 197, 207,
 255, 256, 257,
- Delijania 335, 387
- Demboicyathus 1105
- Demospongea 209, 346, 368, 386
- DEMOSPONGIAE xx, xxi, xxii,
 xxiii, xxvii, xl viii, xl ix, 1, 3,
 5, 10, 11, 12, 13, 18, 55, 79,
 107, 108, 112, 113, 121, 125,
 129, 156, 189, 194, 199, 202,
 208, 209, 229, 231, 235, 239,
 268, 273, 276, 308, 311, 321,
 345, 346, 368, 370, 380, 386,
 387, 392, 548, 581, 896
- Denaecyathellus 945
- Denaecyathus 945, 946
- Dendroceratida 896
- Dendrocyathus 1081
- Dendrophyllia 547
- Dendrostoma 443, 452, 682,
 784, 785
- Deningeria 381, 382, 389
- Densastroma 427, 444, 464, 517,
 591, 624, 640, 671, 672,
 673, 674, 675, 676, 678,
 679, 680, 777, 778, 830
- DENSASTROMATIDAE xl ix,
 489, 590, 618, 676, 700,
 701, 702, 705, 777, 778,
 813, 830
- DENSOCYATHIDAE I, 863,
 865, 938, 939, 941, 942
- Densocyathus 855, 938, 939
- Dentatocoscinus 1003, 1004
- Dentatocyathus 933, 936
- denticles 403, 485, 490, 497, 499,
 583, 589, 709, 710, 711, 712,
 714, 715, 719, 720, 723, 724,
 725, 726, 729, 732, 735, 738,
 739, 740, 741, 742, 745, 748,
 749, 752, 943
- Dephyllum 1097
- Derbyia 159
- dermal 296, 300, 404
- dermal membrane 552, 553, 566
- dermal surface(s) 332, 355, 359,
 360, 362, 365, 366
- Dermatostroma 466, 467, 468,
 581, 584, 585, 587, 617,
 660, 661, 662, 664, 665,
 666, 749, 751, 752, 754
- desma(s) 293, 404

- Desmidodictyon 672, 758
 Desmidopora 110, 113
 Desmidoporidae 110
 Desmonesia 174
 Desmopora 308
 Desmostroma 591, 671, 672, 673,
 674, 675, 678, 679, 680,
 773, 774
 Diademoceras 465, 468
 diapason(s) 294, 296, 297, 298,
 299, 300, 303, 305
 diaphragm(s) 404, 862, 863, 883
 Diaplecta 394
 Diapora 515
 dichotomous exopore 404
 DICTYOCERATIDA xxiv, xvii,
 xviii, 13, 199, 208, 273, 274,
 275, 276, 390, 538, 896
 Dictyoceratina 273
 Dictyocoelia 137
 Dictyocosciniidae 1051
 Dictyocoscinus 1051
 Dictyocanthina 1035
 Dictyocathida 1044
 DICTYOCYATHIDAE lii, 900,
 1044, 1047, 1048, 1049
 Dictyocathina 1044
 Dictyocathinidae 1044
 DICTYOCYATHOIDEA lii, 1044
 Dictyocathys 1020, 1045, 1047,
 1051, 1081
 Dictyofavidae 1069
 DICTYOFAVINA xxvii, liii, 850,
 875, 883, 885, 903, 1069
 Dictyofavoidea 1069
 Dictyofavus 1069
 dictyonal network 404, 850, 872,
 875, 878, 903, 923, 1035,
 1044, 1045, 1046, 1049,
 1054, 1069
 Dictyostroma 548
 Dictyoscon 877, 880, 911, 1053,
 1054
 Didymocyathus 995, 996
 Didymograptus 587
 Diecithalamia 326, 329, 337, 389
 Dielasma 177
 plaster 404
 Diplochaetetes 110, 111
 Diplocyathellus 959
 Diplocyathidae 954
 Diplocyathus 959
 Diplostroma 785
 Diplostromatidae 781
 Discosiphonella 326, 327, 353,
 374, 378, 389
 Disjectopora 311, 312, 313, 384
 DISJECTOPORIDAE xlix, 311,
 312, 314, 315, 316, 317,
 318, 319, 320, 393, 547
 Disparistromaria 308
 Disporella 86
 disseipment(s) 319, 493, 503,
 505, 509, 511, 513, 518,
 520, 543, 561, 567, 571,
 758, 761, 763, 766, 789,
 794, 797, 800, 810, 811,
 812, 813, 818, 819, 820, 831
 Dissocyathus 1105
 Distylostroma 757
 Djemelia 355, 394
 Dokidocyathacea 928
 Dokidocyathella 928, 929
 DOKIDOCYATHELLIDAE I,
 928, 929
 Dokidocyathida 928
 DOKIDOCYATHIDAE I, 928,
 929
 DOKIDOCYATHINA I, 849,
 900, 907, 928
 DOKIDOCYATHOIDEA I, 928
 Dokidocyathus 857, 862, 871,
 876, 909, 928, 929, 1085,
 1090
 Dokidolynthus 928
 Dolichocyathus 1096, 1102, 1103
 domal cup 404
 domical 633, 634, 636, 638, 639,
 640, 648, 649
 domical growth form(s) 404, 477,
 427, 428, 441, 473, 478,
 813, 819
 Domophyllum 1105
 Dongqiastroma 308
 Dongqiastromaria 308
 Dracolychnos 322, 379, 392
 Drepaphora 86
 Drosdovia 576
 Dualestroma 763, 766
 Dualestromatidae 763
 Dubius 1098, 1099
 Dupliroporocyathidae 987
 Dupliroporcyathus 986, 987
 Dysideidae 275
 Dzhagdyocyathus 1037
 Ecclimadictyidae 702, 705, 758
 Ecclimadictyinae 705
 Ecclimadictyon 455, 456, 468,
 497, 517, 549, 581, 587, 589,
 590, 596, 618, 622, 624, 626,
 628, 655, 662, 664, 665, 666,
 667, 668, 669, 671, 672, 673,
 674, 675, 676, 677, 678, 679,
 680, 703, 758
 echinating 404
 Echinocyathus 1081
 Echinoidea 847
 Edelsteinia 576
 Edmondia 171, 177, 178
 Egiinocyathus 1037
 Eladicyathidae 970
 Eladicyathus 970
 Elasmocystria 394
 Elasmopagia 370, 383, 393
 Elasmostoma 371, 382, 383, 394
 Elephantaria 310
 Ellipsactinia 308, 310
 Ellipsophyllina 1097
 Ellipsophyllum 1097
 Emscheria 308
 Emucyathus 954, 956
 Enaulofungia 382, 395
 encrusting mode(s) of life (*or*
 growth) 404, 419, 463, 464
 endocamerai 404
 endopore(s) 323, 364
 Endostoma 359, 380, 382
 Endothyra 171
 endotube 323
 endowall(s) 323, 326, 329, 330,
 332, 335, 336, 338
 Enoplocoelia 324, 379, 388
 Enoplocoeliinae 388
 Entobia 517
 entrapped spicules 294, 404
 enveloping skeletal growth 404
 Eopennastroma 735, 737, 738, 754
 Eophyllidae 1097
 Eophyllum 1097
 Eostachyodes 830, 833
 Eostromatopora 464, 465, 467,
 484, 621, 624, 671, 672, 673,
 674, 675, 677, 701, 802, 803
 Eozoon 544
 Epiphyton 911, 916, 917
 Epistromatopora 256
 epitheca(e) 357, 404, 419, 468, 469,
 470, 471, 473, 513, 520, 887
 Epitheles 370, 382, 393
 Erbocyathacea 962
 ERBOCYATHIDAE li, 962, 964
 ERBOCYATHOIDEA li, 962
 Erbocyathus 963
 EREMITACYATHIDAE lii, 1041
 Eremitacyathus 891, 892, 920,
 1041
 Erismacoscinacea 996
 Erismacoscinidae 996, 997
 ERISMACOSCININA li, 849,
 859, 865, 901, 903, 906,
 907, 908, 996
 Erismacoscinus 860, 912, 997, 998
 Erphyllidae 1099
 Erphyllum 1098, 1100
 Erugatocyathus 872, 1008
 Escharopora 467, 753
 Esphyllum 1097
 Estrellospongia 354, 394
 Estrellospongioninae 394
 ETHMOCOSCINOIDEA li, 1011,
 1013, 1014
 ETHMOCOSCINOIDAE li, 1011
 Ethmocoscinus 1013, 1014
 ETHMOCYATHIDAE I, 947,
 950, 952, 953, 955
 Ethmocyathus 866, 947, 950
 Ethmolynthidae 1081
 Ethmolynthinae 1081
 Ethmolynthus 1081
 Ethmopectinidae 947
 Ethmopectinus 947
 Ethmophyllida 928

- ETHMOPHYLLIDAE li, 978, 986, 987, 988, 989
 ETHMOPHYLLOIDEA li, 907, 908, 921, 978
Ethmophyllum 866, 871, 905, 914, 943, 947, 951, 954, 957, 959, 965, 986, 987, 990, 1058, 1062
Ethmosyringocyathus 965
Euarchaeocyatha 923
Euarchaeocyathi 923
euaster 404
Eucyathus 1049, 1055
Eudea 363, 366, 370, 371, 382, 383, 395
Euepibrhysia 393
Euryamphipora 434, 435, 468, 616, 683, 749, 826, 828, 829
Eusiphonella 380
Euzittelia 394
Euzodiella 57, 200, 206, 273
 EUZKADIELLIDAE xlvi, 208, 271, 273
exaules (see *exaulos*)
Exaulipora 324, 329, 330, 371, 375, 390
exaulos (pl., *exaulos*) 323, 329, 330, 336, 355, 404, 880, 903, 1078
excurent 404, 880, 897
excurent canal(s) 404, 880
exhalant 294, 302, 303, 404
exhalant canal(s) xxvi, 322, 329, 330, 332, 342, 343, 356, 357, 359, 360, 361, 364, 404, 520, 553, 571, 572
exhalant opening xxvi, 404, 853
exhalant system(s) 332, 404, 546, 547, 571
Exocryatha 1081
Exocryathidae 1081
exocryathoid 895, 914
exocryathoid buttress(es) 404, 914, 1068
exocryathoid structures 895
Exocryathus 1081
exopore(s) 323, 327, 332, 334, 343, 346, 351, 364, 405
Exotubispongia 359, 365, 393
Exotubispongidae xlvi, 393
exwall(s) 322, 326, 327, 329, 330, 332, 333, 335, 334, 336, 340, 342, 343, 363, 405
external budding 405, 850, 851, 853, 899, 1043, 1044
facet(s) 405, 875, 878, 899, 1069, 1070, 1071, 1073, 1074, 1075, 1076, 1077
Faciledictyon 763
 FALLOCYATHIDAE li, 978, 979
Fallocyathus 978, 979
Fallotaspidoidea 912
Falsocyathus 1069
Fansicyathacea 978
Fansicyathidae 980
Fansicyathus 909, 913, 980, 982
Fanthalamia 378, 391
Fanthalamiiinae 391
fasicular fibrous microstructure 405
Favia 84, 88, 89
 FAVILYNTHIDAE I, 926, 927
Favilynthus 926, 927
Favistina 626
Favosichaeletes 110, 111
Favosichaetidae 110
Favositidae 105
Fenestrocryathus 878, 891, 1049, 1050
Ferestromatopora 468, 497, 499, 530, 683, 805, 808, 809
 FERESTROMATOPORIDAE xlix, 700, 702, 805, 809, 810, 813
fiber(s) 355, 357, 362, 364, 405, 848
fiber skeleton 405
fibrous 320, 357, 359, 360, 405, 446, 461, 495, 525, 534, 538, 540, 541, 542, 545, 548, 701, 712, 715, 763, 781, 784, 785, 788, 824, 826, 830, 896
filling skeleton(s) 330, 332, 334, 335, 405
filling structure(s) 331, 332, 334, 336, 337, 345, 347, 353, 405
finely porous 405, 830, 854, 857, 872, 875, 880, 1037, 1041, 1042, 1044, 1046, 1049, 1051, 1058, 1060, 1061, 1068
first-order intervallar elements 903
first-order intervallar structure(s) xxvi, 405, 857
Fissispongia 369, 370, 374, 394
Fissispongidae xlvi, 394
Fistulimurina 110, 111
Fistulipora 159, 177
Fistulosponginae 388
Fistulospongina 388
Flabellisclera 111, 319
Flexanulus 981, 983
Flexicyathus 1019
Flexiostroma 790
Flindersicoscinidae 1051
Flindersicoscinus 1051
Flindersicyathacea 1051
Flindersicyathidae 1051, 1055
Flindersicyathinae 1055
Flindersicyathoidea 1051
Flindersicyathus 1051, 1055
Flindersipora 182, 576
Foerstiphyllum 626
Follicatena 327, 340, 388
Foraminifera 544, 551
Formosocyathidae 954
Formosocyathus 871, 905, 956, 958, 965
Forolinia 501, 668, 671, 672, 673, 715, 716
Fossilicyathus 984
 FRAGILICYATHIDAE liii, 1076, 1082
 FRAGILICYATHOIDEA liii, 1076
Fragilicyathus 878, 885, 1077, 1082
 FRANSUASAECYATHIDAE lii, 1029, 1030
Fransuasaecyathus 1029, 1030
Fridaycyathus 1068
Frinalicyathus 951, 952
Frutexites 602
fully roofed canal 405
functional unit(s) xxvi, 405
fungiform 405
Fungispongia 111, 319
funnel-shaped chambers 331
fused bract(s) 405, 863, 865, 887, 891, 903, 906, 907, 938, 1049, 1051, 1055, 1056, 1061, 1065, 1068, 1069, 1073, 1074, 1075, 1076
Gabrielsocyathus 875, 1058, 1063
 GAGARINICYATHIDAE li, 977, 978
Gagarinicyathus 977, 978
Galaxea 547
Galinaecyathus 908, 1022
gallery 405, 425, 493, 495, 501, 507, 509, 524, 530, 534, 558, 568, 712, 715, 753, 781
Gamocynthidae 1105
Gandinocyathus 980, 981
gastral 357, 359, 405
 GATAGACYATHIDAE liii, 1070, 1076
 GATAGACYATHOIDEA liii, 1070
Gatagacyathus 898, 899, 1070, 1076
Geniculicyathus 1019, 1021
Geocryathacea 968
 GEOCYATHIDAE li, 968, 970, 971
Geocryathus 913, 919, 970, 971
Geoiidae 345
Gerbicanicyathidae 1025
Gerbicanicyathus 347, 1026, 1028
Gerronodictyon 618, 674, 675, 676, 677, 678, 679, 762, 763
Gerronostroma 605, 761, 762, 796, 830, 831
Gerronostromaria 452, 468, 501, 507, 511, 516, 519, 526, 547, 618, 671, 672, 673, 674, 675, 677, 678, 679, 682, 704, 761, 762
Gerronostromatida 702, 703, 754, 755
 GERRONOSTROMATIDAE xlix, 501, 618, 671, 700, 702, 704, 705, 761, 762
Gerronostromina 796

- GEYERICOSCINIDAE li, 1013, 1014
Geyericoscinus 1013, 1014
Gigantosclera 111, 319
Gigantospongia 355, 393
Gigantospongiiinae 393
Gigantothalamia 390
Gigantothalamidae 390
Girphanovella 1085, 1087, 1089
Girphanovellaceae 1087
Girphanovellidae 1086, 1087
Girtyocelia 171, 325, 327, 329, 330, 332, 334, 336, 341, 351, 355, 375, 388
Girvanella 160, 517, 917
Girvanellaceae 1087
Glaessnericyathidae 941
Glaessnericyathus 945
GLOBOSOCYATHIDAE I, 926, 927
Globoscyathina 901, 923
Globoscyathus 876, 926
Globovalvulina 171
globular (gross morphology) 294, 405
glomerate 325, 326, 405
Glomocystospongia 388
Glomocystospongiiidae xlvi, 388
GLORIOSOCYATHIDAE li, 980, 981
Glorioscyathus 980, 981
Glyptostroma 802
Glyptostromoides 621, 683, 802, 804, 813
Gnaltacyathidae 947
Gnaltacyathus 866, 869, 951, 952
Gonamispongia 1085, 1086, 1090, 1091
Gonamispangiinae 1087
Goniastrea 84, 88, 89
Gonophyllum 1097
Gordonicyathella 941
Gordonicyathellus 941
Gordonicyathus 856, 945, 946
Gordonifungia 945, 948
Gordonophyton 915, 917
Goreauilla 3, 5, 7, 10, 11, 12, 25, 246, 248, 505, 572
Gorskinocyathus 1081
Gosaukammerella 353
Gracilitubulus 111, 319
Graciocyathus 1100
Graminospongia 390
Granatiparites 110
Grandicyathus 962
Grantia 293
granular microstructure 337, 366, 341
Graphoscyphia 878, 885, 1046, 1047
Graphoscyphidae 1044
Graphoscyphiidae 1044
Gravestockia 293
groovelike canal 405
Grossotubenella 393
growth axis 405, 429, 692, 697, 824
growth banding 405, 559
growth form(s) xxv, 298, 303, 405, 418, 419, 421, 427, 430, 431, 432, 435, 436, 434, 437, 439, 442, 443, 446, 451, 452, 455, 457, 458, 460, 467, 475, 476, 477, 478, 485, 491, 503, 555, 560, 569, 577, 579, 631, 633, 637, 638, 639, 640, 644, 646, 648, 649, 650, 692, 704, 755, 757, 758, 761, 763, 766, 768, 797, 813, 824, 826, 827, 830, 831, 838, 848
growth habit(s) xix, 405, 419, 443, 631, 646
growth module(s) 406, 563, 564, 566
growth surface(s) 406, 419, 433, 439, 473, 480, 481, 483, 487, 489, 490, 493, 497, 499, 503, 505, 506, 507, 509, 511, 513, 515, 543, 561, 569, 693, 570, 707, 797, 824
Guadalupia 330, 343, 375, 389
Guadalupiida 345
Guadalupiidae xlvi, 389
Guizhouchaeertas 110, 111
Gumbocyathidae 963
Gumbocyathus 963, 967
Gummiae 227
Gumminidae 227
Gunnicyathus 1105
Gurumdistroma 308
Gypsina 544
Habrostroma 468, 489, 499, 505, 511, 532, 621, 626, 683, 695, 818, 819
HADROMERIDA xxiii, xxiv, xlvi, 14, 79, 108, 112, 121, 189, 199, 206, 208, 209, 210, 214, 345, 346, 368, 391
Hadromerina 209, 210
Halichondria 207
Halichondriidae 235
HALICHONDRIDA xxiii, xlvi, 108, 189, 207, 208, 235
Halichondrides 235
Halichondriida 235
Halichondrina 235
Haliclona 207
Haliclona 86
Halysicyathus 940
Halysites 626
Hamacanthidae 231
Hammatostroma 468, 475, 489, 501, 525, 530, 536, 566, 641, 682, 763, 764
HAPLOSLERIDA xxiii, xxv, xlvi, 14, 199, 206, 207, 208, 268, 276
Haplosclerina 268
Haraamphipora 824
Hartmanina 264, 392
Hawkeryathidae 1051
Hawkeryathus 1051
Hebertella 467, 752, 753
Heckericyathus 959, 960
Heckerocyathus 959
Helicosalpinx 517
Heliolites 87, 517
Hemicordata 553
Hemiphyllina 1097
Hemiphyllum 1097
hemispherical chamber(s) 324, 332, 335, 343, 405
Hemistillicidocyathus 995
Hemithalamocystatus 975, 976
Henricellum 388
Heptatubispongia 394
Heptatubispongiiinae 394
Hermatoporella 502, 503, 511, 516, 682, 793, 794
Hermatostroma 461, 468, 476, 501, 503, 621, 682, 790, 792, 793, 802
Hermatostromatidae 702, 703, 705, 789
Hermatostromella 677, 678, 679, 682, 704, 795, 796, 797
Hetairacyathida 1087
HETAIRACYATHIDAE liii, 1086, 1087, 1088, 1089, 1091
Hetairacyathina 1087
Hetairacyathus 1087
Heteractinida xvi, xxi, xxiv, xlvi, 293, 346, 392
Heteralosia 175
Heterocyathidae 1087
Heterocyathina 1087
Heterocyathus 1085, 1087
Heterolosia 159, 175, 176
Heteropenia 394
Hexactinellida 13, 346, 379, 392, 848, 896
Hexactinosa 392
Hexagonaria 87, 90
Hexasterophora 392
Hexastylostroma 774
Hillophyllum 626
Himatella 366, 379, 393
Hispidopetra 3, 5, 7, 12, 247, 250, 251
Hodisia 379
Holcospongia 395
Holcospongiiinae 395
Homoscleromorpha 13, 108
Hormospongia 334, 350, 374, 389
Howellicyathus 934
Huayingia 388
Hudsonella 308
Hupecyathellacea 978
Hupecyathellidae 908, 984
Hupecyathelloidea 978

- Hupecyathellus 866, 984, 985
HUPECYATHIDAE lii, 1023, 1025
HUPECYATHOIDEA lii, 1023
 Hupecyathus 1023, 1025
 Hustedia 171, 174, 177
 Hustedograptus 588
 Hydractinia 543, 546, 570, 699
 Hydractinoidea 699
 Hydroconus 916
 Hydrozoa xxi, 106, 543, 545, 546,
 548, 570, 577, 699, 705
 Hypotcyathidae 947
 Hypotcyathus 951, 953
 Ianilamina 578, 581, 596, 838,
 841, 842, 843
 Ichnusocythus 999
 Idiostroma 452, 509, 683, 784,
 797, 798, 799
 Idiostromatida 704
IDIOSTROMATIDAE xliv, 452,
 700, 702, 704, 797, 798,
 799, 830
 Idiostromidae 443, 797
 Iljinicyathus 934, 936
 Imbricatocelia 390
 Imperatoria 355, 369, 371, 394
 Imponodictyidae 789
 Imponodictyon 790
 Inacyathella 965, 966
 Incrustospongia 308
 incurrent 406, 555, 880, 915
 incurrent canal 406
 Incurvocyathus 928, 929
 independent microporous sheath
 406, 908, 930, 959, 960,
 984, 1003, 1027, 1032, 1033
 Inessocyathacea 932
 Inessocyathellus 951, 953
 Inessocyathidae 947
 Inessocyathus 869, 951, 953
 Inferibionta 1086
 inhalant xxvi, 322, 327, 332, 342,
 343, 344, 355, 357, 359, 364,
 367, 368, 406, 851, 853, 915
 inhalant canal(s) 322, 327, 332,
 342, 355, 357, 359, 364,
 406, 551
 Innaecocelia 392
 inner cavity 406, 871, 1026, 1028
 inner wall(s) xviii, xxvi, xxvii, 406,
 711, 848, 849, 850, 857, 859,
 861, 863, 865, 866, 869, 871,
 875, 876, 887, 890, 891, 892,
 897, 899, 900, 902, 903, 904,
 905, 906, 907, 909, 911, 914,
 915, 928, 931, 932, 933, 934,
 935, 938, 940, 942, 947, 951,
 954, 959, 962, 965, 970, 973,
 974, 975, 978, 980, 981, 984,
 987, 990, 992, 995, 1000,
 1003, 1005, 1009, 1010, 1013,
 1016, 1017, 1019, 1023, 1025,
 1026, 1027, 1028, 1029, 1030,
 1033, 1035, 1037, 1042, 1045,
 1046, 1049, 1051, 1055, 1057,
 1058, 1060, 1061, 1064, 1065,
 1066, 1069, 1070, 1071, 1073,
 1076, 1077, 1078, 1087, 1090,
 1093, 1095, 1096, 1099, 1100,
 1101, 1102, 1103
 Inozoa 137, 311, 321, 322, 354,
 368, 386, 392, 393, 406, 547
 Inozoida 406
 inozoan(s) xx, xxi, xxii, xxiv, xxvii,
 xxvii, 321, 338, 352, 354, 355,
 357, 359, 363, 367, 368, 370,
 371, 372, 373, 374, 376, 379,
 380, 381, 382, 383, 384, 385,
 386, 406, 880
 inozoan architecture xxi
 intercalicular budding 406, 850,
 853, 898, 899, 905, 1069
 interlaminar space(s) 406, 501,
 763, 766, 767, 768, 781,
 784, 788, 793, 797, 804,
 829, 831, 836
 internal filling skeleton(s) 326,
 334, 335, 406
 interpore 323, 332, 342, 406,
 859, 872
 intersept 406, 850, 861, 865, 866,
 875, 883, 885, 887, 891, 904,
 906, 932, 933, 934, 938, 940,
 941, 942, 943, 945, 947, 951,
 954, 957, 959, 962, 963, 965,
 968, 969, 970, 973, 974, 975,
 978, 980, 981, 984, 987, 990,
 992, 994, 995, 997, 999, 1000,
 1003, 1005, 1007, 1008, 1009,
 1011, 1012, 1013, 1015, 1016,
 1017, 1019, 1032, 1033, 1034,
 1035, 1037, 1040, 1041, 1042,
 1044, 1045, 1046, 1049, 1051,
 1054, 1055, 1056, 1058, 1060,
 1061, 1064, 1065, 1066, 1068,
 1069, 1093
 interseptal budding 406
 interseptal plate(s) 406, 859, 965
 interskeletal space(s) 406, 553,
 561, 749, 899
 intertabula(e) 406
 intertube 406
 intertubular increase 406
 intervallar cell(s) 406, 885, 889,
 1058, 1061
 intervallar structures 406, 849,
 857, 871, 893, 900, 907
 intervallum 406, 845, 849, 850,
 853, 857, 862, 863, 871,
 872, 875, 876, 877, 883,
 893, 897, 901, 906, 907,
 923, 928, 932, 996, 978,
 981, 987, 1019, 1025, 1030,
 1035, 1036, 1041, 1043,
 1044, 1049, 1069, 1071,
 1090
 interwall(s) 323, 326, 329, 330,
 332, 335, 340, 342, 406
 Intexodictyides 671, 672, 673,
 678, 679, 680, 682, 749,
 763, 764, 836
 Intexodictyon 763
 Intexodictyonella 766
 Intrasporeocoelia 335, 387
 Intrasporeocoeliidae xlvi, 387
 Intratubospongia 392
 invaginated wall 406
 Involucrocyathus 1105
 Iortocyathus 1100
 Iranothalamia 391
 Irhoudicoscinus 1015, 1016
 Irinacyathacea 932
 Irinacyathidae 954
 Irinaecyathacea 932
 Irinaecyathidae 954
 Irinaecyathus 871, 905, 909,
 957
 irregular microstructure 341, 366,
 367, 406
 Irregulares 847, 900, 901, 902,
 904
 Irregularia 845, 847
 Irregulatopora 313, 316
 Ischyrospongiae xx, 407
 Isiticyathus 863, 968, 969
 isodiametric 407
 isodictyal 407
 Isthmocyathus 926
 Istriactis 253, 255
 Jablonskyia 334, 338, 346, 351,
 391
JAKUTOCARINIDAE li, 975,
 977
 Jakutocarinus 913, 975, 977
 Jakutocyathidae 970
 Jakutocyathus 970, 975
 Jangudacyathus 961, 962
JAPHANICYATHIDAE li, 972,
 973
 Japhanicyathus 913, 972, 973
 Jawonia 336, 349
 Jawonya 322, 324, 371, 392
JEBILETICOSCINIDAE lii,
 1014, 1016
 Jebileticoscinus 1015, 1016
 Jillua 308
 Joanaecyathus 940
JUGALICYATHIDAE liii, 1061,
 1066
 Jugalicyathus 889, 1061, 1066
 Juricyathus 932
 juvenile cup(s) 406, 903
 Kaltatocyathacea 930
KALTATOCYATHIDAE l, 930,
 932
KALTATOCYATHOIDEA l, 930
 Kaltatocyathus 930, 932
 Kameschkovia 1081
 Kamyskovaecyathus 928

- Kandatocyathus 957
 Kaphyllidae 1097
 Kaphyllum 1097
 Karakolocyathidae 1069
 Karakolocyathus 959, 1069
 Kashanella 390
 Kashanelliinae 390
 Kashinaecyathus 959
KASYRICYATHIDAE li, 1003, 1005
KASYRICYATHOIDEA li, 1003
 Kasrylicyathus 1005, 1007
KAZACHSTANICYATHIDA
 xxv, xxvii, liii, 575, 850, 851,
 853, 857, 871, 875, 882,
 883, 885, 887, 897, 901,
 902, 903, 904, 915, 916,
 918, 921, 1077, 1078
 Kazachstanicyathidae 1078
KAZACHSTANICYATHINA
 liii, 850, 901, 903, 1077
 Kazachstanicyathus 1078
 Kazakhstanicyathida 1077
 Kazakhstanicyathidae 1078
 Kazakhstanicyathus 1078
 Kazakovicyathidae 1087
 Kazakovicyathus 1087
 Kazlycyathus 994
 Kechikacyathus 1070, 1074
 Keega 469, 824
 Kellericyathus 945
 Kemeria 115, 116, 117, 118, 122,
 123, 189, 262, 264, 265
 Keriocelia 111, 115, 116, 117,
 118, 119, 122, 189, 262,
 266, 392
KERIOCYATHIDAE liii, 1070,
 1076
KERIOCYATHOIDEA liii, 1070
 Keriocyathus 898, 1070, 1076
 Keriophyllum 87
 Kermeria 111
 Khalfinaea 372, 389
 Khasaktia 576, 577, 911
 Khasaktiida 577
 Khasaktiidae 545, 576, 577, 703
 Khirisocyathus 865, 939, 940
 Kidrjasocyathacea 930
KIDRJASOCYATHIDAE li, 930,
 931
KIDRJASOCYATHOIDEA li,
 930
 Kidrjasocyathus 930, 931
KIJACYATHIDAE li, 980, 982,
 983
 Kijacyathus 980, 982
 Kisasacythidae 932
 Kisasacyathus 858, 861, 934, 936
 Kiwicyathus 866, 871, 957, 959
 Kiyafungia 975
 Klematoica 517
 Kolbicyathidae 987
 Kolbicyathus 987, 989
 Komia 308
KONJUSCHKOVICYATHIDAE
 li, 970, 971
 Konjuschkovicyathus 970, 971
 Kordecyathacea 962
 Kordecyathidae 962, 963
 Kordecyathoidea 962
 Kordecyathus 863, 965, 966
 Korovinella 544, 575, 882, 883,
 901, 917, 1078, 1083
KOROVINELLIDAE liii, 1078,
 1083
 Korovinella 1077
 Korshunovicyathus 1029
 Kosticyathus 975, 977
 Kotuyicosinus 1002, 1003
 Kotuyicyathellus 863, 969
 Kotuyicyathidae 968
 Kotuyicyathus 968
 Krasnopeevaecyathus 910, 920,
 965, 968
 Krishnanicyathus 965
 Kruseicnema 878, 885, 889,
 1076, 1082
KRUSEICNEMIDAE liii, 1076,
 1082
 Kruseicnemididae 1076
 Kruseicnemidoidea 1076
KRUSEICNEMOIDEA liii,
 1076
 Kruseicyathus 977, 978
 Kuraya 1085, 1086, 1090
 Kyarocyathus 863, 924
 Kyklopore 619, 621, 683, 755,
 756
KYMBECYATHIDAE li, 931,
 934
KYMBECYATHOIDEA li, 931
 Kymbecyathus 932, 934
 Labechia 310, 441, 449, 468, 484,
 485, 489, 491, 499, 563,
 577, 583, 584, 585, 586,
 587, 588, 604, 605, 618,
 624, 628, 639, 657, 659,
 660, 661, 662, 663, 664,
 665, 666, 667, 668, 669,
 672, 673, 674, 675, 680,
 682, 710, 715, 719, 720,
 721, 722, 725, 729, 750
 Labechiacea 704
 Labechida 703
 Labechida 719
 Labechiella 468, 517, 583, 584,
 585, 588, 593, 618, 655,
 657, 659, 660, 661, 662,
 663, 664, 665, 666, 667,
 668, 669, 678, 679, 682,
 719, 720, 722, 723, 725
 Labeciellata 722, 723
LABECHIIDA xxv, xxvi, xl ix,
 443, 452, 468, 487, 499,
 511, 548, 577, 579, 581,
 582, 587, 589, 590 605, 653,
 657, 660, 661, 664, 665,
 672, 673, 674, 675, 677,
 678, 679, 680, 682, 688,
 700, 702, 703, 704, 705,
709, 710, 711, 837, 838
LABECHIIDAE xl ix, 579, 582,
 583, 584, 590, 616, 700,
 702, 703, 709, 710, 711,
719, 720, 721, 722, 724, 837
 Labechiina 443, 449, 757
 Labechoidea 709
 Labirinthomorpha 1081
 Labirinthomorphidae 1081
 labri pore 407
 labyrinthic exopore 407
 Labyrinthocyathidae 1081
 Labyrinthocyathus 1081
 Labyrinthodictyon 664, 665,
 669, 761
 Labyrinthomorpha 1081
 Labyrinthomorphida 1081
 Labyrinthomorphidae 1081
 Labyrinthomorphina 1081
 Laccosiphonella 389
 Laceratus 1099
 Laceratus 1099
 Ladaecyathidae 962
 Ladaecyathus 963, 964
 Lagenicyathus 1103
 lamella 407
 lamellar microstructure 338, 350,
 407
 Lamellata 308
 Lamellispongia 395
 Lamellistroma 830, 833
 lamina(e) xxv, 311, 313, 407, 417,
 425, 427, 434, 445, 469, 471,
 473, 474, 485, 487, 489, 491,
 493, 495, 497, 499, 501, 503,
 505, 509, 511, 513, 515, 561,
 563, 566, 575, 579, 581, 582,
 589, 590, 664, 669, 697, 701,
 707, 712, 715, 719, 723, 728,
 729, 732, 738, 741, 748, 750,
 752, 753, 755, 757, 758, 761,
 763, 766, 767, 768, 781, 784,
 785, 787, 788, 789, 790, 793,
 794, 796, 797, 816, 818, 824,
 826, 827, 829, 830, 831, 836,
 838, 839, 841, 842, 843, 844,
 895
 Laminaecyathus 924
 Lamottia 110, 113
 Lamottiidae 110
 Landercyathus 880, 882, 1049,
 1050
LANICYATHIDAE lii, 1035, 1036
 Lanicyathus 1035, 1036
 Laphyllum 1097
 Lapidipanis 582
 Larecyathus 963
 latilamina(e) xxvi, 407, 419, 421,
 425, 427, 429, 430, 431, 436,

- 437, 439, 442, 447, 449, 463, 469, 470, 471, 473, 474, 491, 506, 513, 559, 561, 563, 636, 640, 710, 714, 715, 721, 722, 723, 741, 751, 753, 775, 777, 837, 838, 841, 842, 843, 844
Lebedicyathus 992
Lecompella 812
Leecyathidae 1082
Leecyathus 1082
Leibaella 1098, 1099
LEIBAELLIDAE liii, 1098, 1099
Leinia 347, 391
Leiochaetetes 111
Leiocyathus 1082
Leiofungia 243, 264, 393
Leiofungiinae 393
Leiospongia 45, 111, 115, 116, 117, 118, 119, 122, 189, 243, 264, 267, 268, 363, 379, 392, 393
Lemonea 324, 327, 328, 329, 375, 389
Lenaella 1105
Lenocyathacea 973
LENOCYATHIDAE li, 972, 973
LENOCYATHOIDEA li, 973
Lenocyathus 875, 972, 973
Lepidoleucon 12, 305
LEPIDOLEUCONIDAE xl ix, 208, 296, 305
Leptocyathus 940
Leptoscyathella 1105
Leptoscyathellus 940, 941
Leptoscyathidae 938
Leptoscyathus 857, 859, 911, 940, 941, 951
Lermontovacyathus 1037
leuconoid 293, 294, 296, 303, 305, 306, 407
Leucosolenida 368, 387
Lichenaria 110, 113
Lichenariidae 110
Lichuanopora 310
Lichuanospongia 390
Likinia 310
Lineastroma 497, 596, 621, 672, 673, 674, 675, 677, 801, 802, 805
Lingula 171
Lingyunocelia 389
lintel(s) 407, 857, 858, 859, 861, 862, 863, 866, 869, 871, 872, 883, 885, 887, 1020, 1044, 1093, 1095, 1103
Linzophyllidae 1097
Linzophyllum 1097
lipped pore 407
Lithistida 108, 391
LITHONIDA xl ix, 199, 208, 296, 303, 368, 387, 392
Lithoninae 296
Lithopora 308
Litophyllum 110, 111
Loculicyathellus 932
Loculicyathidae 1035, 1036
LOCULICYATHIDAE lii, 1037, 1038, 1039, 1040
LOCULICYATHINA lii, 850, 859, 872, 875, 883, 885, 887, 891, 903, 907, 1035, 1036
LOCULICYATHOIDEA lii, 1036
Loculicyathopsis 961, 962
Loculicyathus 883, 932, 933, 1037, 1038
Loculocyathidae 1035, 1036
Loculocyathidae 1036, 1037
Loculocyathus 1037
loculus (pl., loculi) 407, 859, 861, 875, 880
Loczia 391
Loenopagia 393
Lomaticyathus 1102
Lomaticyathus 1102
Longaevus 1097
Longicyathus 1103
longitudinal fission 407, 850, 851, 853, 899, 1071
longitudinal fold 407
longitudinal subdivision 407, 850, 853, 855, 1044
Londaleoides 172
Lophelia 86, 90
Lophiostroma 310, 433, 435, 466, 467, 468, 485, 547, 553, 555, 579, 583, 585, 587, 617, 621, 637, 646, 654, 657, 659, 661, 664, 665, 666, 667, 668, 674, 675, 678, 679, 680, 682, 709, 715, 749, 750, 753, 754
Lophiostromatacea 705
Lophiostromatida 702, 705, 709
LOPHIOSTROMATIDAE xl ix, 579, 582, 583, 584, 678, 700, 702, 703, 705, 710, 715, 732, 749, 750, 751, 752, 753, 837
Lophophylidium 171
louver 407
Lovcenipora 111
Lucaniaspongia 390
Lucyathus 1102, 1103
Ludityon 449, 583, 654, 657, 659, 661, 664, 665, 667, 672, 673, 741, 745, 754
Lunulacyathacea 1007
Lunulacyathidae 1008
Lunulacyathoidea 908, 1007
Lunulacyathus 1009
Lutia 394
Lysocyathidae 1105
Lysocyathus 1105
Mackenziecyathus 954, 955
macrostructure(s) 407, 497, 538, 539, 540, 542, 698, 777
Madonia 545
Maandrostia 370, 374, 394
Maandrostidae xviii, 394
MAIANDROCYATHIDAE lii, 1067, 1071
Maiandrocyanthus 877, 885, 889, 920, 1067, 1071
Maldeotaina 1105
Maldeotaina 577, 578
Mamelobechia 735
mamelon(s) 320, 360, 357, 407, 419, 421, 435, 437, 439, 447, 480, 481, 483, 484, 490, 497, 499, 503, 505, 506, 507, 509, 515, 546, 556, 568, 569, 570, 709, 710, 753, 789
mamelon column(s) 407, 437, 439, 447, 481, 483, 497, 499, 505, 509, 515, 709, 710, 715, 719, 723, 725, 735, 738
Mammaticyathus 926
Mammillopora 371, 383, 395
Manacyathidae 1105
Manacyathus 1105
Manaelia 1097, 1098
Marawandia 359, 363, 394
Marginicyathus 1030
Marinduqueia 275, 276, 383, 390
Markocyathus 880, 1052, 1054
massive xx, 298, 303, 305, 354, 357, 360, 407, 419, 422, 423, 435, 457, 634, 650
massive gross morphology 408
massive modular (organization) 408, 915, 1077
Mattajacyathus 961, 962
Marthewcyathidae 1106
Marthewcyathus 1106
Matuocyathus 1046, 1049
MAWSONICOSCINIDAE lii, 1031, 1032
MAWSONICOSCINOIDEA lii, 1032
Mawsonicosinus 1031, 1032
Meandrioptera 19, 45, 103
Meandripetra 111, 115, 116, 117, 118, 119, 122, 189, 286, 287
meandroid 294, 408, 576, 755
Medenia 357, 392
Meekella 173, 177
megapillar(s) 408, 489, 499, 757, 758, 761, 766
megascleres 345, 408
Megastroma 310, 548
melanospheric 408, 524, 527, 528, 538, 540, 548, 549, 802, 805, 808, 812, 820, 830
Melkanicyathus 871, 876, 926, 927
MEMBRANACYATHIDAE li, 1005, 1007

- Membranacyathus 866, 1005, 1007
 membrane tabula(e) 408, 850,
 875, 880, 883, 903, 1043,
 1044
 Membranipora 86, 94
 Memriacyathus 940
 Menathalamia 390, 575
 Mennercyathus 1003
 Merlia xix, xxiii, 3, 4, 5, 7, 10, 11,
 12, 13, 14, 15, 16, 20, 25, 27,
 38, 48, 51, 52, 56, 57, 59,
 61, 62, 63, 69, 81, 91, 97,
 99, 100, 101, 106, 107, 108,
 111, 113, 115, 116, 117, 118,
 119, 120, 121, 122, 123, 127,
 130, 131, 142, 179, 189, 190,
 196, 199, 202, 206, 231, 232,
 233, 234, 246, 543, 545, 553,
 572, 893
 Merliida 107
 MERLIIDAE xlvi, 3, 199, 208,
 229, 231, 232, 233, 234, 246
 Mesocyathus 1026
 mesohyl 408
 Mesolobus 171
 Mesophyllum 1097
 Metacoscinida 1035
 Metacoscinidae 1062
 Metacoscinus 901, 1058, 1062,
 1067
 Metacyathacea 1058
 Metacyathellus 901, 920, 1060,
 1063
 Metacyathida 1035
 METACYATHIDAE liii, 1058,
 1062, 1067, 1068
 Metacyathina 1035
 METACYATHOIDEA liii, 875,
 891, 921, 1058
 Metacyathus 1062, 1064
 Metafungia 1062
 Metafungiidae 1062
 Metaldetes 891, 892, 901, 920,
 1060, 1062, 1064, 1067
 Metalderida 1035
 Metaldetimorpha 1037
 Metaldetinae 1062
 Metelipora 159, 177
 Metethmophyllum 1062
 Mezenia 309
 microcolliculus (pl., microcol-
 liculi) 408, 489, 497, 499,
 505, 508, 524, 542, 769,
 771, 774, 775, 776, 777,
 779, 820
 microcyst plate 408
 microgranular 338, 352
 microgranular microstructure(s)
 408, 891, 896, 917, 923,
 1090
 microlamina(e) 408, 469, 489,
 491, 493, 495, 499, 511,
 528, 596, 732, 753, 774,
 775, 776, 777, 779, 794,
 796, 797, 801, 804, 805,
 813, 814, 818, 819, 824
 micropillar(s) 408, 497, 501, 505,
 524, 527, 528, 530, 542,
 544, 596, 732, 769, 771,
 774, 775, 776, 777, 779
 microporous sheath(s) 408, 848,
 866, 872, 883, 885, 887,
 897, 908, 909, 911, 920,
 924, 926, 930, 942, 957,
 959, 960, 962, 984, 992,
 1003, 1007, 1009, 1019,
 1022, 1027, 1028, 1029,
 1032, 1033, 1051, 1085,
 1087, 1090
 microreticulate 408, 489, 497,
 499, 503, 524, 528, 542,
 591, 701, 704, 769, 774,
 776, 777, 779, 781, 811,
 813, 814, 820, 824
 microscle(s) 337, 345, 408, 554
 Microsphaerispongia 392
 Mikhnocystus 875, 1037, 1039
 Milaeyathus 963, 964
 Millarella 310
 Millepora 310, 546, 699
 Milleporella 253, 255
 MILLEPORELLIDAE xlvi, 195,
 201, 208, 253, 255, 256,
 257, 258, 259, 548
 Milleporellidae 253
 Milleporididae 253
 Milleporidiidae 548
 Milleporidium 258, 308, 546
 Milleporoidea 699
 Millestroma 308
 Millestromidae 253
 Millestrominidae 253
 Minchinella 5, 12, 199, 201,
 297, 298
 MINCHINELLIDAE xl ix, 4,
 199, 208, 296, 297, 298,
 299, 300, 301, 302, 303, 392
 Minisiphonella 389
 Minispongia 355, 394
 Miophyllum 1097
 Mirandocyathus 1026, 1028
 Miricyathus 1027
 Mirispomia 111
 Misracyathus 1106
 modular organization 408, 905,
 1035
 module(s) 408, 495, 545, 553,
 554, 563, 564, 565, 566,
 701, 851, 853, 898, 1077
 Molengraaffia 356, 362, 379, 393
 Molybdocyathus 1046, 1048
 monaxon(s) 308, 309, 336, 345,
 350, 408, 561
 Mongolocyathus 1105
 moniliform 325, 327, 332, 333,
 334, 340, 408
 MONOCYATHIDA I, 849, 851,
 853, 857, 869, 883, 885,
 887, 893, 900, 901, 902,
 904, 907, 923
 MONOCYATHIDAE I, 923, 924
 Monocyathina 923
 Monocyathinae 923
 Monocyathus 923, 926
 monglomerate 327, 409
 Monophyllidae 1097
 Monophyllum 1097
 monoplatyform 409
 Monoplectroninia 12, 298, 299
 Monotrypa 221, 283
 Monstricyathus 1049
 Montanaroa 338, 391
 Montastrea 84, 88, 559
 Monticularia 720
 monticule 409
 Monticulipora 15, 105, 106, 107
 Monticuliporidae 15, 106
 MOOTWINGEECYATHIDAE
 lii, 1019, 1022
 MOOTWINGEECYATHOIDEA
 lii, 1019
 Mootwingeeeyathus 1019, 1022
 Morenicyathus 945, 948
 Moskovia 110, 111
 Moskoviinae 110
 Mrassocystidae 1033
 Mrassocystoidea 1033
 Mrassocystus 1033
 Mrassucyathaea 1033
 Mrassucyathidae 1033
 Mrassucyathus 1033
 Muchattocyathus 859, 1017,
 1020
 Muellerithalamia 297, 322, 335,
 337, 353, 382, 392
 multichambered cup(s) 409, 853,
 1025, 1026
 multidichotomous exopore 409
 multiperforate tumulus 409
 Multithecopora 50, 164, 166,
 171, 173, 174, 175, 176
 Murania 256, 257
 Murguithalamia 337, 390
 Murrayona 3, 5, 7, 10, 12, 199,
 294, 295, 538
 MURRAYONIDA xl ix, 199, 208,
 294, 368, 387
 MURRAYONIDAE xl ix, 199,
 208, 294, 295, 305
 Mussooriella 1106
 Myriapora 308, 309
 Myriopora 308, 309
 Myrmecium 382
 NAIMARKCYATHIDAE liii,
 1065, 1069
 NAIMARKCYATHOIDEA liii,
 1065
 Naimarkcyathus 885, 1065, 1069
 Nalivkinicyathus 980, 981

- Natalijaecyathus 940, 941
 Naybandella 388
 Nefrophyllidae 1097
 Nefrophyllina 1097
 Nefrophylum 1097
 Nellicyathus 1044
Nematosalpinx 322, 373, 374, 388
Neobeatricea 443, 449, 672, 673,
 674, 675, 678, 679, 761
Neochonetes 171
Neocladrodictyon 761
Neocoelia 276
Neocyathus 963
Neoguadalupia 324, 327, 378,
 390
Neokolbicyathus 970, 971, 1037,
 1039
Neoloculicyathus 885, 1037
Neospirifera 37, 157, 171
Neostroma 310, 548
Neosringostroma 621, 683, 802,
 805, 806
Nepheliospongida 268
nester(s) 409, 1085, 1086,
 1087, 1090
Nestoridictyon 586, 724
 netlike porosity 409, 859
Neuropora 111, 115, 116, 117,
 118, 119, 122, 123, 189,
 236, 237, 238, 239
Nevadacyathus 1082
Nevadathalamia 324, 327, 378,
 391
Newellia 200, 206, 273, 555
NEWELLIDAE xlvi, 208, 273,
 274
Nexililamina 682, 765, 766
Nibiconia 371, 387
Nigriporella 308, 309
Nochoroicyathacea 932
Nochoroicyathella 947
Nochoroicyathellus 863, 938
Nochoroicyathida 928, 932
Nochoroicyathidae 932
Nochoroicyathina 861, 901, 932
Nochoroicyathus 347, 856, 859,
 861, 863, 871, 895, 909,
 912, 913, 934, 936
Nodulipora 110, 113
 noncommunicating canal(s) 409,
 866, 869, 907, 908, 947,
 962, 963, 970, 973, 975,
 984, 992, 1003, 1009, 1013,
 1014, 1019, 1032, 1035
 non-enveloping skeletal growth 409
Noronha 231
Nostrocyathus 1069
Novitella 683, 827, 830
Nucha 322, 324, 349, 371, 392
Nuchidae xliv, 392
Nuratadicton 785
Obruchevella 1105
Octactinellida xliv, 392
Oculina 84, 86, 90
Oculospongia 370, 395
Okulitchicyathus 850, 885, 1037,
 1040
Olangocoelia 389
Olangocoeliidae xlvi, 389
OLGAECYATHIDAE li, 992
Olgaecyathus 992
Oligocoelia 389
 oligomerization 409, 908
Omphaiotrocus 171
Ophyllum 1097
Orbiasterocyathus 850, 904, 934,
 936
Orbicoscinus 1012, 1013
Orbicyathellus 863, 935, 937
 orbicyathoid 409
Orbicyathus 850, 904, 936, 938
Orbiparanocyathus 1042
 ordinacellular 409, 495, 524, 542,
 563, 781, 788, 790, 796
Orienticyathus 1011
Orthocyathidae 926
Orthocyathus 926
 orthogonal 338, 352, 366, 367
 orthogonal microstructure 298,
 409
 orthogonal network 872
 orthorectalular 409, 524, 542, 591,
 701, 777, 779, 816, 819, 820
Osadchiietes 1090, 1092, 1093
oscula (see *osculum*)
 oscular 294, 298
osculae (see *osculum*)
osculum (pl., *oscula*) xxvi, 294,
 296, 298, 303, 305, 306,
 319, 322, 323, 329, 332,
 343, 357, 409, 483, 551,
 552, 553, 563, 566, 567,
 569, 572, 853, 904
Oslodictyon 672, 673, 678, 679,
 682, 757
Osprioneides 520
Ossiminus 392
ostia (see *ostium*)
 ostial pore(s) 327, 364, 409
ostium (pl., *ostia*) 299, 303, 305,
 306, 322, 323, 327, 333,
 336, 355, 357, 358, 359,
 365, 409, 567, 569, 915
Ostrebium 11, 540, 559
 outer wall(s) xxvi, 409, 544, 745,
 748, 848, 849, 851, 853, 854,
 856, 857, 858, 859, 861, 862,
 863, 865, 866, 869, 871, 872,
 874, 875, 876, 877, 878, 880,
 882, 883, 885, 887, 889, 891,
 892, 897, 900, 901, 903, 904,
 905, 906, 907, 908, 909, 914,
 915, 920, 921, 928, 930, 931,
 932, 933, 934, 942, 945, 947,
 951, 954, 956, 957, 959, 960,
 962, 963, 965, 968, 969, 970,
 973, 974, 975, 978, 980, 981,
 984, 987, 990, 992, 994, 995,
 996, 997, 999, 1000, 1003,
 1007, 1008, 1009, 1010, 1011,
 1013, 1014, 1015, 1016, 1017,
 1019, 1020, 1022, 1023, 1025,
 1026, 1027, 1028, 1029, 1030,
 1032, 1033, 1035, 1036, 1037,
 1040, 1041, 1042, 1043, 1044,
 1045, 1046, 1049, 1051, 1055,
 1058, 1060, 1061, 1064, 1065,
 1066, 1067, 1068, 1069, 1070,
 1071, 1073, 1074, 1076, 1077,
 1078, 1087, 1090, 1093 1095,
 1096, 1103
Pachecocyathus 934
Pachycoscinus 1015
Pachymura 394
 pachystele(s) 409, 487, 489, 493,
 497, 502, 503, 505, 509, 511,
 513, 524, 527, 528, 529,
 530, 532, 533, 537, 540, 543,
 548, 561, 701, 789, 794, 796,
 797, 800, 802, 804, 808, 810,
 811, 812, 813, 814, 819, 820,
 824, 831
Pachystroma 427, 464, 475, 484
 507, 517, 671, 672, 673,
 674, 675, 774, 775
 pachystrome(s) 410, 487, 489,
 493, 497, 499, 503, 524, 543,
 549, 701, 797, 800, 801, 802,
 804, 805, 808, 811, 812, 813,
 814, 818, 819, 820
 pachystele 409
Pachystylostroma 483, 490, 497,
 503, 583, 585, 587, 591, 593,
 618, 628, 639, 655, 657, 659,
 660, 661, 662, 664, 665, 666,
 668, 669, 671, 672, 673, 674,
 675, 680, 682, 703, 720, 738,
 739, 754
 pachystrome 410
Pachythecaea 110, 111, 114, 115,
 116, 117, 118, 122, 123,
 182, 189, 223, 225, 226
Pachythecopora 111
Pachytildia 395
Palaeoaplysina 309
Palaeonconularia 871, 880, 924, 925
PALAEONCONULARIIDAE l,
 924, 925
Palaeomillepora 309
Palaeoschadinae 388
Palaeoscheda 325, 373, 374, 388
 palmate 409
Palermocoelia 388
Palermocoeliidae xlvi, 388
Palmericyathellus 901, 1058
Palmericyathus 957, 959, 1058
Pamirochaetetes 111
Pamirocoelia 391
Pamiropora 313, 317

- Pamirothalamia 388
 Pamiroverticillites 388
 Panormida 324, 325, 331, 389
 papilla(e) 302, 410, 480, 484,
 485, 499, 506, 710, 720,
 721, 722, 741, 749, 750,
 752, 753
 Papillocyathacea 930
PAPILLOCYATHIDAE l, 930,
 932
PAPILLOCYATHOIDEA l, 930
 Papillocyathus 930, 932
 Papulicyathidae 926
 Papulicyathus 926
 Parabaunaea 111
 Parachaetetes 110
 Paracoscinida 1035
 Paracoscinidae 1044
 Paracoscinus 901, 1046, 1048
 Paracyathus 1040
 Paradehornella 309
 Paradeningeria 389
 Parahimatella 393
 Parahimatellinae 393
 paralamina(e) 410, 497, 758, 761,
 770, 771, 805
 Parallelopora 17, 273, 421, 507,
 528, 530, 540, 555, 626,
 672, 673, 674, 675, 676,
 678, 679, 683, 820, 822
 Parallelostroma 435, 437, 442,
 447, 451, 455, 457, 468, 474,
 489, 493, 497, 524, 527, 528,
 542, 547, 621, 624, 646, 674,
 675, 676, 678, 680, 683, 818,
 819, 821
PARALLELOSTROMATIDAE
 l, 542, 700, 702, 813, 819,
 821, 822
 Parallelostromella 814
 Paramblyssiphonella 389
 Paramilleporella 309
 Paramphipora 452, 524, 827,
 829, 831
 Paramurrayona 10, 12, 294, 296
PARAMURRAYONIDAE xl ix,
 208, 294, 296, 305
 Paranacyathida 1035
 Paranacyathidae 1037
 Paranacyathus 890, 918, 940,
 1040, 1042, 1068
 Paraphyllum 1097
 Pararetocyathus 1055
 Pararosenella 452, 454, 682, 742,
 746
 Parastroma 548
 Parastromatopora 205, 256, 258
 Parastromatoporidae 253
 Parastylostroma 682, 729, 732,
 733
 Paratubuliella 309
 Parauvanella 375, 390
 Paravescicula 391
 Parethmophyllum 989, 990
 Pareudea 370, 380, 382, 395
 Parkeria 309, 310
 Parksia 309
 Parksodictyon 584, 585, 715,
 719, 837
 Paronadella 395
 Paronaria 309
 Parvuscyanthus 1037
 Paschkoviella 830, 833
 Pectenocyathus 938
 pectinate tabula(e) 410, 859, 861,
 875, 901, 903, 904, 905, 912,
 932, 934, 938, 940, 941, 942,
 943, 945, 947, 951, 954, 957,
 959, 962, 963, 965, 968, 969,
 970, 973, 975, 978, 980, 981,
 984, 987, 990, 992, 994
 pellis 410, 887, 893
 pelta(e) 410, 869, 871, 876, 923,
 901
 Pennastroma 616, 682, 735, 737,
 738, 739, 754
 Pentameridae 607
 Pentaphyllum 1106
PEREGRINICYATHIDAE li,
 963, 966
 Peregrinicyathus 963, 966
 periloph 410
 Periomipora 309
 peripheral membranes 566
 peripheral vacuoles 501, 502, 503,
 794, 796
 peripheral vesicle(s) 410, 793,
 794, 797
 peripterate(s) 410, 1095, 1096,
 1097, 1099, 1100, 1101,
 1102, 1103
 Peripteratoicyathus 1103
 Periocorynella 354, 359, 360,
 364, 366, 394
 Periocorynellinae 394
 Peromphincta 345
 Peroniella 137, 354, 355, 356,
 357, 363, 366, 367, 368,
 371, 375, 379, 380, 383, 395
 Perplexostroma 680, 831, 834
 Petridiostroma 298, 436, 444, 464,
 465, 466, 467, 501, 518, 519,
 565, 566, 618, 632, 671, 672,
 673, 674, 675, 676, 677, 678,
 679, 680, 682, 762, 763
 Petrobiona 3, 4, 5, 7, 9, 10, 11, 12,
 197, 199, 303, 304, 305, 538
PETROBIONIDAE xl ix, 199,
 208, 296, 303, 304
 Petrostroma 12, 15, 107, 298,
 300, 763
 Petschorostroma 779
 Pharetronex xx, xxi
 Pharetronida xx, 321, 322, 410
 Pharetronidea xx
 Pharetronspongia 370, 383, 393
 Pharetronspongidae xl viii, 393
 Pharetronsponginae 393
 phase 410
 Phaulactis 87
 Phaethalamia 388
 Phragmocelia 335, 387
 Phragmocoeliidae xl viii, 387
 Phamatocyathus 926
 Piamaecyathacea 990
PIAMAECYATHELLIDAE li,
 990, 991
 Piamaecyathellus 990, 991
 Piamaecyathidae 990, 992
 Piamaecyathus 992
 Pichiostroma 674, 675, 676, 678,
 679, 703, 777
 Pichiostromatidae 702, 776
 pillar(s) xxx, 334, 337, 347, 410,
 417, 434, 449, 451, 484, 485,
 451, 487, 489, 491, 493, 495,
 497, 499, 501, 502, 503, 505,
 508, 509, 511, 513, 515, 524,
 525, 526, 529, 535, 540, 703,
 543, 545, 546, 548, 563, 564,
 565, 566, 567, 663, 701, 703,
 709, 710, 711, 712, 715, 719,
 720, 721, 722, 723, 724, 725,
 726, 728, 729, 731, 732, 734,
 735, 738, 739, 740, 741, 748,
 749, 752, 753, 755, 757, 758,
 761, 762, 763, 766, 768, 769,
 770, 771, 774, 779, 781, 784,
 785, 788, 789, 790, 793, 794,
 796, 797, 802, 804, 805, 813,
 814, 816, 818, 819, 824, 826,
 827, 829, 830, 831, 836, 850,
 872, 882, 883, 901, 903
 pillar-laminae 410
 Pilodicosinus 1000, 1001
 Pinacocytathus 1082
 pinacocyte 410
 pinacoderms 410
 pisolithic 332, 335, 345
 pisolithic filling structure 410
 Pisothalamia 335, 336, 391
 Pisothalamida 345
 Planochaetetes 111
 Plasmoporella 626
 Plassenia 278, 279
 plate tabulae 410, 849, 850, 859,
 875, 908, 912, 928, 996, 1019,
 1025, 1036, 1037, 1040
 platelike cup 410, 904
 Platiferostroma xl ix, 501, 616,
 682, 729, 730, 754
PLATIFEROSTROMATIDAE
 582, 616, 700, 704, 728,
 730, 731, 732, 733, 734
 Platysphaeroecelia 391
 Plathythalamella 353, 390
 Plathythalamella 324
 Plectostroma 468, 497, 509, 515,
 591, 621, 646, 671, 672,

- 673, 674, 675, 676, 678,
679, 680, 682, 704, 771, 772
- Plectroninia 5, 10, 11, 12, 199,
298, 299, 301
- Plenocyathus 1105
- Pleospongia 923
- Plestostroma 672, 673, 729,
734, 754
- Plexodictyidae 702, 758
- Plexodictyon 468, 497, 589, 590,
664, 665, 668, 669, 672,
673, 677, 678, 679, 680,
703, 758, 761
- plicate wall 410, 850
- Plicocyathus 859, 871, 874, 969,
970
- Plumatalinaria 581, 590, 591, 595,
596, 664, 665, 666, 674,
675, 704, 775, 776
- PLUMATALINIIDAE xl ix, 590,
591, 702, 705, 775, 776
- Plumataliniinae 591, 700, 732
- plumose 410
- Pluralicosinus 997
- Pluralicyathus 855, 962, 963,
964
- POECILOSCLERIDA xxiii,
xviii, 14, 79, 108, 112, 121,
189, 199, 206, 208, 229, 231
- Poeciloscleridae 229
- Poecilosclerina 229
- Poletaevacyathidae 1032
- Poletaevacyathus 1032
- polyactine(s) xxi, 336, 411
- POLYCOSCINIDAE li, 908,
1007, 1008, 1009
- POLYCOSCINOIDEA li, 908,
921, 1007
- Polycoscinus 865, 895, 920, 1008
- Polycyathidae 962
- Polycyathus 962, 963
- Polyctostocelia 353, 378, 389
- Polyedra 388
- Polyedridae xl vii, 388
- polyglomerate 327, 337, 411
- polyplatyform 411
- Polygonophyllidae 1097
- Polypi 105
- Polypora 169
- Polysiphon 391
- Polysiphonaria 324, 375, 389
- Polysiphonata 346
- polysiphonate 411
- Polysiphonella 393
- Polysiphoniidae 391
- Polysiphospongia 391
- Polysiphospongiiiae 391
- Polystillicidocyathus 1002, 1003
- Polythalamia 325, 371, 389, 910,
918, 920, 1027, 1028
- Polytholosia 325, 334, 378, 391
- Polytholosiinae 391
- Polytubifungia 357, 393
- Polytubispongia 357, 359
- Polyvasculata 346
- porate 323, 324, 325, 327, 329,
331, 335, 336, 338, 339,
344, 411
- pore(s) xviii, 294, 298, 303, 310,
311, 313, 320, 323, 327, 328,
329, 332, 334, 339, 342, 343,
355, 357, 359, 362, 363, 364,
365, 495, 521, 524, 544, 551,
555, 563, 566, 569, 570,
694, 696
- pore field 411
- pore tube(s) 411, 711, 887, 891,
892, 1049, 1055, 1058, 1061,
1065, 1066, 1068, 1069,
1073, 1074, 1076, 1077
- Porefieldia 371, 388
- Porites 84, 88, 455, 456
- Porkunites 110, 113
- PORIFERA xviii, xix, xxi, xxii,
xxiii, xxiv, xxvii, xxviii, xl viii,
1, 106, 107, 206, 208, 293,
417, 700, 845, 847, 848,
923
- POROCOSCINIDAE lii, 1017,
1019, 1021
- POROCOSCINOIDEA lii, 908,
1017
- Poroscoinus 869, 910, 920,
1019, 1021
- Porocyathellus 980, 984, 985
- Porocyathidae 984
- Porocyathus 975, 984
- porosity 355, 411, 538, 555
- Porosphaera 297, 310
- Porosphaerella 297
- Porosphaeridae 296
- Pospelovicyathus 947
- Potekhinocyathus 1082
- Praeactinostroma 544, 1078
- Praeceratoporella 111
- Praefungia 1064
- Praediostroma 452, 677, 678,
679, 680, 831, 835
- Preceratoporella 111, 114
- Precorynella 379, 394
- Precorynellinae 394
- Preudea 357, 392
- Preudinea 392
- Preperonidella 380, 394
- Preperonidellidae xl viii, 394
- Preperonidellinae 394
- Prestellispongia 357, 360, 394
- Prestellispongiinae 394
- Prethmophyllum 934
- Pretiosocyathacea 960
- Pretiosocyathellus 962
- PRETIOSOCYATHIDAE I,
961, 962
- PRETIOSOCYATHOIDEA I, 960
- Pretiosocyathus 911, 961, 962
- Preverticillites 375, 389
- primary calcareous skeleton 411,
880, 903
- primary spicule framework 411
- Priscastroma 583, 585, 586, 587,
588, 657, 660, 662, 715,
717, 749, 754
- Prismatophyllum 87
- Prismocyathellus 1045
- Prismocyathidae 1044
- Prismocyathus 1045
- Prismophyllum 90
- Prismostylus 711
- Proarchaeocyathus 1102, 1103
- Promillepora 256, 258
- Propora 626
- Propriocyathus 926
- Propriolynthidae 926
- Propriolynthus 871, 876, 913,
926, 927
- prosiphonate 332, 341, 411
- Prosiphonella 389
- prosopore 411
- prosopyle 411
- Protaraea 547
- Protoarchaeocyatha 1096
- Protocyathus 945, 983, 984
- Protocyclocyathellidae 1055
- Protocyclocyathidae 1055
- Protocyclocyathus 1082
- Protolabechiida 581, 709, 710,
720, 837
- Protopharetra 918, 1046, 1054,
1055, 1058, 1082
- Protopharetridae 1051
- Protophyllum 1105
- Prufungia 1064
- Pseudoactinodictyon 493, 501,
618, 682, 763, 764, 766
- Pseudoactinostroma 616, 831, 834
- Pseudoamblysiphonella 334, 389
- pseudoceroid forms (*or* modular
organization) xxvii, 411
- Pseudochaetetes 110
- pseudodolathrate wall 411, 861
- Pseudodegeleticyathellus 951
- pseudogemmule 411
- Pseudoguadalupia 389
- Pseudohimatella 357, 359, 367,
368, 393
- Pseudohimatellinae 393
- Pseudoimperatoria 350, 369,
371, 390
- Pseudolabechia 674, 675, 676,
678, 679, 735, 773, 774
- PSEUDOLABECHIIDAE xl ix, 590,
591, 618, 676, 700, 701, 702,
704, 705, 732, 771, 773, 774
- Pseudolabechiinae 700
- Pseudomillestroma 111
- Pseudomonotis 177, 178
- Pseudomonotrypa 283
- Pseudopalaeoaplysina 315, 318
- Pseudoporefieldia 372, 388

- pseudoseptum (pl., pseudosepta) 411, 850, 854, 872, 878, 883, 903, 923, 1035, 1036, 1037, 1040, 1041, 1042, 1043, 1044, 1046, 1049, 1051, 1061, 1066, 1068
Pseudoseptifer 110, 111, 115, 116, 117, 118, 119, 122, 123, 219, 221, 222
 pseudosiphonate 341, 411
 pseudospicules 411
Pseudostictostroma 781
Pseudostromatopora 831, 835
Pseudostromatoporella 781
Pseudostylocladity 439, 491, 499, 581, 583, 584, 585, 588, 591, 592, 628, 635, 639, 655, 656, 657, 659, 660, 661, 662, 664, 665, 666, 667, 668, 669, 715, 718, 719, 720, 754, 837
Pseudosyringocnema 875, 878, 910, 1074, 1080
Pseudosyringocnemididae 1073
 pseudotaenial 872, 875, 903, 923, 1035, 1044, 1049, 1055, 1056, 1058, 1060, 1065
 pseudotaenial network 411
Pseudotenericyathellus 945, 948
Pseudotrupetostroma 502, 513, 528, 533, 621, 683, 804, 807
Pseudotrupetostromatidae 705
Pseudouvanella 391
Pseudoverticillites 392
Pseudovirgula 393
 pseudozoidal 546
 pseudozoidal tube(s) 412, 511
Pterocyathacea 1099
Pterocyathida 1096, 1097
Pterocyathidae 1097, 1099
Pterocyathus 1099
Ptychochaetes 47, 83, 110, 111, 115, 116, 117, 119, 122, 123, 189, 288, 289, 290, 291
Pubericyathus 1101
 pugiole(s) or pugiole tetractine 303, 305, 412
Pulchrilamina 578, 579, 580, 595, 703, 838, 839, 840, 841, 843
PULCHRILAMINIDA xxiv, xxvi, 1, 578, 581, 594, 617, 700, 701, 710, 837
PULCHRILAMINIDAE 1, 579, 581, 582, 700, 703, 710, 837, 838, 839, 840, 842, 843
Pustulacyathellus 1058
 pustula(e) 412, 885
Pustulicyathus 926
Putapacyathacea 1022
PUTAPACYATHIDA lii, 850, 851, 853, 857, 859, 883, 885, 887, 893, 900, 902, 903, 907, 908, 914, 1019
PUTAPACYATHIDAE lii, 1022, 1024
PUTAPACYATHOIDEA lii, 1022
Putapacyathus 1022, 1024
Pycnodictyon 777
PYCNOIDOCOSCINIDAE lii, 1051
Pycnoidocoscinus 851, 854, 875, 880, 891, 901, 920, 1051
Pycnoidocystidae 1055
Pycnoidocystatus 871, 877, 891, 910, 922, 1057
Pygodus 584
PYXIDOCYATHIDAE liii, 1101, 1102
PYXIDOCYATHOIDEA liii, 1101
Pyxidocystatus 1102
Qinghaipora 825
Qinlingocystatus 982, 984
Quadriphyllum 1097
Quasiaulacera 664, 665, 746, 747, 748, 752, 754
Rackovskia 576
Radiciacyathus 1102
 radial 298, 299, 305, 311, 313, 320, 359, 367, 417, 418, 473, 501, 505, 530, 535, 569, 797, 818, 824, 849, 850, 857, 861, 872, 875, 880, 900, 1085, 1086, 1087, 1090
 radial canal(s) 313, 417, 824
Radicanalospongia 393
radicatus (pl., *radicati*) 412, 471, 893, 904
radicati (*see radicatus*)
Radiciacyathus 1102
Radioella 322, 336, 391
Radiociliidae 391
Radiocyataceae 1087
Radiocyatales 1087
RADIOCYATHA xxvii, liii, 1086, 1087, 1090, 1105
Radiocyathaceae 1087
Radiocyathida 1087
Radiocyathidae 1086, 1087
Radiocyathinae 1086, 1087
Radiocyathus 1085, 1087, 1088
Radiofibra 394
Radiostroma 581, 584, 664, 665, 666, 725, 728, 729, 731, 754
Radiothalamos 335, 350, 374, 387, 848
Radiotrabeculopora 318, 319, 375, 393, 547
Rahbahthalamia 387
Ramifer 1098, 1099
Ramostella 394
Ramuscyathus 1037
raphide 412
Raphidiopora 223
Rarocyathus 940, 1100, 1101
Raropectinus 940
Rasetticyathus 869, 920, 954, 955
Raspailia 86
Raspailiidae 229
Razumovskia 917
Receptaculita 1086
 rectangular chamber shape 412
Rectannulus 865, 940, 942
 recurrence 412, 907
Radicicyathus 1102
redimiculus (pl., *redimiculi*) 412, 859, 862, 863, 1019
redimiculi (*see redimiculus*)
 regular spicule(s) 296, 412
Regulares 847, 900, 901, 902, 904
Regularia 845, 847
Renalcis 896, 911, 916, 917
Reptadeonella 86
Retecoscinus 861, 909, 910, 911, 919, 999, 1000
Retecyathus 904, 1055
Retetumulus 1012, 1013
 reticular xxi, 323, 324, 331, 332, 335, 345, 348, 359, 364, 365, 412, 455, 475, 542
 reticulate filling structure 412
 reticulate skeleton 412
Reticullina 309
Reticulocelia 379, 392
Retilamina 855, 880, 917, 920, 1046, 1049
retrosiphonate 326, 329, 332, 341, 347, 412
Rewardocyathacea 973
Rewardocyathidae 973
Rewardocyathus 973
Rhabdactinia 387
Rhabdermiidae 229
Rhabdocnema 973, 926
Rhabdocnemidae 973
Rhabdocyathella 973
Rhabdocyathellidae 973
Rhabdocyathidae 973
Rhabdocyathus 923
Rhabdolynthus 1027, 1028
rhagon 412
Rhaphidiopora 223
Rhizacyathida 901, 1035
Rhizacyathidae 1082
Rhizacyathus 902, 1082
Rhizoporidium 309
Rhizostromella 310
Rhombophyllina 1097
Rhombophyllum 1097
rib(s) 412, 869, 887, 942, 1103
Richthofenia 893
Rigbyetia 371, 389
Rigbyspongia 334, 374, 388
 rigid aspicular skeleton 294, 412
 rigid skeleton(s) 293, 321, 322, 336, 337, 338, 341, 344, 345, 347, 412
rim(s) 412, 491, 523, 530, 535, 538, 863, 866, 871, 876, 893, 943, 945, 947, 1041

- Rimotabulocyathus **1003**
 ring pillar(s) **412**, 497, 499, 502,
 503, 567, 781, 788, 789
Ringifungia **970**, 971
Robertiolynthus **927**, **928**
ROBERTOCYATHIDAE **I**, **960**,
 961
Robertocyathus **960**, 961, 962
Robustocyathellus 859, 863, 937,
 938
Robustocyathidae **1037**
Robustocyathus **1037**
 rod(s) **412**, 710, 729, 837, 838,
 841, 843, 861, 862, 869,
 872, 885, 897, 902, 1030,
 1085, 1086, 1087, 1090,
 1093
Rogerella 169, 170
Romanactis **258**
Rosenella 454, 482, 483, 497, 583,
 585, 587, 618, 626, 655, 657,
 659, 660, 661, 662, 663, 664,
 665, 666, 667, 668, 669, 672,
 673, 674, 675, 678, 679, 680,
 682, 712, 713, 715, 720, 742
ROSENELLIDAE **xlix**, 582, 583,
 589, 616, 700, 703, 705,
 711, 712, 713, 714, 716,
 717, 718, 749
Rosenellina **749**
Rosenellinella 712, 713, **719**
Rosenia **769**
Rossocyathella 977, **978**
Rothpletzella 461, 517
Rotundocyathus 859, 861, 863,
 937, **938**
Rowanpectinus **951**
Rowellella 517
Rozanovicoscinus 851, 853, 863,
 904, **1000**
Rozanovicyathacea **1017**
ROZANOVICYATHIDAE **lii**,
 1017, 1020
Rozanovicyathus 865, **1017**, 1020
RUDANULIDAE **li**, 865, **1000**,
 1001
Rudanulus 910, 920, **1000**, 1001
Rudicyathinae **1044**
Rudicyathus **1044**
 rudimentary wall **412**
Rugocyathus **992**
Russocyathus 865, 977, **978**
Russospongia 388
 S-shaped canal(s) **414**, 866, 869,
 887, 889, 954, 965, 973, 978,
 980, 981, 984, 987, 1003,
 1013, 1017, 1019, 1032, 1042
Sagacyathellus **1105**
Sagacyathus 858, 866, 945, 948
Saginospongia 394
 sagittal spicule **412**
Sagittularia 297
Sahraja 389
SAJANOCYATHIDAE **I**, 954,
 956, 957, 958
Sajanocyathus 898, 954, 956
SAJANOLYNTHIDAE **I**, 926,
 927
Sajanolynthus 871, **926**, 927
SAKHACYATHIDAE **lii**, 1041,
 1042
SAKHACYATHOIDEA **lii**, 1041
Sakhacyathus 885, **1042**
Salairella 163, 169, 468, 493, 505,
 518, 526, 533, 537, 545,
 683, **812**
SALAIROCYATHIDAE **li**, 996,
 1002, **1003**
SALAIROCYATHOIDEA **li**, 996
Salaicrocyathus 1002, **1003**
Salanycyathidae **1051**
Salanycyathus 885, **1051**
Salopicyathus **1082**
Salpingidea **923**
Salzburgia 390
SALZBURGIIDAE **xlix**, 390
Sanaricyathidae **970**
Sanaricyathus **970**
SANARKOCYATHIDAE **li**, 865,
 970, 971
Sanarkocyathus **970**, 971
Sanarkophyllum **965**, 967
Sanxiacyathus **1055**
Saocystatus **1055**
Sarawakia 309
Saresiastroma 309
Sarmentofascis 309
Sayanocyathus **954**
 scale(s) 294, 296, 305, 306, **412**,
 497, 863, 865, 887, 903, 906,
 907, 908, 926, 928, 930, 931,
 938, 940, 951, 954, 970, 973,
 980, 987, 1000, 1005, 1008,
 1013, 1015, 1016, 1019,
 1022, 1023, 1030
 scalenochedral structure **412**
Scaniostroma 309
Schidertycyathellus **965**
Schidertycyathidae **963**
Schidertycyathina **932**
Schidertycyathus **965**
Schistodictyon 493, 501, 505,
 507, 677, 678, 679, 680,
 682, 765, **766**
Schizolites 110, 113
Schumnyicyathidae 908, 1017
Schumnyicyathoidea 908, 1017
Schumnyicyathus 1017, 1020
Scleractinia 547
Sclerocoelia 111, 115, 116, 117,
 119, 122, 189, **264**, 269,
 270, 392
Sclerocyathus **974**
 sclerocyte(s) **413**, 561
 sclerodermit(e)s 294, 303, 305,
 317, **413**, 538
 sclerosome **413**
Sclerospongia xx
Sclerospongiae xx, 13, 107, 108,
 125, **413**
Scyphocyathus **926**
Sebargasia 374, 388
Sebargasidae xlviii, 388
 second-order intervallar structure(s)
 413, 857
 secondary calcareous skeleton **413**,
 845, 880, 893, 897, 901,
 903, 904, 923
 secondary thickening(s) **413**, 895,
 904, 915
Sedekiastroma 309
 segmentation 322, 323, 324, 330,
 413
 segmented tabula(e) **413**, 880,
 875, 877, 880, 903, 904,
 1044, 1046, 1049, 1051,
 1054, 1055, 1058, 1060,
 1061, 1064, 1065, 1068,
 1078
Sekwicyathidae **978**
Sekwicyathus 871, 914, **978**, 979
Senowbaridaryana 323, 324, 325,
 341, 389
septa (*see septum*)
 septate(-reticulate) filling structure
 413
Septochaetetes 110, 111
Septocyathus **1082**
 septum (pl., *septa*) xxvii, **413**, 468,
 544, 848, 849, 850, 853, 856,
 857, 858, 859, 861, 866, 871,
 872, 887, 897, 901, 903, 905,
 906, 912, 913, 914, 923, 928,
 932, 933, 934, 935, 938, 940,
 941, 942, 943, 945, 947, 951,
 954, 957, 959, 962, 963, 965,
 968, 969, 970, 973, 974, 975,
 978, 980, 981, 984, 987, 990,
 992, 994, 995, 996, 997, 999,
 1000, 1003, 1005, 1007,
 1008, 1009, 1010, 1011,
 1012, 1013, 1015, 1016,
 1017, 1019, 1023, 1025,
 1030, 1032, 1033, 1034,
 1035, 1066, 1068
Seranella 389
Sericyathus **954**
Serligocyathidae **1044**
Serligocyathus **1082**, 1105
Serratocyathus **1105**
Sestrostomella 137, 354, 357,
 360, 363, 366, 370, 382, 393
Sestrostomellidae xlviii, 393
 shaft(s) 298, **413**, 853, 1086
Shamovella 309
 sheath(s) **413**, 449, 451, 552, 566
Sheathcyathus **1105**
 sheetlike cup **413**
Shirdagopora 449

- SHIVELIGOCYATHIDAE lii, 1044, 1046
 Shiveligocyathinae 1044
Shiveligocyathus 891, 1044, 1046
Shiveligocyayhus 880
Shortorispongia 390
Shuguria 436, 446, 458, 460, 461, 476
Shuquaia 258, 259
Sibirecyathus 912, 919, 937, 938
Sichotecyathus 945
Sichuanostroma 738, 739
Siderastrea 84, 88, 89
Siderocyathus 871, 898, 958, 959
 sieve plate 413
Sigmocoscinacea 1015
 SIGMOCOSCINIDAE lii, 1015, 1016, 1018
 SIGMOCOSCINOIDEA lii, 1015
Sigmocsinus 1016, 1018
Sigmocyathacea 994
 SIGMOCYATHIDAE li, 994, 995, 996
 SIGMOCYATHOIDEA li, 865, 994
Sigmocyathus 995
Sigmofungia 891, 892, 901, 910, 920, 1058, 1059
Sigmofungiidae 1055
Sigmofungiidae 1055
 simple tumulus 413, 874
Simplexodictyidae 703
Simplexodictyidae 702, 781
Simplexodictyon 495, 545, 563, 564, 596, 621, 674, 675, 676, 677, 678, 679, 680, 682, 763, 785, 786
 single-chambered cup 413
 single exopore 413
Sinodictyon 452, 583, 654, 657, 659, 661, 747, 749, 754
 siphon 330, 413
Siphonata 345
 siphonate 324, 325, 329, 331, 332, 413
 siphonate exhalant system 413
Siphonodendron 153
Siphonodictyon 95
Siphostroma 111, 309
Sivovicyathus 938
 skeletal ontogeny 413, 847, 900, 901, 902, 903, 907
 skeletal structure(s) 342, 370, 371, 383, 413, 443, 469, 470, 473, 475, 511, 521, 544, 561, 563, 566, 576, 578, 579, 641, 711, 723, 749, 753, 848, 857, 899, 900, 914, 1095
 skeletal tracts 413
Skolithos 921
 slitlike pores (*or* porosity) 413, 859, 862, 880, 999, 1003, 1013, 1017
Soanicyathacea 930
 SOANICYATHIDAE I, 930, 931, 933
 SOANICYATHOIDEA I, 930
Soanicyathus 931
Sobralispongia 268, 271
Solenocoelia 388
Solenolmia 341, 348, 379, 389
Solenolmiidae 389
Solenolmiinae 389
Solenopora 111, 112, 463
Solidostroma 749, 826
Sollasia 324, 325, 332, 333, 336, 341, 353, 374, 388
Solutossaspongia 394
Somphocystida 904, 928
Somphocystidae 1082
Somphocystina 928
Somphocystus 895, 1083
 spacing phase(s) 413, 513
 sparsely porous septum 413
 speck(s) 413, 491, 521, 524, 530, 534, 540, 695
Sphaeractinia 308, 309
Sphaeractinoidea 547
Sphaerocodium 310
Sphaeroctelia 330, 332, 337, 342, 344, 353, 382, 391
 SPAHAEROCOELIIDA xxiv, xl ix, 344, 368, 387, 391
Sphaerocoeliidae xl ix, 391
Sphaerocyathus 1106
Sphaerolichaeetes 111
Sphaeropontia 366, 367, 393
Sphaeropontiidae xl viii, 393
Sphaerostroma 824
Sphaerostromella 310
Sphaerotalamia 388
Sphaeroverticillites 388
Spheciosporgia 225
Spherolichaeetes 114, 116, 117, 119, 122, 189, 241, 249, 252, 253
 spherulite(s) 338, 341, 366, 414, 538, 561
 spherulitic microstructure 341, 366, 367, 363, 366, 414, 561, 582
Sphinctocyathus 1054, 1083
Sphinctonella 381, 391
Sphinctozoa 321, 322, 386, 387, 414
sphinctozoan(s) xviii, xix, xx, xxi, xxii, xxiv, xxvii, xxviii, 294, 321, 324, 325, 327, 329, 334, 335, 337, 338, 339, 341, 343, 344, 345, 346, 347, 350, 351, 352, 353, 368, 370, 371, 372, 373, 374, 375, 376, 377, 378, 379, 382, 383, 384, 385, 386, 387, 538, 545, 555, 563, 575, 654, 701, 847, 848, 850
 spicular xviii, xx, xxi, 296, 300, 321, 322, 336, 337, 344, 345, 352, 354, 363, 368, 414, 495, 548, 555, 581, 1090
 spiculate 414, 418, 540, 581, 837, 913, 920, 1086, 1090
 spicule(s) xviii, xix, xx, xxi, xxii, xxiii, xxiv, xxv, xxvi, xxvii, 293, 294, 296, 297, 298, 299, 300, 301, 303, 305, 307, 308, 309, 311, 321, 336, 337, 345, 349, 350, 351, 363, 386, 387, 414, 417, 418, 524, 540, 545, 547, 548, 553, 554, 555, 561, 566, 579, 707
 spine(s) 320, 414, 546, 579, 725, 726, 849, 861, 863, 865, 866, 871, 876, 885, 887, 903, 906, 914, 957, 992, 1009, 1093, 1103
Spinicyathidae 923
Spinicyathus 923
Spinochaetetes 111
 spinose rod(s) xxvi, 414, 579, 710, 837, 838, 841, 843
Spinoscyathus 887, 1060, 1064
Spinospongia 393
Spinosponginae 393
Spinostella 317, 320
Spinostroma 618, 682, 738, 739, 740, 754
Spiralicyathus 1060
Spirastrella 13, 206, 225, 553
 SPIRASTRELLIDAE xl viii, 14, 208, 225, 227, 246
Spirellus 1105
Spirillicyathacea 1058
Spirillicyathidae 1058
Spirillicyathus 871, 877, 887, 920, 1060, 1064
Spirocyathella 871, 877, 1053, 1055
Spirocyathellus 1055
Spirocyathida 1035
Spirocyathidae 900, 1055
Spirocyathina 1035
Spirocyathus 1055, 1073
Spirophorida 13
Spirorbis 159, 474
 spongin 321, 414
Spongiomorpha 384
 spongios wall 414
Spongiosicyathus 1045
Spongiothecopora 110, 111
 spongocoel(s) xvii, 323, 325, 326, 328, 329, 330, 332, 334, 336, 337, 338, 342, 343, 344, 345, 349, 356, 357, 359, 360, 362, 363, 364, 366, 367, 414, 551, 552
 spongocyte 414
Sponganellia 273, 274
Sporadoporidium 309
 spore-like 345, 414
 spore-like filling structure 414

- Squamella 1083
 Squamellicyathus 1083
 Squamosocyathus 988, 990
 Stachyodella 824
 Stachyodes 421, 422, 433, 436,
 451, 452, 453, 455, 459, 461,
 468, 475, 476, 503, 509, 524,
 540, 542, 556, 566, 605, 629,
 649, 797, 823, 824, 830
 Stachyodidae 443, 824
 STACHYODITIDAE 503, 700,
 702, 704, 823, 824, 830
 Staephyllum 1097, 1099
 Staphylopora 110, 113
 Stapicyathus 857, 937, 938
 Stanatulocyathus 1016, 1018
 Steginoporella 86
 Steinerella 309
 Steineria 258
 Steinerina 258, 259
 Stelliporella 455
 Stellispongia 360, 363, 366, 370,
 380, 394
 Stellispongella 357, 360, 361,
 367, 368, 370, 380, 394
 Stellispongilliidae xlvi, 394
 Stellispongillinae 394
 STELLISPONGIIDA xl ix, 368,
 387, 394
 Stellispongidiidae xl ix, 371, 382,
 383, 394
 Stellispongiinae 394
 Stellopora 825
 Stellospangiida 387
 Stelodictyon 587, 589, 622, 664,
 665, 668, 669, 672, 673,
 674, 675, 676, 677, 678,
 679, 680, 682, 757, 758
 stem(s) 324, 414, 424, 509, 544,
 556, 826
 Stephenicyathus 905, 989, 990
 Stereina 296
 Stevocystatus 1049, 1050
 Stictostroma 468, 495, 505, 523,
 524, 526, 545, 563, 565, 566,
 621, 626, 629, 682, 781, 787
 Stictostromatidae 781
 Stictostromella 781
 Stillicidocyathidae 941
 Stillicidocyathus 866, 945, 949
 stipule(s) 414, 871, 978, 987,
 990
 stirrup pore(s) (*or canals*) 414, 857,
 858, 859, 866, 871, 891, 904,
 906, 932, 935, 938, 940, 951,
 954, 959, 962, 963, 970, 973,
 975, 984, 987, 1020
 Stollanella 354, 357, 360, 362,
 363, 394
 Straparollus 171
 stratiform 327, 328, 432
 Stratispongia 392
 stratocyst(s) 414, 491, 710, 720
 Stratodictyidae 702, 710, 719,
 720, 837
 Stratodictyon 468, 491, 577, 581,
 584, 585, 587, 588, 591,
 626, 628, 660, 661, 662,
 663, 664, 665, 667, 668,
 720, 723, 724, 754, 837
 streptaster 414
 Streptindyes 169
 striae 414, 1095, 1096, 1097,
 1101, 1102, 1103
 striated 414, 524, 540, 542, 609,
 824
 Striatocynthacea 1099
 STRIATOCYATHIDAE liii,
 1099, 1100
 Striatocynthus 1100
 Stromactinia 310
 Stromaporidium 310
 Stromatoxinella xxiii, 56, 124,
 125, 238, 240, 241
 STROMATOCERIIDAE xl ix, 582,
 584, 616, 661, 700, 702, 705,
 709, 711, 723, 726, 727, 728
 Stromatocerium 499, 501, 575,
 581, 584, 585, 586, 587,
 588, 660, 661, 662, 663,
 664, 665, 666, 668, 669,
 682, 710, 711, 720, 724,
 726, 729, 732, 752, 754
 Stromatodictyon 730, 732, 753
 Stromatomorpha 308
 Stromatopora 43, 256, 258, 261,
 308, 309, 421, 430, 455, 457,
 465, 468, 489, 497, 499, 513,
 516, 526, 530, 542, 559, 605,
 621, 629, 646, 672, 673, 674,
 675, 677, 678, 679, 680, 683,
 738, 752, 769, 777, 781, 787,
 789, 797, 800, 801, 802, 804,
 805, 810, 812, 813, 818, 819,
 824, 831
 Stromatoporacea 704, 705
 Stromatoporata 547, 707
 Stromatoporella 309, 465, 468, 495,
 499, 501, 502, 524, 545, 563,
 566, 567, 605, 621, 626, 682,
 763, 766, 781, 782, 789, 790
 Stromatoporellata 309
 STROMATOPORELLIDA xl ix,
 443, 452, 468, 487, 495, 499,
 501, 511, 548, 561, 566, 595,
 596, 621, 654, 674, 675, 676,
 677, 678, 679, 680, 682, 700,
 703, 704, 705, 781
 STROMATOPORELLIIDAE xl ix,
 452, 700, 702, 705, 761,
 781, 782, 783, 784, 785,
 786, 787, 788, 789, 790
 Stromatoporellina 309
 STROMATOPORIDA xxv, xl ix,
 468, 487, 497, 503, 507, 548,
 561, 568, 595, 596, 621, 654,
 671, 672, 673, 674, 675, 677,
 678, 679, 680, 683, 700, 702,
 704, 705, 797, 802, 810, 813
 STROMATOPORIDAE xl ix, 671,
 672, 699, 700, 702, 705, 797,
 800, 801, 802, 803, 804, 805,
 806, 807, 808
 Stromatoporidium 278
 Stromatoporina 309
 stromatoporoid architecture 414,
 417, 418, 850
 Stromatoporoida 107
 STROMATOPOROIDEA xx, xxiv,
 xxv, xxvi, xl ix, 307, 308, 544,
 546, 547, 548, 575, 579, 588,
 593, 594, 595, 617, 619, 620,
 700, 701, 703, 707, 709, 723
 Stromatopospongia
 Stromatorhiza 309
 Stromatorhizidae 259
 Stromatospongia xxv, 25 4, 5, 7, 10,
 11, 12, 18, 199, 249, 254, 566
 Stromatostroma 309
 Stromatowendtia 367
 strongyle 414
 style(s) xxvi, 414, 424, 425, 427,
 428, 437, 581
 Stylococlia 389
 Stylodictyon 490, 501, 819
 Styloegma 394
 Styloporella 616, 682, 788, 789
 Stylostroma 499, 581, 584, 605,
 618, 629, 660, 661, 662, 663,
 664, 665, 666, 669, 672, 673,
 682, 720, 735, 736, 738
 STYLOSTROMATIDAE xl ix,
 582, 583, 584, 616, 700, 702,
 703, 734, 736, 737, 739, 740
 Stylothalamia 321, 338, 347, 353,
 379, 382, 383, 390, 575
 Subascosympagma xxiv, 324, 325,
 327, 329, 336, 390
 subcolumn(s) 414, 503, 505, 774,
 775, 776, 779, 816, 818, 819
 subdivided canal(s) 414, 877, 885,
 889, 920, 1067
 subdivided pore(s) 414, 885,
 887, 889, 1058, 1060, 1061,
 1064, 1065
 Suberites xxvi
 SUBERITIDAE xxvi, xl viii, xl viii,
 208, 214, 216, 217, 218,
 219, 220, 221, 222, 223,
 224, 225, 226
 Suberitidinae 214
 Subiculicyathus 926
 subspherical growth morphology
 (form) 303, 414, 634
 Subtilocyathus 931, 933
 Subtumulocyathellus 974
 successive phase(s) 414, 429, 471,
 511, 513, 515, 632, 735, 800
 Sunicyathus 1103

- superposed astrophizae 414, 511
Sverlanocyathus 863, 866, 947,
 949
- Sycettida* 368, 387
Sygmocyathidae 994
SYLVIACOSCINIDAE lii, 1015,
 1017
- Sylviacoscinus* 1015, 1017
Symbiodinium 556
synapticula(e) 414, 859, 861,
 872, 885, 903, 904, 905,
 906, 912, 932, 938, 940,
 942, 945, 947, 951, 954,
 959, 969, 970, 973, 975,
 996, 1011, 1017, 1030,
 1036, 1040, 1041, 1046,
 1051, 1055, 1058, 1060,
 1064
- Synthetostroma* 468, 683, 781,
 796, 797
- Synthetostromatidae* 705, 789
syringes (*see* *syrinx*)
Syringicnemidina 1071
Syringocnema 878, 887, 1073,
 1075, 1076, 1079
- Syringocnematida* 901, 1035
Syringocnematidae 1073
SYRINGOCNEMIDAE liii, 900,
 1073, 1079, 1080, 1081
- Syringocnemidida* 1035
Syringocnemididae 1073
Syringocnemidoidea 1073
SYRINGOCNEMOIDEA liii,
 1073
- SYRINGOCNEMINA* xxvii, liii,
 850, 875, 883, 885, 887,
 900, 903, 907, 912, 1035,
 1071
- Syringocnemitidae* 1073
Syringocoscinidae 997
Syringocyathellus 965
Syringocyathina 1071
Syringocyathus 965, 967
Syringodictyon 605, 682, 789
Syringoidea 901
Syringostroma 451, 489, 505,
 506, 532, 540, 554, 605,
 629, 683, 695, 768, 796,
 819, 820
- SYRINGOSTROMATIDA* xxv,
 xxvi, l, 443, 468, 487, 497,
 503, 507, 542, 548, 597,
 621, 654, 672, 673, 674,
 675, 676, 678, 679, 680,
 683, 700, 701, 702, 703,
 704, 813, 819
- Syringostromatidae* 621, 700,
 702, 705
- Syringostromella* 513, 515, 527,
 529, 542, 555, 563, 596,
 621, 629, 646, 671, 672,
 673, 674, 675, 677, 678,
 679, 680, 683, 810, 811, 813
- SYRINGOSTROMELLIDAE*
 xlix, 671, 700, 810, 811,
 812, 813
- Syringostromidae* 813
Syringothalamus 875, 878, 891,
 1074, 1080
- Syringsella* 885, 1055
Syringellidae 1055
syrinx (pl., *syringes*) 415, 848,
 850, 875, 878, 885, 903,
 923, 1035, 1071, 1073,
 1074, 1075, 1076, 1077
- Szecycathidae* 1101
Szecycathus 1101, 1102
Tabasia 329, 389
Tabasiidae xlviii, 389
TABELLAECYATHIDAE liii,
 1068, 1069, 1073
- TABELLAECYATHOIDEA* liii,
 1068
- Tabellaecyathus* 1069
tabellar wall(s) 415, 887
tabula(e) 313, 319, 320, 415, 493,
 509, 513, 517, 552, 559, 561,
 567, 570, 571, 573, 575, 576,
 711, 785, 802, 824, 848, 849,
 850, 859, 860, 861, 875, 877,
 880, 883, 901, 903, 904, 905,
 908, 912, 923, 928, 932, 934,
 938, 940, 941, 942, 943, 945,
 947, 951, 954, 957, 959, 962,
 963, 965, 968, 969, 970, 973,
 975, 978, 980, 981, 984, 987,
 990, 992, 994, 996, 997, 999,
 1000, 1003, 1005, 1007, 1008,
 1009, 1010, 1011, 1012, 1013,
 1015, 1016, 1017, 1019, 1020,
 1022, 1023, 1025, 1032, 1033,
 1034, 1035, 1036, 1037, 1040,
 1043, 1044, 1046, 1049, 1051,
 1054, 1055, 1058, 1060, 1061,
 1064, 1065, 1068, 1078
- Tabulaconida* 575
Tabulacyathellidae 1058
Tabulacyathellus 880, 911, 1060,
 1065
- Tabulacyathida* 900, 908, 1083
Tabulacythidae 908, 1083
Tabulacythina 908
Tabulacythus 908, 1083
tabular 320, 355, 415, 423, 424,
 432, 433, 457, 555, 556,
 560, 634, 639, 641
- tabular wall(s)* 415, 859, 861
tabulate osculum 415
- Tabulata* 105, 106, 110, 547
- Tabulathyathidae* 1083
- Tabulatispongia* 319, 320
- Tabulocyathida* 908, 1083
- Tabulocyathidae* 1083
- Tabulocythus* 1083
- Tabuloidea* 1083
- Tabulophyllum* 87
- Tabulopora* 163, 177
Tabulospongia 120, 210
Tabulospongida 107, 210
Tabulospongiidae 210
tabulum 415
taenia(e) 415, 850, 871, 872, 875,
 877, 885, 895, 903, 923,
 1035, 1044, 1046, 1051,
 1055, 1058, 1060, 1064,
 1065, 1068
- Taeniaecyathellacea* 1068
Taeniaecyathellidae 1069
Taeniaecyathellus 887, 889, 1069,
 1073
- Taeniostroma* 825
Talestroma 468, 501, 503, 540,
 621, 683, 804, 805, 808
- Tanchocystatus* 1106
Tannuolacyathidae 1083
Tannuolacythus 1083
- Tannuolaia* 576
Tannuolaiidae 576
- Tarphystroma* 732, 749, 752,
 753, 754
- Tarthinia* 917
Taschtagolia 1105
TATIJANAECYATHIDAE lii,
 908, 1017, 1020
- Tatijanaecyathus* 1017
- Tauripora* 309
- Taylorcyathus* 947, 949
Taylorfungia 947, 949
- Taymyrostroma* 586, 749, 835, 836
- TCHOJACYATHIDAE* li, 1042,
 1043
- Tchojacyathus* 887, 889, 891,
 1042, 1043
- Tebagathalamia* 390, 850
- Tebagathalamiidae* 390
- Tecticyathida* 923
- Tecticyathidae* 926
- Tecticythus* 926
- Tectocyathida* 923
- Tedania* 86
- Tegerocoscinus* 965
- Tegerocyathella* 963
- TEGEROCYATHIDAE* li, 965,
 968
- Tegerocyathus* 871, 899, 905,
 910, 920, 922, 963, 965, 968
- Teginicyathus* 923
- Tegulinifera* 159, 175
- Tennericyathidae* 938
- Tennericyathus* 859, 865, 940,
 942, 945
- Tephillum* 1097
- Tercyathacea* 990
- Tercyathellus* 994
- TERCYATHIDAE* li, 990, 992,
 993, 994
- TERCYATHOIDEA* li, 990
- Tercyathus* 992, 993
- Terektingocyathidae* 1083

- Terektingocyathus **1083**
 terminal phase(s) **415**, 471, 487,
 513
 Terraecyathus **954**, 955
 Tertia **1083**, 1084
 Tersicyathus **947**
 Tersiella **1084**
 Tersiida **1035**
 tersioid buttress(es) **415**, 895
 Tetracladina **391**, 900
 tetractine(s) **293**, 296, 297, 298,
 299, 300, 301, 302, 303,
 305, 306, 336, **415**, 895
 Tetractinellida **13**
 Tetractinomorpha **18**, 108, 113,
 209, 346, 368, 386
 Tetradium **626**, 711
 Tetralithistida **391**
 Tetraproctosia **391**
 Tetrataxis **159**, 171
 thalamid architecture **xxi**, xxvii,
415, 850, 882, 901, 905, 923
 Thalamida **322**, **415**
 thalamidarium **415**
 Thalaminia **310**
 Thalamocystathellus **947**
 Thalamocystidae **941**
 Thalamocystatus **857**, 866, 941,
 942, 943, 945, 947, 970
 Thalamopectinus **941**
 Thalamopora **326**, 355, 382, 391
 Thalassocystida **1035**
 Thalassocystidae **1084**
 Thalassocystatus **1084**
 Thamnaraea **309**
 Thamnobatricea **452**, 454, 583,
 655, 657, 659, 660, 661,
 662, 663, 664, 665, 669,
 748, **749**, 754
 Thamnopora **606**
 Thaumastocelia **337**, 341, 388
 Thaumastocoeliidae **xlvii**, 388
 Thaumastocoeliinae **388**
 Thecicyathus **1102**
 Thecidellina **175**
 Thecocystatus **1102**
 Thoosa **9**, 11
 Tianshanostroma **825**
 TIENODICTYIDAE **xlix**, 618,
 671, 700, 702, 705, 763,
 764, 766
 Tiendictyinae **705**
 Tiendictyon **489**, 495, 501, 545,
 682, **763**, 764
 Tiverina **110**, 113
 Tiverinidae **110**
 Tollicyathus **887**, **1044**, 1045
 Tolminothalamia **324**, 388
 Tologoicyathus **974**, 975
 TOMOCYATHIDAE **lii**, **1032**,
 1033
 Tomocyathus **1005**, **1008**, **1032**
 Tongluspongia **391**
 Topolinocyathus **1101**
 Topsentopsis **517**, 519
 Torgashinocyathus **1084**
 toroidal **415**
 Torosocyathella **972**, **973**
 TOROSOCYATHIDAE li, **972**,
973
 Torosocyathus **875**, **972**, **973**
 Torquaysalpinx **169**, 517
 Tortocystatus **1100**, **1101**
 Tosastroma **309**
 trabeculae **311**, **415**
 trabecular (pillar-like) filling skele-
 tons **334**, **415**
 trabecular microstructure **415**,
 545
 Trachypenia **395**
 Trachysinia **395**
 Trachysphecion **371**, 383, 395
 Trachytilla **370**, 383, 393
 Trammeria **370**, 381, 395
 transverse fold(s) **415**, 850, 851,
 854, 928, 934, 935, 938,
 962, 1000, 1013, 1026
 Trapecephyllum **1097**
 Tremacystia **391**
 Tremospongia **395**
 Tretocalia **371**, 383, 395
 triactine(s) **293**, 294, 296, 297,
 298, 299, 300, 303, 305,
 306, 337, **415**, 547, 895
 Trichogypsidae **303**
 Trifoliophyllum **1106**
 Trigonophyllum **1106**
 Trininaecyathidae **941**
 Trininaecyathus **947**, 949
 Tristratocoelia **375**, 390
 Trupetostroma **468**, 503, 518,
 524, 529, 530, 563, 605,
 621, 682, **790**, 791, 793,
 794, 797
 Trupetostromaria **308**, 309
 TRUPETOSTROMATIDAE
xlix, **700**, **789**, **791**, **792**, **793**,
794, **795**, **796**
 Trupetostromidae **789**
 Trypanites **169**, **170**, 441, 444,
 479, 516, 517
 Trypanopora **169**
 tubercle(s) **415**, 485, 544
 TUBERICYATHIDAE lii, **1030**
 Tubericystatus **1030**
 Tubicoscinus **1019**, 1021, 1032
 Tubicyathus **1051**
 tubiform **415**
 Tubiphytes **308**, 309, 384
 Tubocystatus **1051**
 Tubomorphophyton **915**, 917
 tubular **298**, 326, 327, 332, 334,
 336, 343, 345, **415**, 544, 699,
 761, 880, 893, 901, 915, 917
 tubular filling skeleton **334**, **415**
 tubulate **415**, 526, 540, 524, 542,
 781, 788
 tubules **415**, 485, 521, 540, 545,
 547
tubuli (*see* *tubulus*)
 Tubuliella **309**
 Tubuliporella **682**, **789**, **790**
 Tubuliporellina **812**
 Tubulispongia **111**, **319**
 Tubulistema **313**
 Tubulocyathus **1051**
 Tubulopareites **309**
 tubulus (pl., *tubuli*) **415**, 877,
 880, 893, 903
 Tularinaria **5**, **12**, 297, 302, **303**
tumuli (*see* *tumulus*)
 Tumulifungi **869**, 968, **973**, **974**
 TUMULIFUNGIIDAE li, **973**,
974
 TUMULIOLYNTHIDAE **l**, **926**,
927
 Tumulolyntus **871**, **909**, **926**,
927
 Tumulocoscincacea **1011**
 TUMULOCOSCINIDAE li, **1012**
 Tumulocoscininae **1011**, **1012**
 Tumulocoscinoidea **1011**
 Tumulocoscinus **1012**
 Tumulocyathacea **968**
 Tumulocyathellus **970**
 TUMULOCYATHIDAE li, **863**,
968, **969**
 TUMULOCYATHOIDEA li,
968
 Tumulocyathoides **968**
 Tumulocyathus **859**, **874**, **913**,
968, **969**, **970**
 Tumuloglobosidae **926**
 Tumulglobosus **926**
 tumulus (pl., *tumuli*) **415**, 869,
 874, 875, 885, 926, 930,
 968, **973**, 1011, 1013, 1030,
 1033, 1076
 Tunkia **1105**
 Turgidocyathus **1084**
 Turricyathus **1103**
 Tuvacnema **878**, **1073**, **1078**
 TUVCNEMIDAE **lii**, **1073**, **1078**
 Tuvacnemidiidae **1073**
 Tuvacyathus **1084**
 Tuvaechia **584**, 585, 719, 720, 722
 Tuvaechiida **709**
 Tuvaechiidae **582**, **702**, **703**, **719**,
720
 Tuvinia **1106**
 Tuvinidae **1106**
 TYLOCYATHIDAE lii, **1028**, **1029**
 Tylocyathus **869**, **872**, **1028**, **1029**
 tylostyle **416**
 Tythocyathus **923**
 Ulenicyathus **1105**

- Unicophyllum 1097
 uniporous septum 416
 unpaired actine 298
Uralocyathella 1027, 1028
URALOCYATHELLIDAE lii,
 1027, 1028
Uralocyathidae 1084
Uralocyathina 1025
Uralocyathus 1084
Uralotimania 309
Uranocyatha 1087
Uranosphaera 1085, 1086, 1090,
 1091
Uranosphaeraceae 1090
URANOSPHAERIDAE liii,
 1090, 1091
Uranosphaerina 1087
Uranosphaerinae 1090
Urcyathella 961, 962
Urcyathus 910, 937, 938
Urdacythus 1040
USLONCYATHIDAE liii, 1069,
 1074, 1075
USLONCYATHOIDEA liii, 1069
Usloncyathus 878, 883, 899, 910,
 918, 1069, 1074
Ussuricyathellus 954, 955
Ussuricyathus 954
Utukcyathus 1105
Uvacelia 388
Uvanella 137, 327, 341, 391
uiform 327, 416
Uvothermalia 330, 390
V-shaped canals 416, 866, 869,
 907, 1011, 1019
Vacelletia xxiv, 3, 5, 7, 9, 10, 11,
 12, 13, 56, 197, 198, 199, 200,
 207, 275, 276, 277, 327, 334,
 336, 337, 341, 342, 343, 346,
 353, 368, 383, 386, 390, 417,
 538, 560, 561, 563, 564, 575,
 847, 848, 893, 896
Vacelletia xxiv
VACELETIIDAE xxiv, xlvi, 199,
 208, 276, 277, 390
Vacuocyathidae 1084
Vacuocyathus 1084
vacuolate 416, 524, 529, 531,
 701, 790, 793, 794, 796,
 797, 805, 829
Vacuustum 683, 829
Vadimocyathacea 1051
Vadimocyathidae 1055
Vadimocyathus 1055
Vandophyllum 1097
Varioparietes 110, 116, 117, 119,
 122, 189, 291
Vascothalamia 337, 390
Vasculata 345
Vasicyathidae 1025
Vasicyathus 1026
Velicyathus 928
Ventriculocyathus 923
Veolynthus 928
vermiculate 416
Vermispongiella 393
VERONICACYATHIDAE li,
 1009, 1010
Veronicacyathus 1009, 1010
Verrucicyathidae 926
Verrucicyathus 926
verticillately spined style 416
Verticillites 275, 347, 382, 383,
 390, 545
VERTICILLITIDA xxiv, xlvi,
 xlviii, 13, 199, 275, 276, 345,
 387, 389
Verticillitidae xxiv, xlxi, 275,
 390
Verticillitinae 275, 390
Vertocyathinae 1044
Vertocyathus 1044
vesicle(s) (or vesicular skeleton)
 416, 719, 793, 794, 797,
 841, 893, 895
Vesicocaulinae 388
Vesicocaulis 324, 388
Vesicotubularia 389
vesicular 323, 345, 416
Vesiculoida 1084
Vesiculoidae 1084
Vicinostachyodes 824
Vicinustachyodes 824, 825
Vietnamostroma 501, 575, 616,
 682, 729, 732, 733, 754
Vikingia 591, 621, 624, 674, 675,
 676, 680, 773, 775, 831
villi 416, 499, 551, 714
Virgola 392
Virgolidae xlvi, 392
Vittia 576, 577
Vologdinocyathellus 984, 985
VOLOGDINOCYATHIDAE li,
 963, 966, 967
Vologdinocyathus 963, 966, 987
Vologdinophylacea 1097
VOLOGDINOPHYLLIDA liii,
 1097
VOLOGDINOPHYLLIDAE liii,
 1097, 1098
VOLOGDINOPHYLLOIDEA
 liii, 1097
Vologdinophyllum 1097, 1098
Volvacyathus 1055
 Voroninicyathus 951
Voznesenskicyathus 1044
Wagima 322, 324, 349, 371,
 392
WARRIOOTACYATHIDAE liii,
 1065, 1070
- WARRIOOTACYATHOIDEA**
 liii, 1065
Warriootacyathus 885, 889, 920,
 1065, 1070
water-jet microstructure 416
Welteria 389
Wetheredella 517
Wienbergia 383, 391
Willardia 3, 5, 7, 12, 13, 38, 199,
 214, 215
Williamicyathus 875, 878, 1075,
 1081
Winwoodia 370, 382, 393
WRIGHTICYATHIDAE li, 995,
 997
Wrighticyathus 995, 997
XESTECYATHIDAE li, 1005,
 1006
Xestecyathus 865, 1005, 1006
Xizangstromatopora 309
Yabeodictyon 674, 675, 678, 679,
 680, 682, 761
Yakovlevia 1106
Yakovleviella 1106
Yakovlevites 1106
Yavorskiina 810
Yavorskiinidae 705
Yaworipora 575, 576
Yezaactinia 309
Yhecyathus 1000, 1001
Yudjaicyathus 983, 984
Yukonella 388
Yukonensis 853, 859, 861, 1029,
 1030
Yukonocyathus 979, 980
Zanklithalamia 329, 390
Zapfella 169, 170
Zardinia 323, 324, 326, 332, 391
Zeecyathus 1082
Zeravschanelia 813
Zeravshanella 813
ZHURAVLEVAECYATHIDAE I,
 931, 933
Zhuravlevaecyathus 931, 933
Zlambachella 111
Zoanthaires 105
Zoantharia 105
Zolacyathus 1037
ZONACOSCINIDAE li, 1010,
 1011
Zonacoscinus 1010, 1011
Zonacyathellidae 947
Zonacyathellus 954, 955
Zonacyathus 871, 954, 958,
 959
Zondarella 578, 581, 587, 595,
 596, 838, 841, 843
Zunyicyathus 855, 883, 899,
 1070, 1075
zygosite 296, 299, 303, 416