

## REFERENCES CITED

- Ager, D. V. 1963. Principles of Paleocology—An introduction to the study of how and where animals and plants lived in the past. McGraw-Hill. New York. 371 p.
- Aleotti, G., G. Dieci, & F. Russo. 1986. Éponge Permiennes de la Vallée de Sosio (Sicile). Révision systématique des Sphinctozoaires. *Annales de Paléontologie* 72(3):211–246, 1 fig., 8 pl.
- Altman, P. L., & D. S. Dittmer. 1962. Growth including reproduction and morphological development. Committee on Biological Handbook, Federation of American Societies for Experimental Biology. Washington, D.C. 608 p.
- . 1964. Biology Data Book. Committee on Biological Handbook, Federation of American Societies for Experimental Biology. Washington, D.C. xix + 633 p.
- Ankel, W. E. 1948. Über Fragen der Formbildung und der Zelldetermination bei Süßwasserschwämmen. *Deutsche Zoologische Gesellschaft Verhandlungen*, Leipzig 1948:58–66, 8 fig.
- Ankel, W. E., G. Wintermann-Kilian, & E. F. Kilian. 1955. Fehlbildungen bei *Ephydatia fluviatilis* und ihre Bedeutung für das Verständnis der normalen Korrelationen. *Deutsche Zoologische Gesellschaft Verhandlungen* 1954:362–371, 11 fig.
- Annandale, Nelson. 1911. Freshwater sponges, hydroids and Polyzoa. In A. E. Shipley, ed., *The Fauna of British India, including Ceylon and Burma*. Taylor and Francis. London. p. 27–126, 241–245, pl. 1–2.
- d'Archiac, E. J. A. 1843 [1842]. Description géologique du Département de l'Aisne. *Mémoire de la Société Géologique de France*, Paris (series 2, part 2) 5:129–419 (1–290), pl. 21–31.
- . 1846. Description des fossiles recueillis par M. Thorent dans les couches à Nummulites des environs de Bayonne. *Mémoire de la Société Géologique de France*, Paris (series 2) 2(1), 4:197.
- Arendt, Y. A. 1959. [A new calcareous sponge from the Lower Carboniferous of the Moscow Basin]. *Paleontologicheskii Zhurnal* 2:46–52, 1 pl. In Russian.
- Armstrong, J., J. Young, & J. Robertson. 1876. Catalogue of Western Scottish Fossils. British Association for the Advancement of Science. Blackie & Son. Glasgow.
- Arndt, W. 1941. *Bibliographia Spongiologica*. I. Spongiae utiles (1940). W. Junk. The Hague. 114 p.
- Ayling, A. M. 1968. The feeding behavior of *Rostanga rubicunda* (Mollusca, Nudibranchia). *Tane* 14:25–42, 7 fig.
- Baer, Leopold. 1906 [1905]. Silicispongien von Sansibar, Kapstadt and Papeete. *Archiv für Naturgeschichte* 72(1):1–32, 5 pl.
- Bagby, R. M. 1965. The contractile system of marine sponges. *Dissertation Abstracts* 25:6721.
- Bakus, G. J. H. 1964. The effects of fish-grazing on invertebrate evolution in shallow tropical waters. Allan Hancock Foundation Occasional Papers 27:1–29, 1 fig., 1 table.
- Balss, H. 1927. Decapoda. In Kuenthal und Krumbach, ed., *Handbuch der Zoologie*, de Gruyter, Berlin 3(1):840–1038, 217 fig.
- Barboza du Bocage, J. V. 1869. Éponges siliceuses nouvelles de Portugal et de l'île Saint-Iago (archipel de Cap-vert). *Jornal de Sciencias mathematicas, physicas et naturaes, publicado sob os auspicios da Academia real das sciencias de Lisboa* (May 1869) 4:159–162, pl. 10–11.
- Barrois, Charles. 1882. Recherches sur les terrains anciens des Asturies et de la Galice. Association pour l'Avancement des Sciences, Congrès de Rouen. Lille. 630 p., 20 pl.
- Bartolomaeus, Werner, & Martin Lange. 1998. A new Ordovician sponge from the Kaolinsand Formation of the Isle of Sylt. *Archiv fuer Geschieberkunde* 2(6):398–402.
- Bassler, R. S. 1927. A new Ordovician sponge fauna. *Journal of the Washington Academy of Science* 17(15):390–394.
- . 1941. The Nevada Early Ordovician (Pogonip) sponge fauna. *Proceedings of the United States National Museum* 91(3126):91–102, pl. 19–24.
- Batten, R. L. 1958. Permian gastropods of the southwestern United States. 2. Pleurotomariaceae; Portlockiellidae, Phymatopleuridae, and Eotomariidae. *American Museum of Natural History Bulletin* 114:153–246, 17 fig., pl. 32–42, 29 tables.
- Beauvais, L. 1980. Les Calcaires (spongiaires) du Lias du Maros. *Annales de Paléontologie (Invertebrata)* 66(1):21–41.
- Bechstädt, T., & R. Brandner. 1970. Das Anis zwischen St. Vigil und dem Hohensteintal (Prager- und Olinger Dolomiten, Südtirol). *Festband Geologische Institut. 300 Jahr-Freier Universitet Innsbruck*. p. 9–103, 4 fig., 18 pl.
- Bedford, R., & W. R. Bedford. 1934. New species of Archaeocyathinae and other organisms from the Lower Cambrian of Beltana, South Australia. *Kyancutta Museum Memoir* 1:1–7, fig. 1–36, pl. 1–6.
- . 1936. Further notes on Archaeocyathinae (Cyathospongia) and other organisms from the Lower Cambrian of Beltana, South Australia. *Kyancutta Museum Memoir* 2:9–20, pl. 14–20.
- Bedford, R., & J. Bedford. 1937. Further notes on Archaeos (Pleosporgia) from the Lower Cambrian of South Australia. *Kyancutta Museum Memoir* 4:27–38, fig. 106–159, pl. 27–41.
- Beecher, C. E. 1889. Brachiospongidae: A memoir on a group of Silurian sponges; with six plates. Peabody Museum of Natural History. Yale University, Memoir 2, part 1. 28 p., 4 fig., 6 pl.
- Beede, J. W. 1899. New fossils from the Kansas Coal Measures. *Kansas University Quarterly* 8:123–130, pl. 32–33.

- Belyaeva, G. V. 2000. Novye taksony sfinktozoa iz Permskikh rifov iugo-vostochnogo Kitaia [New taxa of Sphinctozoa from the Permian reefs of southeastern China]. *Paleontologicheskii Zhurnal* 2000(2):41–46, 3 fig.  
In Russian. English translation: *Paleontological Journal* 34:155–160, 4 fig.
- Benett, E. 1831. A catalogue of the organic remains of the county of Wilts. Warminster, England. p. i–iv, 1–9, 15 pl.
- Bengtson, Stefan. 1986. Siliceous microfossils from the Upper Cambrian of Queensland. *Alcheringa* 10:195–216, 11 fig.
- . 1990a. Spicules. In Stefan Bengtson, Simon Conway Morris, B. J. Cooper, P. A. Jell, & B. N. Runnegar, eds., *Early Cambrian fossils from South Australia*. Association of Australasian Palaeontologists, Memoir 9. Brisbane. p. 24–37, fig. 11–21.
- . 1990b. Chancelloriids. In Stefan Bengtson, Simon Conway Morris, B. J. Cooper, P. A. Jell, & B. N. Runnegar, eds., *Early Cambrian fossils from South Australia*. Association of Australasian Palaeontologists, Memoir 9. Brisbane. p. 45–68, fig. 23–40.
- Beresi, M., & J. K. Rigby. 1993. The Lower Ordovician sponges of the San Juan Formation, Argentina. *Brigham Young University Geology Studies* 39:1–64, 8 fig., 13 pl.
- Berg, C. 1899. Substitucion de nombres genericos; III Comm. Museo Nacional. Buenos Aires. p. 1:77–80.
- Bergmann, W., & R. J. Feeney. 1949. Contributions to the study of marine products, XXIII. Sterols from sponges of the family Haliclonidae. *Journal of Organic Chemistry* 14(6):1078–1084.
- . 1950. The isolation of a new thymine pentoside from sponges. *Journal of the American Chemical Society* 72:2805.
- Bergmann, W., & W. J. McAleer. 1951. The isolation of metanethole from the sponge *Sphaciospongia vesparia*. *Journal of the American Chemical Society* 73(10):4,969–4,970.
- Bergmann, W., & F. H. McTigue. 1949. Contributions to the study of marine products, XXI. Chondrillasterol. *Journal of Organic Chemistry* 13(5):738–741.
- Bergmann, W., F. H. McTigue, E. M. Low, W. M. Stokes, & R. J. Feeney. 1950. Contributions to the study of marine products, XXVI. Sterols from the sponges of the family Suberitidae. *Journal of Organic Chemistry* 15(1):95–105.
- Bergquist, P. R. 1961. A collection of Porifera from northern New Zealand, with descriptions of seventeen species. *Pacific Science* 15:33–48.
- . 1965. The sponges of Micronesia, Part 1: the Palau Archipelago. *Pacific Science* 19:123–204, 34 fig.
- . 1967. Additions to the sponge fauna of the Hawaiian Islands. *Micronesia* 3:159–174.
- . 1968. The marine fauna of New Zealand, Porifera, Part 1 (Tetractinomorpha and Lithistida). *New Zealand Department of Scientific and Industrial Research Bulletin* 188:1–106.
- . 1978. *Sponges*. University of California Press. Berkeley & Los Angeles. 268 p., 81 fig., 12 pl.
- Bergquist, P. R., & W. D. Hartman. 1969. Free amino acid patterns and the classification of the Demospongiae. *Marine Biology* 3:247–268.
- Bergquist, P. R., & J. J. Hogg. 1969. Free amino acids in Demospongiae: a biochemical approach to sponge classification. *Cahiers de Biologie Marine* 10:205–220.
- Bergquist, P. R., & M. E. Sinclair. 1968. The morphology and behaviour of larvae of some intertidal sponges. *New Zealand Journal of Marine and Freshwater Research* 2:426–437.
- Beu, A. G. 1965. Ecological variations of *Chlamys dieffenbachi* (Reeve) (Mollusca, Lamellibranchiata). *Transactions of the Royal Society of New Zealand (Zoology)* 7:93–96, 1 pl.
- Bidder, G. P. 1893. On the flask-shaped ectoderm and spongioblasts in one of the Keratosa. *Royal Society Proceedings, London* 52:134–139.
- . 1898. The skeleton and classification of calcareous sponges. *Proceedings of the Royal Society, London* 64:61–76.
- . 1923. The relation of the form of a sponge to its currents. *Quarterly Journal of Microscopical Science* 67:293–323.
- . 1928. Some sponges of the South-West Coast. *Proceedings of the Southwestern Naturalist Union* 1928:12–20, 2 pl.
- . 1929. Sponges. *Encyclopaedia Britannica*, 14th ed., vol. 21. Encyclopaedia Britannica Company. New York. p. 254–261.
- Billings, Elkanah. 1859. Fossils of the Calciferous sandrock, including some of the deposits of White limestone at Mangan, supposed to belong to the formation. *Canadian Naturalist and Geologist and Proceedings of the Natural History Society of Montreal* 4(27):345–346.
- . 1861. New species of lower Silurian Fossils. *Geological Survey of Canada Pamphlet* 21:24 p.
- . 1865. On some new or little-known species of lower Silurian fossils from Potsdam Group (Primordial Zone). In *Palaeozoic Fossils*, vol. 1. Containing Descriptions and Figures of New or Little Known Species of Organic Remains from the Silurian Rocks. Geological Survey of Canada. Baillière. London, New York, & Paris. 426 p., 399 fig.
- . 1875. On some new or little known fossils from the Silurian and Devonian rocks of Ontario. *Canadian Naturalist (new series)* 7:230–240.
- von Bistram, A. F. 1903. Beiträge zur Kenntniss der Fauna des unteren Lias in der Val Solda, Geologisch-paläontologische Studien in den Comasker Alpen, I. *Berichte der Naturforschenden Gesellschaft zu Freiburg I. Br.* 13:1–99[116–214], pl. 1–8.
- Bizzarini, Fabrizio, & Franco Russo. 1986. A new genus of Inozoa from S. Cassiano Formation (Dolomiti di Braies, Italy). *Memorie di Scienze Geologiche* 38:129–135.
- Blacher, L. J. 1965. Esquisse de l'histoire des stations biologiques maritimes russes. (Résumé). *Vie Milieu, supplement* 19:261–263.

- Blacker, R. W. 1965. Recent changes in the benthos of the West Spitsbergen fishing grounds. International Commission of the Northwest Atlantic Fisheries, Special Paper 6(H-1):791-794.
- de Blainville, H. M. D. 1830. Zoophytes. In F. G. Levrault, ed., Dictionnaire des Sciences Naturelles 60:546.
- . 1834. Manuel d'Actinologie ou de Zoophytologie. F. G. Lerrault. Paris and Strasbourg. vol. 1, p. i-viii, 1-644; vol. 2, atlas, 100 pl.
- Blumenbach, J. F. 1815. Specimen archaeologicae telluris terrarumque in prinis Hannoveranarum alterum. Commentationes Societas Scientiarum, Göttingen 3:3-25.
- Sponge on p. 24.
- Bocage—see Barboza du Bocage
- Bodzioch, Adam. 1993. Sponges from the epicontinental Triassic of Europe. In Hans Hagdorn & Adolf Seilacher, eds., Muschelkalk: Schöntaler Symposium 1991. Goldschneck-Verlag Werner K. Weidert. Stuttgart. p. 235-244, 18 fig.
- Böhm, J. 1927. Beitrag zur kenntnis der Senonfauna der Bithynischen Halbinsel. Palaeontographica, Stuttgart 69:187-222, 3 fig., pl. 11-18.
- Boiko, E. V. 1979. O semeistve Verticillitidae Steinmann, 1882, ego sestare i sistematischeskom polozhenii [On the family Verticillitidae Steinmann, 1882, its composition and systematic position]. Trudy Instituta Geologii i Geofiziki Nauk SSSR, Sibirskoe Otdelenie 481:74-82.
- In Russian.
- . 1984. Nekotorye pozdnetriasovye izvestkovye gubki iugo-vostochnogo Pamira [Certain Late Triassic calcareous sponges from southeastern Pamira]. In M. R. Dzhalilov, ed., Namudkhoi navi 'okimondakhoi khaivonot va n'ototi tochikiston [New species of fossil fauna and flora of Tadzhikistan]. Donish. Dushambe. p. 28-41, pl. V-IX.
- In Russian, unpaginated plates.
- . 1990. [On the diversity of skeletal structures of Porifera Camerata]. Akademiya Nauk SSSR. Siberskoe Otdelenie Institut Geologii i Geofiziki Trudy 783:119-129, pl. XXXVII-XLVII.
- In Russian.
- Boiko, E. V., G. V. Belyaeva, & I. T. Zhuravleva. 1991. Sfinktozoa fanerozoia territorii SSSR [Sphinctozoa of the Phanerozoic of the USSR]. Nauka. Moskova. 224 p., 35 fig., 64 pl.
- Bolkhovitinova [Bolkovitinoff], M. A. 1923. O kamennougol'nykh gubkakh Moskovskoi gubernii [Carboniferous sponges of Moscow Province]. Vestnik Moskovskoi Gornoi Akademii 2(1):61-72, 1 pl.
- Borojevic, R. 1967. Éponges calcaires recueillies en Nouvelle-Calédonie par la Mission Singer-Polignac. Expédition Française sur les récifs coralliens de la Nouvelle-Calédonie, Paris 2:1-10.
- . 1968. Éponges calcaires des côtes de France, IV: Le genre *Ascaltis* Haeckel emend. Archives de Zoologie Experimentale et Général 109:193-210.
- . 1979. Evolution des spongiaires Calcareo. Colloques Internationaux, Centre National de la Recherche Scientifique 291:527-530.
- Borojevic, R., & N. Boury-Esnault. 1986. Une nouvelle voie d'évolution chez les éponges Calcareo: description des genera *Burtonella* n. g. et *Levinella* n. g. Bulletin du Muséum national d'Histoire naturelle (series 4, section A) 8(3):443-455.
- Borojevic, R., N. Boury-Esnault, & J. Vacelet. 1990. A revision of the supraspecific classification of the subclass Calcareo (Porifera, class Calcarea). Bulletin du Muséum National d'Histoire Naturelle de Paris 12:243-276.
- Borojevic, R., L. Cabioch, & C. Lévi. 1958. Inventaire de la faune marine de Roscoff, spongiaires. Cahiers de Biologie Marine 9(1):1-44.
- Borojevic, R., & G. Graat-Kleeton. 1965. Sur une nouvelle aspic de *Sycon* et calces demosponge récoltées par le 'Cirrus' dans l'Atlantique Nord. Beaufortia 13:81-85, 1 fig.
- Borojevic, R., & C. Lévi. 1964. Métamorphose artificielle de larves d'éponges, après dissociation et réaggrégation des cellules larvaires. Compte Rendus, Académie des Sciences, Paris 259:4,364-4,366, 1 fig.
- Bouchet, P., & K. Rützler. 2002. Case 3211. Clionidae Rafinesque. 1815 (Mollusca, Pteropoda) and Clionidae d'Orbigny 1851 (Porifera, Hadromerida): proposal to remove homonymy by emending the sponge family-group name to Clionaidae; and Clionidae Rafinesque, 1815 and Clionidae Jeffreys, 1869 (Mollusca, Pteropoda): proposed confirmation that they are based on *Clione* Pallas, 1774 and *Clio* Linnaeus, 1767, respectively. Bulletin of Zoological Nomenclature, in press.
- Bowerbank, J. S. 1842. *Halichondria johnstoni*; *Pachymatisma johnstoni*. In G. Johnston, History of British sponges and lithophytes. W. H. Kizars. Edinburgh. p. 198, 244.
- . 1845. Observations on the Spongiadae, with descriptions of some new genera. Annals and Magazine of Natural History (series 1) 6:400-410.
- . 1858. On the anatomy and physiology of the Spongiadae, Part I: On the spicula. Philosophical Transactions of the Royal Society of London 148:279-332.
- . 1861. List of British sponges. In R. McAndrew, ed., List of the British marine invertebrate fauna. Reports of the British Association for the Advancement of Science 30:235-236.
- . 1862. On the anatomy and physiology of the Spongiadae, Parts II, III. Philosophical Transactions of the Royal Society of London 152:747-836, 1,087-1,135, pl. 27-36, 72-74.
- . 1863. A monograph of the Spongillidae. Proceedings of the Zoological Society of London 1863:440-472, pl. 38.
- . 1864. A monograph of the British Spongiadae, vol. I. Ray Society. London. 290 p., 37 pl.
- . 1866. A monograph of the British Spongiadae, vol. II. Ray Society. London. 388 p.

- . 1869. A monograph on the siliceo-fibrous sponges. Proceedings of the Scientific Meetings of the Zoological Society, London 1869:66–108, pl. 3–6, part 1; p. 323–351, pl. 20–25, part 3.
- . 1874a. Contributions to a general history of the Spongiadae, part 6. Proceedings of the Zoological Society of London 1874:298–305, pl. 41–42.
- . 1874b. A monograph of the British Spongiadae, vol. III. Ray Society. London. xvii + 167 p., 92 pl.
- . 1882. A monograph of the British Spongiadae, vol. IV. Ray Society. London. xvii + 250 p., 17 pl.
- Brasier, M. D. 1992. Nutrient-enriched waters and the early skeletal fossil record. *Journal of the Geological Society*, London 149:621–629.
- Brasier, M. D., O. Green, & G. Shields. 1997. Ediacaran sponge spicule clusters from southwestern Mongolia and the origin of the Cambrian fauna. *Geology* 25:303–306.
- Breistroffer, M. 1949. Note de nomenclature paléontologique: Spongiaires créacés. *Bulletin de la Société Scientifique du Dauphiné*, Grenoble 62(2):103.
- Brien, Paul. 1967. Formation des statoblastes dans le genre *Potamolepis*: *P. symoensi* (Marshall), *P. pechuelli* (Marshall), *P. schoutedeni* (Burton). *Bulletin de la Classe des Sciences, Académie royale de Belgique* 53:573–590.
- . 1969. À propos de deux éponges du Cameroun appartenant au genre *Corvospongilla* (Annandale). *Embryogénèse—la Parenchymula—la Gemmule. Revue de Zoologie et de Botanique Africaines* 80:121–156, 15 fig., 3 pl.
- . 1970. Let potamolépides africaines nouvelles du Luapula et du la Moero. Symposium of the Zoological Society of London 25:163–187, 2 fig., 2 pl.
- . 1973a. Les Démosponges: Morphologie et reproduction. *In* P. P. Grassé, ed., *Traité de Zoologie, Anatomie, Systématique, Biologie*, III, Spongiaires. Masson et Cie. Paris. p. 133–461, fig. 90–351.
- . 1973b. *Malawispongilla echinoides* Brien: Etudes complémentaires—histologie—sexualité—embryologie—affinités systématiques. *Revue de Zoologie et de Botanique Africaines* 87(1):50–76, 12 fig.
- Brimaud, C. 1984. Étude biosédimentologique des gisements à Spongiaires du Tortonien des Cordillères bétiques orientales. Thèse, Université de Marseille. 482 p., 32 pl. Unedited.
- Brimaud, Claudine, & Daniel Vachard. 1986. Les Spongiaires siliceux du Tortonien des Bétiques (Miocène de l'Espagne du Sud): espèces nouvelles ou peu connues, I. Choristides et Lithistides. *Bulletin du Muséum National d'Histoire Naturelle*, Paris (series 4, section C) 8:293–341, 9 pl.
- . 1987 [1986]. Les Spongiaires siliceux du Tortonien des Bétiques (Miocène de l'Espagne du Sud): espèces nouvelles ou peu connues, II. Hexactinellides. *Bulletin du Muséum National d'Histoire Naturelle*, Paris (series 4, section C) 8:415–445, 7 pl.
- Broecker, W. S. 1974. *Chemical Oceanography*. Harcourt Brace Jovanovich, Inc. New York. 214 p.
- Bromley, R. G. 1970. Borings as trace fossils and *Entobia cretacea* Portlock, as an example. *Geological Journal*, Special Issue 3:49–900.
- Bromley, R. G., & Ulla Asgaard. 1993. Endolithic community replacement on a Pliocene rocky coast. *Ichnos* 2:93–116, 17 fig.
- Brongniart, Adolphe. 1828. *Histoire des végétaux fossiles, ou recherches botaniques et géologiques sur les végétaux renfermés dans les diverses couches du globe*. G. Dufour et Ed. D'Ocagne, Printers. Paris. vol. 1, 488 p.; vol. 2, plates.
- Brönn, H. G. 1825. *System der urweltlichen Pflanzenthiere*. J. C. B. Mohr. Heidelberg. i–iv, 1–47 p., 7 pl.
- . 1837–1838. *Lethaia geognostica oder Abbildungen und Beschreibungen der für die Gebirgs-Formationen bezeichnendsten Versteigerungen*. E. Schweizerbart. Stuttgart. 1,350 p.
- . 1848. *Index Palaeontologicus, Übersicht der bis jetzt bekannten fossilen Organismen. Erste Abtheilung, Nomenclator Palaeontologicus*, vol. 1, no. 2. E. Schweizerbart. Stuttgart. 1,260 p.
- Brydone, R. M. 1912. *The Stratigraphy of the Chalk of Hants, with map and palaeontological notes*. Dulau and Co, Ltd. London. 116 p., 3 pl.
- Buckland, W. 1817. Description of the Paramoudra, a singular fossil body, that is found in the Chalk of the north of Ireland, with some general observations upon flint in chalk, tending to illustrate the history of their formation. *Transactions of the Geological Society of London* 4:413–423.
- van Budden-brock. 1939. Über die Abhängigkeit der Atmung vom Sauerstoffdruck: Zugleich ein Beitrag zur Diffusionstheorie der Atmung. *Nova Acta Leopoldina Carol*, Halle 6(1939):557–565.
- Bullivant, J. S. 1960. Photographs of the bottom fauna in the Ross Sea, New Zealand Oceanographic Institute, Department of Scientific and Industrial Research, Wellington. *New Zealand Journal of Science* 2:485–497, 10 fig.
- Bullock, T. H., & G. A. Horridge. 1965. *Structure and function in the nervous systems of invertebrates*. W. H. Freeman & Co. San Francisco & London. xx + 798 p., vol. 1; vii + p. 799–1,719, vol. 2.
- Burton, M. 1928. Report on some deep-sea sponges from the Indian Museum collected by R.I.M.S. "Investigator," Part II. Tetraxonida (concluded) and Euceratosa. *Records of the Indian Museum, Calcutta* 30(1):109–138, pl. 1–2.
- . 1929. Description of South African sponges collected in the South African Marine Survey, Part II. The Lithistidae. *Union of South Africa Fisheries and Marine Biology Survey South Africa Report 7, Special Report* 2:1–12.
- . 1932. Sponges. *Discovery Reports* 6:237–392, pl. 48–57.
- . 1934. Sponges. *Further Zoological Research, Swedish Antarctic Expedition 1901–1903*, Stockholm 3(2):1–58, 16 fig., 8 pl.

- . 1948. Ecology of sponges. *Nature* 162(4,106):73–74.
- . 1949. Observations on littoral sponges, including supposed swarming of larvae, movement and coalescence in mature individuals, longevity and death. *Proceedings of the Zoological Society of London* 118:893–915, 27 fig.
- . 1956. The sponges of West Africa. *Atlantide Reports*, Danish Science Press IV:111–147, 4 fig.
- . 1959. Sponges. *Scientific Reports of the John Murray Expedition*, 10(5):151–281, 41 fig.
- . 1963. A Revision of the Classification of the Calcareous Sponges. *British Museum of Natural History*. London. 693 p., 375 fig.
- Carrera, M. G. 1994. An Ordovician sponge from the San Juan Formation, Precordillera Basin, western Argentina. *Neues Jahrbuch für Geologie und Paläontologie*, Abhandlungen 191:201–220, 6 fig.
- . 1996. Ordovician megamorinid demosponges from San Juan Formation, Precordillera, western Argentina. *Geobios* 29:643–650, 4 fig., 1 pl.
- . 1998. First Ordovician sponge from the Puna region, northwestern Argentina. *Ameghiniana* 35(2):205–210, fig. 1–3, pl. 1.
- Carrera, M. G., & J. K. Rigby. 1999. Biogeography of Ordovician sponges. *Journal of Paleontology* 73:26–37, 4 fig.
- Carter, H. J. 1849. A descriptive account of the fresh-water sponges (genus *Spongilla*) in the island of Bombay, with observations on their structure and development. *Annals and Magazine of Natural History* (series 2) 4:81–100.
- . 1871. On fossil sponge-spicules of the Greensand compared with those of existing species. *Annals and Magazine of Natural History* (series 4) 7:112–141, pl. 7–10.
- . 1872. On two new sponges from the Antarctic Sea, and on a new species of *Tethya* from Shetland; together with observations on the reproduction of sponges commencing with zygosis of the sponge-animal. *Annals and Magazine of Natural History* (series 4) 9(54):409–435, pl. 20–22.
- . 1873. On the Hexactinellidae and Lithistidae generally, and particularly on the Aphrocallistidae, Aulodictyon, and Farreae, together with facts elicited from their deciduous structures, and descriptions respectively of three new species. *Annals and Magazine of Natural History* (series 4) 12:349–373, 437–472, pl. 13–17.
- . 1874. Descriptions and figures of deep-sea sponges and their spicules from the Atlantic Ocean, dredged up on board H.M.S. “Porcupine,” chiefly in 1869; with figures and descriptions of some remarkable spicules from the Agulhas shoal and Colon, Panama. *Annals and Magazine of Natural History* (series 4) 14:207–221, 245–257, pl. 13–15.
- . 1875. Notes introductory to the study and classification of the Spongida. *Annals and Magazine of Natural History* (series 4) 16:1–40 (Part 1, Anatomy and Physiology), 126–145, 177–200 (Part 2, Proposed classification of the Spongida).
- . 1876. Descriptions and figures of deep-sea sponges and their spicules, from the Atlantic Ocean; dredged on board H.M.S. “Porcupine,” chiefly in 1862. *Annals and Magazine of Natural History* (series 4) 18:226–240, 307–324, 388–410, 458–473, pl. 12–16.
- . 1878. Mr. James Thomson’s fossil sponges from the Carboniferous System of the south-west of Scotland. *Annals and Magazine of Natural History* (series 5) 1:128–143.
- . 1879. On a new species of excavating sponge (*Alectona Millari*); and on a new species of *Rhaphidotheca* (*R. affinis*). *Journal of Royal Microscopical Society* 2:493–499, pl. 17.
- . 1880a. On fossil sponge-spicules from the Carboniferous of Ben Bulbel near Sligo. *Annals and Magazine of Natural History* (series 5) 6:209–214, pl. 14B.
- . 1880b. Report on specimens dredged up from the Gulf of Manaar and presented to the Liverpool Free Museum by Capt. W. H. Cawne Warren. *Annals and Magazine of Natural History* (series 5) 6(31):35–61, pl. 4–6; p. 129–156, pl. 7–8.
- . 1881a. History and classification of the known species of *Spongilla*. *Annals and Magazine of Natural History* (series 5) 7:77–107, pl. 5–6.
- . 1881b. On *Spongilla cinerea*. *Annals and Magazine of Natural History* (series 5) 7:263–264.
- . 1882. Some sponges from the West Indies and Acapulco in the Liverpool Free Museum described, with general and classificatory remarks. *Annals and Magazine of Natural History* (series 5) 9(52):266–301, 346–368, pl. 11–12.
- . 1885. Report on a collection of marine sponges from Japan made by Dr. J. Anderson, F.R.S. (Hexactinellida). *Annals and Magazine of Natural History* (series 5) 15:387–406.
- . 1886. Descriptions of sponges from the neighborhood of Port Phillip Heads, South Australia, continued. *Annals and Magazine of Natural History* (series 5) 17:40–53, 112–127, 431–441, 502–516; vol. 18:34–55, 126–149.
- Casey, R. 1961. The stratigraphical palaeontology of the Lower Greensand. *Palaeontology* 3:487–621, 8 pl.
- Caster, K. E. 1939. Siliceous sponges from Mississippian and Devonian strata of the Penn-York Embayment. *Journal of Paleontology* 13:1–20, 8 fig.
- . 1941. The Titusvillidae: Paleozoic and Recent branching Hexactinellida. *Palaeontographica Americana* 2:470–523, 5 pl.
- Cavaroc, V. V., & J. C. Ferm. 1968. Siliceous spiculites as shoreline indicators in deltaic sequences. *Geological Society of America Bulletin* 79:263–271.
- Chapman, Frederick. 1940[1939]. On a new genus of sponges from the Cambrian of the Flinders Range, South Australia. *Transactions of the Royal Society of South Australia* 64(1):101–108, pl. 9–12.
- Chapman, F., & Irene Crespin. 1934. The Palaeontology of the Plantagenet Beds of Western Australia. *Journal of the Royal Society of Western Australia* 20:103–136, pl. 6–11.
- Charlesworth, E. 1848. On the mineral condition and general affinities of the Chalk at Flamborough and Bridlington. *Proceedings of the Yorkshire Philosophical Society*, York 1848:73–77.

- Chen J.-Y., Hou X.-G., & Li G.-X. 1990. New Lower Cambrian demosponges—*Quadrolaminiella* gen. nov. from Chengjiang, Yunnan. *Acta Palaeontologica Sinica* 29(4):402–414, 4 fig., 6 pl. In Chinese with English summary.
- Chen J.-Y., Hou X.-G., & Lu H.-Z. 1989. Lower Cambrian leptomitids (Demospongia), Chengjiang, Yunnan. *Acta Palaeontologica Sinica* 28:17–31, 6 fig., 6 pl. In Chinese with English summary.
- Chen Meng-e, & Xiao Zong-Zheng. 1992. Macrofossil biota from Upper Sinian Doushantuo Formation in eastern Yangtze Gorges, China. *Acta Palaeontologica Sinica* 31(5):513–529, 6 pl. In Chinese with English summary.
- Christ, J. 1925. Ein neues fossilen Spongiengattung *Asteriscosella*, im Unterdevon des Nassauischen Hunsrückschiefers, *Asteriscosella nassovica*. *Jahrbuch des Vereins Naturkunde, Wiesbaden* 77:1–12.
- Church, S. B. 1974. Lower Ordovician patch reefs in western Utah. *Brigham Young University Geology Studies* 21(3):41–62.
- Clarke, J. M. 1900. Dictyonine hexactinellid sponges from the Upper Devonian of New York. *New York State Museum Bulletin* 39:187–194, pl. 10–11.
- . 1908. Early Devonian history of New York and eastern North America. *New York State Museum Memoirs* 9:1–252.
- . 1912. Early adaptation in the feeding habits of starfishes. *Academy of Natural Sciences of Philadelphia Journal* 15(art. III):113–118.
- . 1918a. Contributions to the paleontology of New York: Devonian glass sponges. I. The ontogeny of *Hydnoceras*. *New York State Museum Bulletin* 196:177–198, pl. 1–6.
- . 1918b [1917]. Devonian glass sponges. *New York State Museum Bulletin* 196:177–198.
- . 1920. *Armstrongia*, a new genus of Devonian glass sponges. *New York State Museum Bulletin* 219–220:143–146, pl. 1.
- . 1921. Organic dependence and disease, their origin and significance. *New York State Museum Bulletin* 221–222:1–133, 105 fig.
- . 1924. Eighteenth report of the director of the State Museum and Science Departments. *New York State Museum Bulletin* 251:192 p., 20 fig., 31 pl.
- Claus, C. F. W. 1872. *Grundzuge der Zoologie*, 2nd ed. N. G. Elwert. Marburg, Leipzig, & Jena. 1, 170 p.
- Clausen, C. K. 1982. *Wienbergia*, 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.
- Conrad, D. A. 1842. Observation on the Silurian and Devonian Systems of the United States, with descriptions of new organic remains. *Journal of the Academy of Natural Sciences, Philadelphia* 8:267–268, 1 fig., pl. 16.
- Conway, K. W., J. V. Barrie, W. C. Austin, & J. L. Lauternauer. 1991. Holocene sponge bioherms on the western Canadian continental shelf. *Continental Shelf Research* 11:771–790.
- Conway, K. W., M. Krautter, J. V. Barrie, & M. Neuweiler. 2001. Hexactinellid sponge reefs on the Canadian Continental Shelf: a unique “living fossil.” *Geoscience Canada* 28(2):71–78, 8 fig.
- Cossmann, M. 1909. Rectifications de nomenclature. *Revue Critique Paléozoologie* 13:67.
- Courtiller, A. 1861. Éponges fossiles des sables du terrain crétacé supérieur des environs de Saumur (étage Sénonien de d’Orbigny). *Annales de la Société Linnéenne de Maine-et-Loire* 4:117–142, pl. 1–40.
- Croneis, Carey, & D. F. Toomey. 1965. Gunsight (Virgilian) wewokellid sponges and their depositional environment. *Journal of Paleontology* 39:1–16, 2 fig., 7 pl.
- Cuif, J.-P. 1973. Histologie de quelques sphinctozoaires (Porifères) Triasiques. *Geobios* 6:115–125, 4 fig., pl. 8–10.
- . 1974. Role des sclérosponges dans la faune récifale du Trias des Dolomites (Italie du Nord). *Geobios* 7:139–153, 5 fig., pl. 29–31.
- . 1979. Caractères morphologiques et microstructuraux de trois sclérosponges triasiques association avec des Chaetetida. In Claude Lévi & Nicole Boury-Esnault, eds., *Biologie des Spongiaires, Colloques Internationaux du Centre National de la Recherche Scientifique* 291:475–481, 1 pl.
- Cuif, J. P., F. Debrenne, J. G. Lafuste, & J. Vacelet. 1979. Comparaison de la microstructure du squelette carbonaté non-spiculare d’éponges actuelles et fossiles. In Claude Lévi & Nicole Boury-Esnault, eds., *Biologie des Spongiaires, Colloques Internationaux du Centre National de la Recherche Scientifique* 291:459–465.
- Cuif, J. P., & P. Gautret. 1991. Taxonomic value of microstructural features in calcified tissue from recent and fossil Demospongiae and Calcareia. In J. Reitner & H. Keupp, eds., *Fossil and Recent Sponges*. Springer-Verlag, Berlin. p. 159–169.
- Cullison, J. S. 1944. The stratigraphy of some Lower Ordovician formations of the Ozark Uplift. *University of Missouri School of Mines and Metallurgy Bulletin (technical series)* 15(2):1–112, 35 pl.
- Dawson, J. W. 1883. Preliminary notice of new fossils from the Lower Carboniferous of Nova Scotia and Newfoundland. *McGill University Peter Redpath Museum, Report* 2:10–15.
- . 1888. Preliminary note on new species of sponges from the Quebec Group at Little Métis. *The Canadian Record of Science* 3(2):49–59.
- . 1896. Additional notes on fossil sponges and other organic remains from the Quebec Group at Little Métis, on the Lower St. Lawrence, with notes on some of the specimens by Dr. G. J. Hinde. *Transactions of the Royal Society of Canada, Section* 4:91–121, 4 pl.
- Dawson, J. W., & G. J. Hinde. 1889. On new species of fossil sponges from the Siluro-Cambrian at Little Métis on the Lower St. Lawrence; including notes on the specimens by Dr. G. J. Hinde, F.G.S. *Trans-*

- actions of the Royal Society of Canada (section IV, Geological and Biological Sciences) 7(4):31–55, 27 fig., pl. III.
- Dayton, P. K., G. A. Robilliard, & R. T. Paiune. 1970. Benthic faunal zonation as a result of anchor ice at McMurdo Sound, Antarctica. *In* M. W. Holdgate, ed., *Antarctic Ecology*, vol. 1, part 5. Academic Press. London. p. 244–258, 5 fig., 2 tables.
- Dearborn, J. H. 1965. Ecologic and faunistic investigations of the marine benthos at McMurdo Sound. Ph.D. Dissertation. Stanford University. 180 p.
- Debrenne, Françoise, & J. Lafuste. 1972. Nouvelle données sur la microstructure du squelette de quelque sphinctozoaires. *Bulletin de la Société Géologique de France* 14:325–330.
- Debrenne, Françoise, Henri Termier, & Geneviève Termier. 1971. Sur de nouveaux représentants de la classe des *Radiocyatha*. Essai sur l'évolution des Métazoaires primitifs. *Bulletin de la Société Géologique de France (series 7)* 13(3–4):439–444, pl. 29–30.
- 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.
- Debrenne, Françoise, & A. Zhuravleva. 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.
- De Kema, M. J. L. 1816. *Alcyonium*. *In* F. G. Levrault, ed., *Dictionnaire des Sciences Naturelles*, 2nd ed., I. F. G. Levrault. Paris. Supplement, p. 107.
- . 1829. *Verticillites*. *In* F. G. Levrault, ed., *Dictionnaire des Sciences Naturelles*, vol. 58. F. G. Levrault. Paris. p. 5–6.
- Defretin-Lefranc, Simone. 1961. Contribution à l'étude des spongiaires siliceux du Crétacé supérieur du Nord de la France. Thèse Présentée à la Faculté des Sciences de Lille pour obtenir le Grade de Docteur es Sciences Naturelles. Université de Lille. Lille. 178 p., 47 fig., 27 pl.
- Delage, Y. 1892. Embryogénie des éponges; développement postlarvaire des éponges siliceuses et fibreuses marine et d'eau douce. *Archive de Zoologie Expérimentale et Générale (series 2)* 10(3):345–498, 8 pl.
- Dendy, Arthur. 1893. Synopsis of the Australian *Calcarea Heterocoela*, with a proposed classification of the group, and descriptions of some new genera and species. *Proceedings of the Royal Society of Victoria (new series)* 5:69–116.
- . 1905. Report on the sponges collected by Professor Herdman, at Ceylon, in 1902. Report on the Pearl Oyster Fisheries of the Gulf of Manaar, Royal Society, London, supplement 18:57–246, 16 pl.
- . 1910. Porifera, Part I—Non-Antarctic sponges. *British Antarctic (Terra Nova) Expedition, Zoology* 6(3):269–392, 15 pl.
- . 1916. Report on the Homosclerophora and Astrotetaxonida collected by H. M. S. "Sealark" in the Indian Ocean. *Transactions of the Linnean Society, Zoology* 17:225–271, 4 pl.
- . 1917. On the occurrence of gelatinous spicules and their mode of origin in a new genus of siliceous sponges. *Proceedings of the Royal Society of London (section B)* 89:315–321.
- . 1921. The tetraaxonid sponge spicule: a study in evolution. *Acta Zoologica, Stockholm* 2:95–152.
- . 1922. Report on the Sigmatotetaxonida collected by H. M. S. "Sealark" in the Indian Ocean. *Transactions of the Linnean Society, London* 18:1–164, 18 pl.
- . 1924a. Porifera, Part 1. Non-Antarctic Sponges. *British Antarctic ("Terra Nova") Expedition, 1910, Zoology* 6(3):269–392, 15 pl.
- . 1924b. On an orthogenetic series of growth-forms in certain tetraaxonid sponge spicules. *Proceedings of the Royal Society of London (section B)* 97:243–250, pl. 9–10.
- Dendy, Arthur, & W. H. 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* 1913:704–813, 1 fig.
- Deng Zhan-Qiu. 1981. Upper Permian sponges from Laibin of Guangxi. *Acta Palaeontologica Sinica* 20(5):418–427, 4 pl.  
*In Chinese with English summary.*
- . 1982. Paleozoic and Mesozoic sponges from Southwest China. *In* *Stratigraphy and Palaeontology in western Sichuan and eastern Xizang, China, Part 2. Sichuan Renmin Chubanshe, Chengdu*. p. 245–258, pl. 1–6.  
*In Chinese with English summary.*
- . 1990. New materials of Permian sponges. *Acta Palaeontologica Sinica* 29(3):315–320, pl. 1.  
*In Chinese with English summary.*
- De Saporta, L. C. J. G. 1887. Nouveaux documents relatifs aux organismes problématiques des anciennes mers. *Bulletin de la Société Géologique de France (series 3)* 15:286–302, pl. 3–7.
- Dieci, G., 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, pl. 18–33.
- Dieci, G., A. Russo, & F. Russo. 1974a. Nota preliminare sulla microstruttura di spugne aragonitiche del Trias medio-superiore. *Bollettino della Società Paleontologica Italiana* 13(1–2):99–107, pl. 32–37.
- . 1974b. Revisione del genere *Leiospongia* d'Orbigny (*Sclerospongia* triassica). *Bollettino della Società Paleontologica Italiana* 13(1–2):135–146, pl. 51–53.
- Ding L., Li Y., Hu X., Xiao Y., Su C., & Huang J. 1996. Sinian Miaohe Biota. *Geological Publishing House, Beijing*. 221 p.

- Ding Wei-ming, & Qian Yi. 1988. Late Sinian to Early Cambrian small shelly fossils from Yangjiaping, Shimen, Hunan. *Acta Micropalaeontologica Sinica* 5(1):39–55, 4 pl. In Chinese with English summary.
- Doederlein, L. 1892. Über *Petrostoma schulzei* n. g., n. sp., der Kalkschwamme. [Description of *Petrostoma schulzei* of Calcareia, representing a new order of Lithones]. *Verhandlungen Deutsche Zoologische Gesellschaft* 2:143–145.
- Dong Xiping, & A. H. Knoll. 1996. Middle and Late Cambrian sponge spicules from Hunan, China. *Journal of Paleontology* 70:173–184, 7 fig.
- Doré, Francis, & R. E. H. Reid. 1965. *Allonia tripodophora* nov. gen., nov. sp., nouvelle Éponge du Cambrien inferior de Carteret (Manche). *Comptes Rendus Somme Seances, Société Géologique de France* 1:20–21, 1 fig.
- Dorn, P. 1932. Untersuchungen über fränkische Schwammriffe. *Abhandlungen Geologisches Landesamt Bayern Oberbergamt, Munchen*, p. 13–44, 6 pl.
- du Dresnay, Renaud, Geneviève Termier, & Henri Termier. 1978. Les hexactinellides (lyssakides et dictyonines) du lias marocain. *Geobios* 11(3):269–295, 4 fig., 6 pl.
- Duchassaing de Fonbressin, P., & G. Michelotti. 1864. Spongiaires de la mer Caraïbe. *Natuurkundige verhandelingen van de Hollandsche maatschappij der wetenschappen te Haarlem* 21(2):1–124, pl. I–XXV.
- Dumortier, E. 1871. Sur calces gisements de l'Oxfordian inferieur de l'Ardeche. *Paris-Lyon*, 4, 85 p.
- Dunagan, S. P. 1999. A North American freshwater sponge (*Eospongilla morrisonensis* new genus and species) from the Morrison Formation (Upper Jurassic), Colorado. *Journal of Paleontology* 73:389–393, 3 fig.
- Duncan, P. M. 1879. On some spheroidal lithistid Spongiida from the Upper Silurian Formation of New Brunswick. *Annals and Magazine of Natural History (series 5)* 4:84–91.
- Duner, H., & B. Pernow. 1963. Chapter 22, Histamine. In U. S. von Euler and H. Heller, eds., *Comparative Endocrinology*, vol. 2. Academic Press, Inc. New York. p. 239–257, 1 fig.
- von Dunikowski, Emil. 1883. Die Pharetronen aus dem Cenoman von Essen, und die Systematische Stellung der Pharetronen. *Paleontographica* 29:283–323, pl. 37–40 (1–4).
- . 1884. Über Permo-Carbon-Schwämme von Spitzbergen. *Koniglich Svenska Vetenskaps Akademiens, Handligar, Stockholm (series 4)* 21:1–18.
- . 1892. Die Pharetronen aus dem Cenoman von Essen und die Systematische Stellung der Pharetronen. *Paleontographica* 29:281–348.
- Dunn, M. T., R. H. Mapes, & J. K. Rigby. 2003. A land plant not a sponge: a re-evaluation of the Mississippian demosponge *Vintonia* and the family Vintoniidae. *Journal of Paleontology* 77:397–399, 1 fig.
- Edwards, M. A., & A. T. Hopwood, eds. 1966. *Nomenclator Zoologicus*, vol. 6, 1946–1955. The Zoological Society of London. London. 329 p.
- Edwards, M. A., & H. G. Ververs, eds. 1975. *Nomenclator Zoologicus*, vol. 7, 1956–1965. The Zoological Society of London. London. 374 p.
- Efremova, S. M. 1965. Experiments on the use of glycine C<sup>14</sup> for the study of the nutrition of sponges *Sycon lingua* Haeck. *Vestnik Leningradskogo Gosudarstvennogo Universiteta* 3:17–23, 6 fig. In Russian.
- Eichwald, E. 1860. *Lethaea rossica ou paléontologie de la Russie, décrite et figurée par Eduard d'Eichwald*, vol. 1. E. Schweizerbart. Stuttgart. 359 p.
- Elliott, G. F. 1963. Problematical microfossils from the Cretaceous and Paleocene of the Middle East. *Palaeontology* 6:293–300, 3 pl.
- Emery, K. O., J. L. Tracy Jr., & H. S. Ladd. 1954. Geology of Bikini and nearby atolls. U. S. Geological Survey Professional Paper 260-A:1–265.
- Engeser, T. S. 1986. Nomenklatorische notiz zur gattung *Dictyocoelia* Ott, 1967 (“Sphinctozoa”, Porifera). *Neues Jahrbuch für Geologie und Paläontologie, Monatshefte* 10:587–590.
- Engeser, T. S., & Dorte Mehl. 1993. Corrections and additions to the nomenclature of the Porifera in *The Treatise on Invertebrate Paleontology, (Part E)*. *Berliner Geowissenschaftliche Abhandlungen (Reihe E)* 9:183–198.
- Engeser, T. W., & H.-H. Neumann. 1986. Ein neuer verticillitider “sphinctozoe” (Demospongiae, Porifera) aus dem Campan der Krappfeld-Gosau (Kärnten, Österreich). *Mitteilungen, Geologisch-Paläontologische Institut, Universität Hamburg* 61:149–159, 1 pl.
- Engeser, T. S., & P. 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 series)* 45:39–55, 9 fig.
- Esper, E. J. C. 1791. *Oryctographiae Erlangensis specimina quaedam imprimis spongiarium petrefactorum*. *Nova Acta Physikal-Medicinische Abhandlungen der Akademie Caesarea Leopold-Carol. Naturae Curios*, vol. 8. p. 194–204, pl. 8.
- . 1794. *Die Pflanzethiere in Abbildungen nach der Natur mit Farben erleuchtet nebst Beschreibungen*. Zweiter Theil. Raspe. Nürnberg. 303 p.  
This second part appeared 1791–1794 and contains Lieferung 7–12, about sponges, p. 102, 165–282, 289–294.
- Étallon, M. A. 1859a [1858]. Études paléontologiques sur le Haut-Jura. *Additions et Rectifications* S. 24 im Separat-Abdruck der Mémoires de la Société Jurassienne d'Émulation du Département du Doubs 3:1–153.
- . 1859b. Études paléontologiques sur le Haut-Jura, Rayonnes du Corallien. Part III. *Mémoires de la Société Jurassienne d'Émulation du Département du Doubs* 3:401–553.



- . 1860. Sur la classification des Spongiaires du Haut-Jura, et leur distribution dans les étages. Actes de la Société Jurassienne d'Émulation, pendant l'année 1858. Porrentruy. p. 129–160.
- . 1863. *Lethea bruntrutana*. Denkschriften der Schweizerischen naturforschenden Gesellschaft (Mémoires de la Société helvétique des sciences naturelles) 20:357–454.
- . 1864. *Lethea bruntrutana*. Siehe No. 222. Études paleontologiques sur le Jura graylois. Mémoires de la Société d'Émulation du Département du Doubs 8:221–506.
- Fabricius, O. 1780. Fauna Groenlandica, systematicae sistens, Animalia Groenlandiae occidentalis hactenus indagata, quoad nomen specificum, triviale, vernaculumque; synonymum auctorum plurium, descriptionem, locum, victum, generationem. Mores, usum, capturamque singuli; prout detegendi occasio fuit, maximaque parti secundum proprias observationes. Hafniae & Lipsiae. xvi + 1–452, 1 pl.
- Fan Jiasong, J. K. Rigby, & Qi Jingwen. 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 Middle and Upper Permian reefs of South China. *Journal of Paleontology* 65:44–68.
- Fan Jiasong, 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, pl. 1–8.
- Fedorov, A. B. 1987. Tip Gubki [Phylum Sponges]. In Yu. Ya. Shabanov & others, *Nizhniy paleozoy yugozapadnogo sklona Anabarskoy anteklizy (po materialam bureniya)* [Lower Paleozoic of the southwestern slope of the Anabar Anticline (according to boring data)]. Nauka. Novosibirsk. 208 p.
- Felix, J. 1913. Über ein cretaceisches Geshiebe mit *Rhizocorallium* Gläseli n. sp. aus dem Diluvium bei Leipzig. *Sitzungsberichte der Naturforschenden Gesellschaft zu Leipzig* 39:19–26.
- Fenton, C. L., & M. A. Fenton. 1932a. Boring sponges in the Devonian of Iowa. *American Midland Naturalist* 13:42–54, pl. 6–9.
- . 1932b. A new species of *Cliona* from the Cretaceous of New Jersey. *American Midland Naturalist* 13:54–55, pl. 7.
- Filatova, Z. A., & N. G. Barsanova. 1964. [The communities of bottom fauna of the western part of the Bering Sea.] *Trudy Instituta Okeanologiya, Moscova* 69:6–97, 4 fig. In Russian with English summary.
- Finks, R. M. 1955. *Conularia* in a sponge from the West Texas Permian. *Journal of Paleontology* 29:831–836, pl. 82.
- . 1960. Late Paleozoic sponge faunas of the Texas region: the siliceous sponges. *American Museum of Natural History Bulletin* 120(1):1–160, 77 fig., pl. 1–50.
- . 1967a. The structure of *Saccospongia laxata* Bassler (Ordovician) and the phylogeny of the Demospongia. *Journal of Paleontology* 41:1137–1149, 5 fig., pl. 145–146.
- . 1967b. Phylum Porifera Grant 1836. In W. B. Harland, ed., *The Fossil Record*. Geological Society of London. London. p. 333–341, fig. 9.
- . 1970. The evolution and ecologic history of sponges during Paleozoic times. In W. G. Fry, ed., *The Biology of the Porifera*. Symposia of the Zoological Society of London 25:3–22, fig. 1–15.
- . 1971a. Sponge zonation in the west Texas Permian. *Smithsonian Miscellaneous Contributions, Paleontology* 3:285–300, 3 fig.
- . 1971b. A new Permian eutaxicladine demosponge, mosaic evolution, and the origin of the Dicanocladina. *Journal of Paleontology* 45:977–997, 5 fig., pl. 117–122.
- . 1983a. Pharetronida: Inozoa and Sphinctozoa. In T. W. Broadhead, ed., *Sponges and Spongiomorphs*. Notes for a short course organized by J. K. Rigby and C. W. Stearn, *Studies in Geology* 7. University of Tennessee. Knoxville. p. 55–69.
- . 1983b. Fossil Hexactinellids. In T. W. Broadhead, ed., *Sponges and Spongiomorphs*. Notes for a short course organized by J. K. Rigby and C. W. Stearn, *Studies in Geology* 7. University of Tennessee. Knoxville. p. 101–115, 4 fig.
- . 1990. Late Paleozoic pharetronid radiation in the Texas region. In Klaus Rutzler, ed., *Perspectives in Sponge Biology*. 3rd International Sponge Conference 1985. Smithsonian Institution Press. Washington, D.C. p. 17–24.
- . 1995. Some new genera of Paleozoic calcareous sponges. *The University of Kansas Paleontological Contributions* (new series) 6:9 p., 11 fig.
- . 1997. New name for a Permian calcareous sponge and some related corrections. *Journal of Paleontology* 71:352.
- Finks, R. M., & D. F. Toomey. 1969. The paleoecology of Chazyan (lower Middle Ordovician) "reefs" or "mounds." *New York State Geological Association Guidebook*, 41st Annual Meeting. Plattsburgh. p. 93–120, 4 fig., 6 pl.
- Finks, R. M., E. L. Yochelson, & R. P. Sheldon. 1961. Stratigraphic implications of a Permian sponge occurrence in the Park City Formation of western Wyoming. *Journal of Paleontology* 35:564–568.
- Fischbuch, N. R. 1970. Devonian reef-building stromatoporoids from western Canada. *Journal of Paleontology* 44:1,071–1,084, pl. 145–149.
- Fischer, A. G. 1962. Fossilien aus Riffkomplexen der alpinen Trias: *Cheilosporites* Wähner, ein Foraminifere? *Paläontologische Zeitschrift* 36:118–124, pl. 13–14.
- Fischer, J. C. 1970. Révisions et essai de classification des Chaetetida (Cnidaria) post-Paléozoïques. *Annales de Paléontologie des Invertébrés* 56:151–220.

- Fischer, P. 1867. Note sur calces Spongiaires fossiles de la Craie, appartiennent au groupe des Géodies. Actes Société Linnéenne de Bordeaux (series 3) 6:233–238.
- Fischer von Waldheim [de Waldheim], G. F., MS in C. E. d'Eichwald [Eduard von]. 1829. Zoologia specialis quam expositis animalibus tum vivis, tum fossilibus potissimum Rossiae in universum, et Poloniae in species, in usum lectionum, vol. 1. J. Zawalski. Vilna. vi + 314 p., 5 pl.
- Fischer de Waldheim, G. F. 1830–1837. Oryctographie du Gouvernement de Moscou. Ouvrage publié aux frais de la Société Impériale des Naturalistes de Moscou, 2nd ed. A. Semen. Moscow. v + 202 p., 62 pl.
- Fjordingstad, E. J. 1961. The ultrastructure of choanocyte collars in *Spongilla lacustris* (L.). Zeitschrift für Zellforschung 53:645–657.
- Fleming, J. 1828. A history 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. Bell and Bradfuste. Edinburgh & London. xxiii + 565 p.
- Flügel, E. 1966. Algen aus dem Perm der Karnischen Alpen. Carintha II, Sonderheft, Klagenfurt 25:3–76, 15 fig., 11 pl.
- . 1981. Paleocology and facies of Upper Triassic reefs in the Northern Calcareous Alps. In D. F. Toomey, ed., European Fossil Reef Models. SEPM Special Publication 30:291–359, 26 fig.
- Flügel, E., R. Lein, & B. Senowbari-Daryan. 1978. Kalkschwämme, Hydrozoen, Algen und Mikroproblematika aus des Cidarisschichten (Karn, Ober-Trias) der Mürtzaler Alpen (Stiermark) und des Gosaukammes (Oberösterreich). Mitteilungen Gesellschaft des Geologie- und Bergbaustudenten in Österreich 25:153–195.
- Flügel, E., & G. D. Stanley. 1984. Reorganization, development, and evolution of post-Permian reefs and reef organisms. Palaeontographica Americana 54:177–186, 5 fig.
- Foerste, A. F. 1916. Notes on Cincinnatian fossil types. Bulletin of the Scientific Laboratories of Denison University 18:285–355, pl. 1–7.
- Fontaine, H. 1962. Nouveau nom pour le genre *Steinmannia* Waagen et Wentzel. Comptes Rendus, Société Géologique de France 7:205.
- Forbes, M. L. 1964. Distribution of the commensal oyster, *Ostrea permollis*, and its host sponge. Bulletin of Marine Science of the Gulf and Caribbean 14:453–464, 2 fig.
- Fox, H. M., & Hugh Ramage. 1930. Spectrographic analyses of animal tissues. Nature 126(3,183):682.
- . 1931. A spectrographic analysis of animal tissues. Proceedings of the Royal Society, London (section B) 108(755):157–173.
- Fraipont, Charles. 1911. Use hexactinellide nouvelle du Dévonien belge (Calcaire Frasnie) *Pseudopemmatites Fourmarieri* nov. g. et. n. sp. Annales de la Société Géologique de Belgique 38:197–206, pl. 13–15.
- de Freitas, Tim A. 1987. A Silurian sphinctozoan sponge from east-central Cornwallis Island, Canadian Arctic. Canadian Journal of Earth Sciences 24:840–844, 3 fig.
- . 1989. Silurian *Archaeoscyphia* from the Canadian Arctic: a case for simplified generic taxonomy in the anthaspidellid lithistids. Canadian Journal of Earth Sciences 26:1,861–1,879.
- . 1991. Ludlow (Silurian) lithistid and hexactinellid sponges, Cape Phillips Formation, Canadian Arctic. Canadian Journal of Earth Sciences 28:2,042–2,061, 9 fig.
- Frentzen, Karl. 1932. Paleobiologisches ueber die koralleuvorkommen im oberen weissen Jura bei Nattheim, O.-A. Heidenheim. Bodische Geologische Abhandlungen 4:43–57.
- Fretter, V., & A. Graham. 1976a. The prosobranch molluscs of Britain and Denmark, Part 1, Pleurotomariacea, Fissurellacea, and Patellacea. Journal of Molluscan Studies (supplement) 1:1–37, 25 fig.
- . 1976b. Sponges. In V. Fretter & A. Graham, eds., A Functional Anatomy of Invertebrates. Academic Press. London. p. 44–52, 2 fig.
- Page information for complete book: vii + 589 p.
- de Fromentel, M. E. 1860a [1859]. Introduction à l'étude des éponges fossiles. Mémoires de la Société Linnéenne de Normandie 11:1–50, pl. 1–4.
- . 1860b. 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.
- . 1861 [1860]. Catalogue raisonné des Spongiaires de l'étage Néocomien. Bulletin de la Société des Sciences historiques et naturelles de l'Yonne (series 4) 14(2):356–372.
- . 1864. Monographie des Polypiers jurassiques supérieurs (étages portlandien et kimmeridgien). Mémoires de la Société Linnéenne de Normandie, Paris 13:1–53, 8 pl.
- . 1865. Polypiers coralliens des environs de Gray, considérés dans leurs rapports avec ceux des bassins coralliens de la France, et dans leur développement pendant la durée de cet étage. Mémoires de la Société Linnéenne de Normandie, Paris 14:1–43.
- Fry, W. G. L. 1970. The sponge as a population: a biometric approach. In W. G. Fry, ed., Biology of the Porifera. Zoological Society of London Symposium 25:135–162, 12 fig.
- Fursich, R. T., T. J. Palmer, & K. L. Goodyear. 1994. Growth and the disintegration of bivalve-dominated patch reefs in the Upper Jurassic of southern England. Palaeontology 37:131–171.
- Gaillard, C. 1983. Les bioherms à spongiaires et leur environnement dans l'Oxfordien du Jura méridional. Documents des Laboratoires de Géologie de la Faculté des Sciences de Lyon 90:1–515, 187 fig., 42 pl.
- García-Bellido Capdevila, D., & J. K. Rigby. 2004 (in press). Middle and Late Paleozoic sponges from the Iberian Peninsula. Journal of Paleontology 77:77 p., 19 fig.

- Gatehouse, C. G. 1968 [1967]. The first record of lithistid sponges in the Cambrian of Australia. Bulletin of the Bureau of Mineral Resources, Geology and Geophysics, Australia 92:57–67, pl. 7–8.
- Gateby, H. B., & T. M. Tahmisiyan. 1959. The contractile vacuoles and Golgi apparatus of *Ephydatia fluviatilis*: an electron microscope study. Journal of the Royal Microscopical Society (series 3) 77(3–4):107–115, 5 pl.
- Gautret, P. 1985. Organisation de la phase minérale chez *Vaceletia crypta* (Vacelet) démosponge, sphinctozoaire actuelle. Comparaison avec des formes aragonitiques du Trias de Turquie. Geobios 18(5):553–562, 2 fig., 4 pl.
- Gautret, P., & J. P. Cuif. 1989a. Les démosponges calcifiées des biohermes du Jurassique supérieur du Sud Tunisien (Oxfordian de la région de Tataouine). Geobios 22(1):49–63.
- . 1989b. Microstructure granulaire calcitique de trois sphinctozoaires du Trias supérieur des Dolomites et le Turquie. Annales de Paléontologie 75(4):171–186, 1 pl.
- Gautret, P., J. Vacelet, & J.-P. Cuif. 1991. Caractéristiques des spicules et du squelette carbonaté des espèces actuelles du genre *Merlia* (démosponge, Merliida), et comparaison avec des chaetétides fossiles. Bulletin du Muséum nationale de l'histoire naturelle de Paris (section A) 13:289–307.
- Gehling, J. G., & J. K. Rigby. 1996. Long expected sponges from the Neoproterozoic Ediacara fauna of South Australia. Journal of Paleontology 70:185–195, 7 fig.
- Geinitz, H. B. 1864. Zwei Arten von *Spongillopsis*, *S. dyadica*, *S. carbonica*. Neues Jahrbuch für Mineralogie und Geologie 1864:517–519.
- Gerassimov, P. R. 1960 [1957]. Gubki podmoskovnoi yury i nizhnego mela [Sponges of the Jurassic and Lower Cretaceous of the Moscow area]. Materialy po Geologii i Poleznym Iskopaemym Tsentral'nykh Rainov Evropeiskoi Chasti SSSR, v. 3.
- Gerth, H. 1909 [1907]. *Timorella permica* n. gen. n. sp., eine Neue Lithistide aus dem Perm von Timor. Centralblatt für Mineralogie, Geologie und Paläontologie 22:695–700, 5 fig.
- . 1927. Die Spongien aus dem Perm von Timor. Jaarboek van het Mijnwesen Nederland-Oost Indië, Verhandlungen für 1926:99–132.
- . 1929. XXVII. Die Spongien aus dem Perm von Timor. In Joh. Wanner, ed., Paläontologie von Timor, nebst kleineren Beiträgen zur paläontologie einiger anderen Inseln des ostindischen Archipels. E. Schweizerbart'sche Verlagsbuchhandlung. Stuttgart. p. 1–35, 6 pl. Essentially a reprint of the systematics presented in Gerth, 1927.
- Giattini, G. B. 1909 [1908]. "*Manzonina aprutina*" Nuova esattinellidae del Miocene Medio di S. Valentino (Chieti). Revista Italiana di Paleontologia 14:57–63.
- Giebel, C. G. 1850 [1849]. Über *Scyphia uvaeformis*, n. sp. Jahresbericht ueber Naturwissenschaftlichen Verein in Halle, 2. Jahrg. Berlin. p. 57–60.
- . 1852. Deutschlands Petrefacten. Ein systematisches Verzeichniss aller in Deutschland und den angrenzenden Landern vorkommenden Petrefacten nebst Angabe der Synonymen und Fundorte. A. Abel. Leipzig. 706 p. Sponges on p. 169–183.
- Gilbert, J. J., & T. L. Simpson. 1976. Sex reversal in a freshwater sponge. Journal of Experimental Zoology 195:145–151.
- Girty, G. H. 1895. A revision of the sponges and coelenterates of the Lower Helderberg Group of New York. New York State Geologist Annual Report 14(64):259–322, pl. 1–7.
- . 1908. On some new and old species of Carboniferous fossils. Proceedings of the U.S. National Museum 34:281–303, pl. 14–21.
- . 1909 [1908]. The Guadalupian Fauna. U.S. Geological Survey Professional Paper 58:1–641, 31 pl.
- . 1912 [1911]. On some new genera and old species of Pennsylvanian fossils from the Wewoka Formation of Oklahoma. Annual Report of the New York Academy of Sciences 21:119–156.
- Glaessner, M. F. 1962. Pre-Cambrian fossils. Biological Reviews of the Cambridge Philosophical Society 37(4):467–494.
- Goldfuss, A. 1826. Petrefacta Germaniae oder Abbildungen und Beschreibungen der Petrefacten Deutschlands und der angrenzenden Lander, Band 1, Heft 1. Unter Mitwirkung des Grafen George zu Münster. Düsseldorf. p. 1–76, pl. i–xxv.
- . 1829. Petrefacta Germaniae oder Abbildungen und Beschreibungen der Petrefacten Deutschlands und der angrenzenden Lander, Band 1, Heft 2. Unter Mitwirkung des Grafen George zu Münster. Düsseldorf. p. 77–164, pl. xxvi–l.
- . 1831. Petrefacta Germaniae oder Abbildungen und Beschreibungen der Petrefacten Deutschlands und der angrenzenden Lander, Band 1, Heft 3. Unter Mitwirkung des Grafen George zu Münster. Düsseldorf. p. 165–240, pl. li–lxxi.
- . 1833. Petrefacta Germaniae oder Abbildungen und Beschreibungen der Petrefacten Deutschlands und der angrenzenden Lander, Band 1, Heft 4. Unter Mitwirkung des Grafen George zu Münster. Düsseldorf. p. 241–252.
- Goryansky, V. Y. 1977. Lervaia Nakhodka ostatkov gubki v nizhnem kembrii vostochnoi sibirii [First discoveries of sponge remains from the Lower Cambrian in eastern Siberia]. Ezhegodnik Vsesoyuznyi Paleontologiya Obshchestvo 20:274–278, pl. 1. In Russian.
- Goreau, T. F., & W. D. Hartman. 1963. Boring sponges as controlling factors in the formation and maintenance of coral reefs. American Association for the Advancement of Science 75:25–54.
- Grabau, A. W. 1932. Paleozoic centers of faunal evolution and dispersion. Pan-American Geologist 58(4):273–284.

- Graham, A. 1971. British prosobranch and other operculate gastropod molluscs. Key and notes for the identification of the species. Synopses of the British Fauna, new series, no. 2. The Linnean Society of London. London. p. 1–112, 118 fig.
- Grant, R. E. 1826. Observations on the structure of some siliceous sponges. *Edinburgh New Philosophical Journal* 1:341–351.
- . 1833. On the classification of the organs of animals and on the organs of support in animacules and poriferous animals. Lecture IV, University of London lectures on comparative anatomy and animal physiology. *The Lancet* (1833–1834, Nov. 2, 1833) 1:194–200.
- . 1835–1841. Porifera. In H. Bailliere, ed., *Outlines of Comparative Anatomy*, vol. 1. London. p. 5–9, 310–313, pl. II–IV.
- . 1836. Animal Kingdom. In R. B. Todd, ed., *The Cyclopaedia of Anatomy and Physiology*, vol. 1. Sherwood, Gilbert, & Piper. London. p. 107–118.
- . 1841. *Outlines of Comparative Anatomy*. Hippolyte Bailliere. London. 656 p., 147 fig.
- Gray, D. I. 1980. Spicule pseudomorphs in a new Palaeozoic chaetetid, and its sclerosponge affinities. *Palaeontology* 23(4):803–820, pl. 102–103.
- Gray, J. E. 1832. Synopsis of the contents of the British Museum (London). British Museum Publication, edition 27. London. 212 p.
- . 1835. On the coral known as the glass plant. *Proceedings of the Zoological Society of London* 1835:492–558, pl. 27–28.
- . 1837. A synoptical catalogue of the species of certain tribes or genera of shells contained in the collections of the British Museum and the author's cabinet, with descriptions of new species. *Magazine of Natural History* 1:370–376.
- . 1848. List of specimens of British sponges in the collection of the British Museum (London). British Museum Publication viii:1–24.
- . 1857. Synopsis of the axiferous Zoophytes or barked corals. *Proceedings of the Zoological Society of London* 25:278–294, pl. 9.
- . 1858. On *Aphrocallistes*, a new genus of Spongiadae from Malacca. *Annals and Magazine of Natural History* (series 3) 2:224.
- . 1859. Description of *MacAndrewia* and *Myliusia*, two new forms of sponges. *Proceedings of the Zoological Society of London* 1859:437–440, pl. 15–16.  
Also published in 1860 in the *Annals and Magazine of Natural History* (series 3) 5:495–498.
- . 1867. Notes on the arrangement of sponges, with the description of some new genera. *Proceedings of the Scientific Meetings of the Zoological Society of London* 1867:492–558.
- . 1868. Note on *Hyalonema schultzei* Semper. *Annals and Magazine of Natural History* (series 4) 2:373–377.
- . 1872a. Notes on the classification of the sponges. *Annals and Magazine of Natural History* (series 4) 9:442–462.
- . 1872b. On a new genus of hexiradiate and other sponges discovered in the Philippine Islands by Dr. A. B. Meyer. *Annals and Magazine of Natural History* (series 4) 10:134–139.
- . 1872c. *Crateromorpha*. In H. J. Carter, Description of two new sponges from the Philippine Islands. *Annals and Magazine of Natural History* (series 4) 10(56):110–113.
- Gregorio, A. 1883. Coralli Giurresi di Sicilia. *Il Naturalista Siciliano*, Palermo 2(6):121–126.
- . 1908. Sul generi *Zittelspongia*. *Il Naturalista Siciliano*, Palermo 20:83.
- . 1930. Sul Permiano di Sicilia (Fossili del calcare con Fusulina di Palazzo Adriano). *Annals of Geology and Palaeontology* 52:1–70.
- Gutschick, R. G., & T. G. Perry. 1959. Sappington (Kinderhookian) sponges and their environment. *Journal of Paleontology* 33:977–985, 3 fig., 2 pl.
- Gwinner, M. P. 1958. Schwämmbänke, Riffe und submarines relief im oberen Weissen Jura der Schwäbischen Alb (Württemberg). *Geologische Rundschau* 47(1):408–418.
- . 1968. Palaeogeographic und Landschaftsentwicklung im Weissen (ober) Jura der Schwäbischen Alb (Baden-Württemberg). *Geologische Rundschau* 58(1):32–41.
- . 1976. Origin of the Upper Jurassic limestones of the Swabian Alb (southwest Germany). *Contributions to Sedimentology* 5:1–75.
- Haas, Otto. 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 Institutes der Universität Wien* 22:143–167, 2 pl.
- von Hacht, Ulrich. 1981. *Syltroschos pyramidoidalis*—eine neu oberordovizische Spongie aus der Braderuper Serie der Kaolinsande von Sylt. *Grondboor & Hamer* 35(6):154–155.
- . 1990. Wenig bekannte Spongien von Sylt. In U. von Hacht, ed., *Fossilien von Sylt III*. Verlag und Verlagbuchhandlung Inge-Maria von Hacht. Hamburg. p. 43–57, 4 pl.
- . 1994. Sponzentelling op Sylt. *Grondboor & Hamer* 48(4/5):76–80, 8 fig.
- von Hacht, Ulrich, & F. Rhebergen. 1997. Ordovizische Geschiebespongien Europas. In M. Zwanzig & H. Löser, *Berliner Beiträge zur Geschiebeforschung*. Dresden. p. 51–63.
- Haeckel, E. 1870. Prodröm eines Systems der Kalkschwämme. *Jenaer Zeitschrift für Medicin und Naturwissenschaft* 5:236–254.  
Translated in *Annals and Magazine of Natural History* (series 4) 5:176–191.
- . 1872a. Prodröm eines Systems der Kalkschwämme. *Zeitschrift für die gesammten Naturwissenschaften*, Berlin 6:507–515.
- . 1872b. Die Kalkschwämme. Ein Monographie. Verlag von Georg Reimer. Berlin. Band I, Biologie der Kalkschwämme (Calcispongien oder Grantien), 484 p.; Band II, System der

- Kalkschwämme (Calcispongien oder Grantien), 418 p.; Band III, atlas, 60 pl.
- Hajdu, E., R. W. M. Van Soest, & J. N. A. Hooper. 1994. Proposal for a phylogenetic subordinal classification of poecilosclerid sponges. *In* R. W. M. van Soest, T. M. G. van Kempen, & J. C. Braekman, eds., *Sponges in Time and Space*. Balkema, Rotterdam. p. 123–139.
- Hall, James. 1863. Observations upon the genera *Uphantaenia* and *Dictyophyton*, with notice of some species from the Chemung Group of New York and the Waverly sandstone of Ohio. *New York State Cabinet* 16:84–91, pl. 3–5.
- . 1884. Descriptions of the species of fossil reticulate sponges, constituting the family Dictyospongidae. *New York State Museum of Natural History, 35th Annual Report*. p. 465–481, pl. 17–21.
- . 1890a. On new genera and species of the family Dictyospongidae. New forms of Dictyospongidae from the rocks of the Chemung Group. *Geological Society of America Bulletin* 1:22–23.
- . 1890b. Fossil Dictyospongidae of the Devonian and Carboniferous formations; new forms of Dictyospongidae from rocks of the Chemung Group. *Ninth Annual Report, New York State Geologist*. p. 56–60.
- Hall, James, & J. M. Clarke. 1899 [1898]. A memoir of the Paleozoic reticulate sponges constituting the family Dictyospongidae. *New York State Museum Memoir* 2:350 p., 45 fig., 70 pl. Various dated as 1898, 1899, and 1900.
- Hancock, Albany. 1849. On the excavating powers of certain sponges belonging to the genus *Cliona*; with descriptions of several new species, and an allied generic form. *Annals and Magazine of Natural History (series 2)* 3:321–348, pl. 12–15.
- Häntzschel, Walter. 1962. Trace fossils and Problematica. *In* W. W. Hass, W. Häntzschel, D. W. Fischer, B. F. Howell, F. H. T. Rhodes, K. J. Müller, & R. C. Moore, eds., *Treatise on Invertebrate Paleontology, Part W, Miscellaneous*. University of Kansas & Geological Society of America. Lawrence & Boulder. p. 177–245.
- . 1972. Trace fossils and problematica. *In* Curt Teichert, ed., *Treatise on Invertebrate Paleontology, Part W, Miscellaneous, Supplement 1*. University of Kansas & Geological Society of America. Lawrence & Boulder. 269 p.
- Hara, J. 1894. On a new species of calcareous sponge, *Lelapia nipponica*. *Zoological Magazine* 6:369–370. *In* Japanese.
- Hartman, W. D. 1958a. A re-examination of Bidder's classification of the Calcarea. *Systematic Zoology* 7:97–110.
- . 1958b. Natural history of the marine sponges of southern New England. *Bulletin of the Peabody Museum of Natural History* 12:1–155, 46 fig., 12 pl.
- . 1969. New genera and species of coralline sponges (Porifera) from Jamaica. *Postilla, Peabody Museum of Natural History* 137:1–39, fig. 1–32.
- . 1979. A new sclerosponge from the Bahamas and its relationship to Mesozoic stromatoporoids. *In* C. Lévi & N. Boury-Esnault, eds., *Biologie des Spongiaires, Colloques Internationaux du Centre Nationale de la Recherche Scientifique* 291:467–474.
- . 1982. Porifera. *In* S. P. Parker, ed., *Synopsis and classification of living organisms*, vol. 1. McGraw-Hill Book Co. New York, London, Toronto. p. 641–666.
- Hartman, W. D., & T. F. Goreau. 1966. *Ceratoporella*, a living sponge with stromatoporoid affinities. *American Zoologist* 6:262.
- . 1970. Jamaican coralline sponges; their morphology, ecology and fossil relatives. *Zoological Society of London Symposium* 25:205–243.
- . 1975. A Pacific tabulate sponge, living representative of a new order of Sclerosponges. *Postilla, Peabody Museum of Natural History* 167:1–14, fig. 1–15.
- Haswell, W. A. 1882. On Australian freshwater sponges. *Proceedings of the Linnean Society of New South Wales* 7:208–210.
- Hay, W. W., F. Wiedenmayer, & D. S. Marszalek. 1970. Modern organism communities of Bimini Lagoon and their relation to the sediments. *In* Supko, P., D. Marszalek & W. D. Bock, eds., *Sedimentary environments and carbonate rocks, Bimini, Bahamas*. Miami Geological Society 4th Annual Field Trip. p. 19–30.
- Hechtel, G. J. 1965. A systematic study of the Demospongiae of Port Royal, Jamaica. *Peabody Museum of Natural History Bulletin* 20:1–94, 15 fig., 8 pl.
- Hentschel, Ernst. 1909. Tetraxonida, tl. 1. *In* W. Michaelsen & R. Hartmeyer, *Die Fauna Südwest-Australiens*, bd. 2, lfg. 21. G. Fischer. Jena. p. 347–402, 2 pl.
- . 1923–1924. Erste Unterabteilung der Metazoa: Parazoa, Porifera-Schwämme. *In* W. Küenthal & T. Krumbach, eds., *Handbuch der Zoologie, Eine Naturgeschichte der Stämme des Tierreiches*, vol. 1, Protozoa, Porifera, Coelenterata, Mesozoa. Walter de Gruyter and Co. Berlin & Leipzig. p. 307–408, fig. 288–377.
- . 1929. Die Kiesel- und Hornschwämme des Nordlichen meeres. *Fauna Arctica, Jena (series 4)* 5(4):859–1,042, 4 pl.
- Herak, M. 1943. Zur Kenntnis triadischer Kalkschwämme (Sycones). *Neues Jahrbuch für Geologie und Paläontologie* 88:107–135, 5 fig., 2 pl.
- . 1944. Zur kenntniss triadischer Kalkschwämme (Sycones). *Neues Jahrbuch für Mineralogie, Geologie und Paläontologie* 88:107–135, pl. 13–14.
- Hérenger, Lucette. 1942. Contribution à l'étude des spongiaires du Jurassique et du Crétacé de Catalogne. *Travaux du Laboratoire de Géologie de la Faculté des Sciences de l'Université de Grenoble* 23:143–192, 13 fig., 4 pl.

- . 1944. Spongiaires siliceux du Crétacé du Sud-Est de la France. Travaux du Laboratoire de Géologie de la Faculté des Sciences de l'Université de Grenoble 24:79–110, 9 fig.
- . 1945 (1944). Nouvelle genre d'éponge siliceuse et remarque sur la classification des Hexactinellides. Comptes Rendus de la Société Géologique de France, Paris 218:688–690.
- . 1946a. Sur calces nouveaux gisements de Spongiaires du Crétacé de Provence et sur une Mégamordine bien conservée provenant de l'un d'entre eux. Travaux du Laboratoire de Géologie de la Faculté des Sciences de l'Université de Grenoble 25:3–7.
- . 1946b. Description de nouvelles formes de spongiaires du Crétacé supérieur des Petites Pyrénées. Comptes Rendus sommaire de la Société Géologique de France 3/4:46–48.
- Herrmann-Degen, Wolfgang. 1980. Eine hexactinelliden-faunula aus dem "Chalk" (Maastricht?, Paläozän) Sudwest-Ägyptens. Berliner geowissenschaftliche Abhandlungen (Reihe A, Geologie und Paläontologie) 24:1–29, 3 fig., 10 pl.
- Herzer, H. 1901. A new fossil sponge from the Coal Measures. Annual Report of the Ohio State Academy of Science 9:30–31.
- Hicks, H. 1869. Notes on a species of *Eophyton* (?) from the Lower Arenig rocks of St. Davids. The Geological Magazine 6:534–535.
- Hickson, S. J. 1911. On *Ceratopora*, the type of a new family of Alcyonaria. Proceedings of the Royal Society of London (series B) 84:195–200.
- Hill, Dorothy. 1972. Part E, Archaeocyatha. In Curt Teichert, ed., Treatise on Invertebrate Paleontology, Part E, revised, vol. 1. Geological Society of America & The University of Kansas Press. Boulder & Lawrence. xxx + 158 p., 107 fig.
- Hilmer, Gero, & B. Senowbari-Daryan. 1986. Sphinctozoa aus dem Cenoman von Mühlheim-Broich, SW-Westfalen. Mitteilungen aus dem Geologisch-Paläontologischen Institut der Universität Hamburg 61:161–187, 8 pl.
- Hinde, G. J. 1875. [untitled abstract]. Proceedings of the Geological Society of London, Quarterly Journal 31:88.
- . 1882. Notes on fossil Calcispongiae, with descriptions of new species. Annals and Magazine of Natural History 10:185–205, pl. 10–12.
- . 1884a [1883]. Catalogue of the fossil sponges in the Geological Department of the British Museum (Natural History). British Museum (Natural History). London. p. viii + 248 p., 38 pl.
- . 1884b. On fossil calcisponges from the well-boring at Richmond. Quarterly Journal of the Geological Society of London 40:778–783, pl. 35.
- . 1885. On beds of sponge-remains in the Lower and Upper Greensand of the South of England. Philosophical Transactions of the Royal Society, London 1885:403–453, pl. 40–45.
- . 1887a. On the genus *Hindia* Duncan, and the name of a typical species (*fibrosa*) Roemer. Annals and Magazine of Natural History (series 5) 19:67–79.
- . 1887b. A monograph of the British fossil sponges, part 1. Palaeontographical Society Monograph. London. p. 1–92, pl. 1–8.
- . 1888. A monograph of the British fossil sponges, part 2, Sponges of the Palaeozoic Group. Palaeontographical Society Monograph. London. p. 93–188, pl. 9.
- . 1889a. On a new genus of siliceous sponge from the Trenton Formation at Ottawa. Canadian Record of Science 3:395–398.
- . 1889b. On *Archaeocyathus* Billings, and on other genera, allied to or associated with it, from the Cambrian strata of North America, Spain, Sardinia, and Scotland. Quarterly Journal of the Geological Association of London 45:125–148, pl. 5.
- . 1890. On a new genus of siliceous sponge from the lower Calcareous Grit of Yorkshire. Quarterly Journal of the Geological Society of London 46:54–61, pl. 6.
- . 1891. Notes on a new fossil sponge from the Utica Shale formation (Ordovician) at Ottawa, Canada. Geological Magazine (new series, decade III) 8:22–24, 1 fig.
- . 1893a. On *Palaeosaccus dawsoni* Hinde, a new genus and species of hexactinellid sponge from the Quebec Group (Ordovician) at Little Métis, Quebec, Canada. Geological Magazine (new series, decade III) 10(1):56–59, pl. 4.
- . 1893b. A monograph of the British fossil sponges, part 3, Sponges of Jurassic strata. Palaeontographical Society Monograph. London. p. 189–254, pl. 10–19.
- . 1900. On some remarkable calcisponges from the Eocene Strata of Victoria, Australia. Quarterly Journal of the Geological Society (London) 56:50–66, pl. 3–5.
- . 1904. On the structure and affinities of the genus *Porosphaera* Steinmann. Journal of the Royal Microscopical Society 1904:1–25, 2 pl.
- . 1912. A monograph of the British fossil sponges, Index. Palaeontographical Society Monograph. London. p. 255–265.
- Hinde, G. J., & W. M. Holmes. 1892 [1891]. On the sponge-remains in the Lower Tertiary strata near Oamaru, Otago, New Zealand. The Journal of the Linnean Society, Zoology 24:177–262, pl. 7–15.
- Howell, B. F. 1952. Four new Devonian sponges from Western Australia. Bulletin of the Wagner Free Institute of Science 27(1):1–8, 3 pl.
- . 1956. New Permian sponges from Western Australia. Bulletin of the Wagner Free Institute of Science 31(4):29–38, 3 pl.
- . 1957a. A new Devonian sponge, *Striatospongia cylindrica*, from Western Australia. Bulletin of the Wagner Free Institute of Science 32(1):1–3, 1 pl.
- . 1957b. Four new Cretaceous sponges from Texas. Bulletin of the Wagner Free Institute of Science 32(1):4–10, 2 pl.
- . 1957c. The Australian Devonian sponge, *Devonospongia clarkei* (de Koninck). Bulletin of the Wagner Free Institute of Science 32(2):13–16, 1 pl.

- Howell, B. F., & F. B. van Houten. 1940. A new sponge from the Cambrian of Wyoming. *Bulletin of the Wagner Free Institute of Science* 15(1):1–8, 3 pl.
- Howell, B. F., & R. W. Landes. 1936. New monactinellid sponges from the Ordovician of Wisconsin. *Journal of Paleontology* 10:53–59.
- Hozawa, S. 1923. On a new genus of calcareous sponge. *Annotationes Zoologicae Japonense*, Tokyo (Article 18) 10:183–190, 1 pl.
- Hudson, R. G. S. 1929. A Carboniferous lagoon deposit with sponges. *Proceedings of the Yorkshire Geological Society* 21:181–195, pl. 6.
- Hughes, G. W. 1985. *Silicosphaera asteroderma* (Porifera), a new siliceous microfossil from the South China Sea. *Neues Jahrbuch für Geologie und Paläontologie, Monatshefte* 10:599–604, 3 fig.
- Hunt, O. D. 1925. The food of the bottom fauna of the Plymouth fishing grounds. *Marine Biological Association Journal, Plymouth* 1925:568.
- Hurcewicz, Helena. 1966. Siliceous sponges from the Upper Cretaceous of Poland. Part 1. Tetraxonia. *Acta Palaeontologica Polonica* 11:15–129, 38 fig., 24 pl.
- . 1975. Calcispongea from the Jurassic of Poland. *Acta Palaeontologica Polonica* 20:223–291, 32 fig., pl. 29–41.
- . 1983 [1982]. Permian sponges from brachiopod cherts at Hornsund, Spitzbergen. *Acta Palaeontologica Polonica* 27:85–114, pl. 30–40.
- . 1985. [Frasnian sponges from Wietrznia and Kowala, Góry Swietokrzyskie Mts.]. *Kwartalnik Geologiczny* 29:271–300, 6 pl. English summary, p. 288.
- . 1986. *Astylospongia* Roemer (Porifera) from the Givetian at Gorno (Poland). *Przegląd Geologiczny* 34(2):89–91.
- . 1993. Sponge spicules from the Middle and Upper Devonian of the Holy Cross Mts., and Silesian uplands. *Acta Palaeontologica Polonica* 37(1,992):291–296.
- Hurcewicz, H., & S. Czarniecki. 1986. Lyssakidae sponges from the Carboniferous limestone and the Culm of southern Poland and their environmental differentiation. *Annales Societatis Geologorum Poloniae* 55:333–354, fig. 1–18, pl. I–IX.
- Hyman, L. H. 1925. Respiratory differences along the axis of the sponge *Grantia*. *Biological Bulletin* 48:379–389.
- . 1940. *The Invertebrates: Protozoa through Ctenophora*. McGraw-Hill. New York. 726 p.
- ICZN (International Commission on Zoological Nomenclature). 1999. *International Code of Zoological Nomenclature*, 4th ed. The International Trust for Zoological Nomenclature. London. xxix + 306 p.
- Ijima, Isao. 1903. Studies on the Hexactinellida, III (*Placosoma*, a new euplectellid; *Leucopsacidae* and *Caulophacidae*). Imperial University of Tokyo, *Journal of the Science College Tokyo* 18(1):124 p., 8 pl.
- . 1904. Studies on the Hexactinellida, IV, Rossellidae. Imperial University of Tokyo, *Journal of Science College* 18(7):307 p., 23 pl.
- . 1927 [1926]. The Hexactinellida of the Siboga Expedition. *Siboga-Expeditie* 6:1–383, 36 fig., 26 pl.
- Inai, Yutaka. 1936. *Discosiphonella*, a new ally of *Amblysiphonella*. *Proceedings of the Imperial Academy of Japan* 12(6):169–171, 4 fig.
- Jablonsky, E. 1975. *Colospongia andrusovi* n. sp., eine neue Art von segmentierten Kalkschwämmen (Sphinctozoa). *Geolicky Zbornik-Geologica Carpathica Slovenska Akademie Ved* 26(2):269–273, pl. 1–3.
- Jackson, J. B. C., T. F. Goreau, & W. D. Hartman. 1971. Recent brachiopod-coralline sponge communities and their paleoecological significance. *Science* 173:623–625, 2 fig.
- Jakowska, S., & R. F. Nigrelli. 1960. Antimicrobial substances from sponges. *Annals of the New York Academy of Sciences* 90:913–916.
- Jansa, L. F., G. Termier, & H. Termier. 1983. Les biohermes à algues, spongiaires et coraux des séries carbonatées de la flexure bordière du "paleoshelf" au large du Canada oriental. *Revue de Micropaleontologie* 25:181–219, 13 pl.
- Jepps, M. W. 1947. Contribution to the study of the sponges. *Proceedings of the Royal Society of London* 134B(896):408–417, 5 fig.
- Jeuniaux, C. 1963. Distribution in chitin in animals (Protozoa, Porifera, Cnidaria, Rhynchocoela, Acanthocephala, Aschelminthes, Sipunculoidea, Mollusca, Annelida, Crustacea, Insecta, Echinodermata). *Proceedings of the 16<sup>th</sup> International Congress of Zoology* 16(2):78.
- Johns, R. A. 1994. Ordovician lithistid sponges of the Great Basin. Nevada Bureau of Mines and Geology, NBMG Open-file Report 94-1:vi + 140 p., 16 fig., 16 pl.
- Johnson, J. E. 1899. Notes on some sponges belonging to the Clionidae obtained at Madeira. *Journal of the Royal Microscopical Society* 1899:461–463.
- Johnston, G. 1842. *History of British sponges and lithophytes*. Edinburgh. vii + 1–264 p., 25 pl.
- Jones, W. C. 1957. The contractility and healing behaviour of pieces of *Leucosolenia complicata*. *Quarterly Journal of Microscopical Science* 98:302–217.
- . 1962. Is there a nervous system in sponges? *Biological Reviews* 37:1–50, 4 fig.
- . 1964. Photographic records of living oscular tubes of *Leucosolenia variabilis*. I. The choanoderm boundary, the choanocytes and the pore arrangement. *Journal of the Marine Biological Association, United Kingdom* 44:67–85, 3 pl., 2 fig.
- Jørgensen, C. B. 1955. Quantitative aspects of filter feeding in invertebrates. *Biological Revue* 30:391–454.
- . 1960. Efficiency of particle retention and rate of water transport in undisturbed lamellibranchs. *Journal du Conseil International pour l'Exploration de la Mer* 26:94–116, 12 fig.

- . 1966. Biology of suspension feeding. Pergamon Press. Oxford. i–xv + 1–845, 660 fig.
- Jux, Ulrich. 1992. Schwämme aus dem obersten Mitteldevon der Bergisch Gladbach-Paffrather Mulde (Bergisches Land). *Decheniana* 145:302–311, 3 pl.
- . 1994. *Schizorhabdus libycus* Zittel, 1877—a lithistid sponge from the late Maastrichtian of Egypt. *Courier Forschungs-institut Senckenberg* 172:299–306, 3 fig.
- Kapp, U. S. 1975. Paleocology of Middle Ordovician stromatoporoid mounds in Vermont. *Lethaia* 8:195–207, 3 fig., 6 pl.
- Kaye, H. R. 1990. Reproduction in West Indian commercial sponges: oogenesis, larval development, and behavior. In Klaus Rützler, ed., *New Perspectives in Sponge Biology*. Smithsonian Institution Press. Washington, D.C. p. 161–169.
- Kaysers, E. 1885. *Lodanella mire*, ein unterdevonische Spongie. *Zeitschrift der Deutschen Geologischen Gesellschaft* 37:207–213.
- Kazmierczak, J. 1984. Favositid tabulates: evidences for poriferan affinity. *Science* 225:835–837.
- . 1991. Further evidence for poriferan affinities of favositids. In J. Reitner & H. Keupp, eds., *Fossil and Recent Sponges*. Springer-Verlag. Berlin. p. 212–223.
- van Kempen, T. M. G. 1977. *Roepella solanensis*, new sponge from the mid-Tertiary of S.E. Spain; First fossil of a gymeniacionid, with remarks on other fossilized sponges with monaxonid megascleres. *Proceedings Koninklijke Nederlandse Akademie van Wetenschappen (series B, Palaeontology, Geology, Physics, and Chemistry)* 80(2):106–131.
- . 1978. Anthaspidellid sponges from the Early Paleozoic of Europe and Australia. *Neues Jahrbuch für Geologie und Paläontologie, Abhandlungen* 156(3):305–337, 7 fig.
- . 1989. On a new anthaspidellid sponge from the Baltic Early Paleozoic. *Mitteilungen aus dem Geologisch-Paläontologischen Institut der Universität Hamburg* 68:131–157, fig. 1–2, pl. 1–5.
- . 1990. Two Baltic Ordovician chlastoclonellids (Porifera) from the island of Sylt (NW Germany). In Ulrich von Hacht, ed., *Fossilien von Sylt III*. Inge-Maria von Hacht, Verlag und Verlagsbuchhandlung. Hamburg. p. 151–178, 9 fig.
- Kent, W. S. 1870. On the “Hexactinellidae” or hexaradiate spiculed siliceous sponges taken in the “Norna” expedition off the coast of Spain and Portugal. *Monthly Microscopical Journal* 4:241–252.
- Keupp, Helmut, & Dorte Mehl. 1994. *Ammonella quadrata* Walther 1904 (Porifera, Hexactinellida) aus dem solnhofener Plattenkalk von Pfalzpaint: Relikt aus dem Altpaläozoikum? *Archaeopteryx* 12:45–54, 3 fig.
- . 1995. *Ammonella quadrata* Walther, 1904 (Porifera, Hexactinellida) of the Solnhofen Plattenkalks: Systematics and environmental deductions. *Extended Abstracts, II International Symposium on Lithographic Limestones*. Ediciones de la Universidad Autonoma de Madrid. Madrid. p. 93–94, 1 fig.
- Khorshunov [also Korshunov], V. I. 1968. *Gonamispungia*, novily rod gubok seneystva Chancelloriidae [Gonamispungia, a new genus of the family Chancelloriidae]. *Paleontologicheskii Zhurnal* 3:127–129, 1 fig. English translation in *Palaeontological Journal* 1968(3):398–400, 1 fig.
- Kilian, E. F. 1952. Wasserströmung und Nahrungsanfrage beim Süßwasserschwamm *Ephydatia fluviatilis*. *Zeitschrift für Vergleichende Physiologie* 34(5):407–447, 24 fig.
- . 1964. Zur Biologie der einheimischen Spongilliden Ergebniss und Probleme. Unter besonderer Berücksichtigung eigener Untersuchungen. *Zoologische Beiträge* 10:85–159, 16 fig.
- King, R. H. 1933. A Pennsylvanian sponge fauna from Wise County, Texas. *The University of Texas Bulletin* 3,201:75–85, pl. 7–8.
- . 1938. Pennsylvanian sponges of north-central Texas. *Journal of Paleontology* 12:498–504, 14 fig.
- . 1943. New Carboniferous and Permian sponges. *State Geological Survey of Kansas Bulletin* 47:1–36, 2 fig., pl. 1–3.
- King, W. 1850. A monograph of the Permian fossils of England. *Palaeontographical Society*. London. p. 11–14, fig. 1–7, pl. 2.
- Kirkpatrick, R. 1900. Description of sponges from Funafuti. *Annals of Natural History* 7:345–362, pl. 13–15.
- . 1908. On two new genera of recent pharetronid sponges. *Annals and Magazine of Natural History (series 8)* 12:503–514, pl. 13–15.
- . 1910a. On a remarkable pharetronid sponge from Christmas Island. *Proceedings of the Royal Society of London (series B)* 83:124–133, pl. 10–11.
- . 1910b. On the affinities of *Astrosclera willeyana* Lister. *Annals and Magazine of Natural History (series 8)* 5:380–383.
- . 1912. *Merlia normani* and its relation to certain Palaeozoic fossils. *Nature* 89:502–503.
- Kling, S. A., & W.-E. Reif. 1969. The Paleozoic history of amphiidisc and hemidisc sponges: new evidence from the Carboniferous of Uruguay. *Journal of Paleontology* 43:1,429–1,434, 1 fig., pl. 176.
- Klipstein, A. von. 1843–1845. *Beiträge zur geologischen Kenntnis der östlichen Alpen*. Georg Friedrich Heyer’s Verlag. Giessen. 311 p., 20 pl.
- Kobluk, D. R. 1981a. Lower Cambrian cavity-dwelling endolithic (boring) sponges. *Canadian Journal of Earth Sciences* 18:972–980.
- . 1981b. Middle Ordovician (Chazy Group) cavity-dwelling boring sponges. *Canadian Journal of Earth Sciences* 18:1,101–1,108.
- Koenig, C. D. E. 1820. *Icones fossilium sectilis, centuria prima*. C. Koenig. London. 4 p., 19 pl.
- Kolb, Rudolf. 1910–1911. Die Kieselspongien des schwäbischen Weissen Jura. *Palaeontographica* 57:141–256, fig. 1–27, pl. 11–21.



- Koltun, V. M. 1964. Sponges of the Antarctic. 1. Tetraxonida and Cornucospongida. *In* Biological results of the Soviet Antarctic Expedition (1955–1958). Issledovaniya Fauny Morei 2:6–131, 25 fig., 15 pl.
- de Koninck, L. G. 1842–1844. Description des animaux fossiles, qui se trouvent dans le terrain carbonifère de Belgique, vol. I–II. H. Dessain. Liège. iv + 650 p., pl. A–H + 1–53. Volume I contains plates, volume II contains text.
- . 1877. Recherches sur les fossiles paléozoïques de la Nouvelle-Galles du Sud (Australie). Mémoires de la Société Royale des Sciences de Liège (series 2) 6:1–135.
- Korshunov, V. I. 1968. *Gonamispungia*, noviy rod gubok seneystva Chancelloriidae [*Gonamispungia*, a new genus of the family Chancelloriidae]. Paleontologicheskii Zhurnal 3:127–129, 1 fig. English translation in *Palaeontological Journal* 1968(3):398–400, 1 fig.
- Kovács, Sándor. 1978. New siphonozoan sponges from the North Hungarian Triassic. Neues Jahrbuch für Geologie und Paläontologie, Monatshefte 1978:685–697, 6 fig.
- Kozur, H. W. 1991. Erster Nachweis von Polyactinellidae Mostler (Calcispongia, Porifera) im Perm und Revision der Gattung *Phobettractinia* Reif. Zeitschrift für Geologische Wissenschaften 19(5):585–591, 2 fig.
- Kozur, H. W., H. Mostler, & J. E. Repetski. 1996. ‘Modern’ siliceous sponges from the lowermost Ordovician (early Ibexian–early Tremadocian) Windfall Formation of the Antelope Range, Eureka County, Nevada, USA. Geologische-Paläontologische Mitteilungen, Innsbruck 21:201–221, 1 fig., 5 pl.
- Krainer, Karl, & Helfried Mostler. 1992. Neue Hexactinellide Poriferen aus der Südalpinen Mitteltrias der Karawanken (Kärnten, Österreich). Geologische-Paläontologische Mitteilungen, Innsbruck 18:131–150, 7 pl.
- Krasnopeeva, P. S. 1937. Vodorosli i arkhheotsiatty drevneishikh tolschch potekhiinskogo plansheta Khakassi [Algae and Archaeocyatha of the most ancient strata on Potekhin’s topographic map for the Khakass Autonomous Region]. Materialy po Geologii Krasnoyarskogo Kraya 3:1–51.
- . 1940 [1939]. Al’gonskaya flora i fauna Saralinskogo raiona Kuznetskogo Alatau [Algonkian (pre-Cambrian) flora and fauna of the Saralinsky region of the Kuznetsky Ala Tau]. Materialy po Geologii Krasnoyarskogo Kraya 8:1–32.
- . 1962. *Occultus* (new name for *Archaeospongia* Krasnopeeva, 1937). *In* P. D. Rezvoi, I. T. Zhuravleva, & V. M. Koltun, Phylum Porifera, p. 17–74, fig. 1–107. *In* B. S. Sokolov, ed., *Osnovy Paleontologii* [Fundamentals of Paleontology], vol. 1, number 2, Porifera, Archaeocyatha, Coelenterata, Vermes. Izdatel’stvo Akademii Nauk SSSR. Moscow. p. 58.
- 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: Biology, Chemistry, Paleontology*. A. A. Balkema. Rotterdam. p. 29–34, 12 fig.
- . 1996. Kieselschwämme aus dem unterjurassischen Misonekalk der Trento-Plattform (Südalpen): Taxonomie und phylogenetische Relevanz. *Paläontologische Zeitschrift* 70(3–4):301–313, 6 fig.
- Krautter, M., K. W. Conway, J. V. Barrie, and M. Neuweller. 2001. Discovery of a “living dinosaur:” globally unique modern hexactinellid sponge reefs off British Columbia, Canada. *FACIES* 44:265–282, 10 fig., pl. 42–45.
- Kravtsov, A. G. 1968. Maastrichtian spiral sponges of the Crimean Highlands. *Paleontologicheskii Zhurnal* 1968(3):124–127, 2 fig. Translated in *Paleontological Journal* 3:401–404.
- Kruse, P. D. 1983. Middle Cambrian ‘*Archaeocyathus*’ from the Georgina Basin is an anathspidellid sponge. *Alcheringa* 7:49–58, fig. 1–6.
- . 1987. Further Australian Cambrian siphonozoans. *Geological Magazine* 124:543–553, 3 fig.
- . 1990. Cambrian palaeontology of the Daly Basin. Northern Territory Geological Survey Report 7:1–58, 23 fig., 27 pl.
- Kruse, P. D., & F. Debrenne. 1989. Review of archaeocyath microstructure. *Memoirs of the Association of Australasian Palaeontologists* 8:133–141.
- Kucera, M. 1993. Sponge spicules from the Lower Devonian (Pragian) of the Barrandian. *Journal of the Czech Geological Society* 38(3–4):193–200.
- Kügel, H.-W. 1987. Siphonozoen aus dem Auernigsschichten des Nassfeldes (Oberkarbon, Karnische Alpen, Österreich). *Facies* 16:143–156, pl. 33–35.
- Lachasse, Jacques. 1943. Contribution à l’étude des spongiaires fossiles du Campanien des Charentes. *Bulletin de la Société géologique de France* 1943:43–66, 2 pl.
- Lagneau-Hérengrer, Lucette. 1955. Remarques sur la classification des spongiaires fossiles et essai de nouvelle classification. *Comptes Rendus de l’Académie des Sciences, Paris* 240:1,563–1,564.
- . 1961. Contribution à l’étude des Spongiaires siliceux du Crétacé inférieur. *Comptes Rendus de la Société Géologique de France* 6:168–169.
- . 1962. Contribution à l’étude des Spongiaires siliceux du Crétacé inférieur. *Mémoires de la Société Géologique de France (new series)* 95:252 p., 30 fig., 16 pl., 7 tables.
- . 1967. Les Spongiaires Turoniens du Synclinal d’Eygalières (Baronnies, Drôme). *Travaux du Laboratoire de Géologie de la Faculté des Sciences de l’Université de Grenoble* 43:79–93, 3 pl.
- de Lamarck, J. P. B. A. 1815 [1814]. Suite des Polypiers empâtés: Téthies, Alcyon, Géodie, Botrylle, et Polycycle (dont l’exposition commence au 20ième vol. des Annales, p. 294). *Mémoires du Muséum d’Histoire naturelle, Paris* 1:69–80, 162–168, 331–340.

- . 1816a. Histoire des polypiers coralligènes flexibles, vulgairement nommés Zoophytes. F. Poisson. Caen. 560 p., 19 pl.
- . 1816b. Histoire naturelles des animaux sans vertèbres, présentant les caractères généraux et particuliers de ces animaux, vol. 2. Verdière. Paris. p. 1–586.
- Lamont, Archie. 1935. The Drummuck Group, Girvan; a stratigraphical revision, with descriptions of new fossils from the lower part of the group. Transactions of the Geological Society of Glasgow 19(2):288–332, 4 fig., pl. 7–8.
- Lamouroux, J. V. F. 1813. Dictionnaire Classique. Annales du Muséum National d'Histoire Naturelle, Paris 20(1):285.
- . 1816. Histoire des polypiers coralligènes flexibles, vulgairement nommés Zoophytes. F. Poisson. Caen. 560 p., 19 pl.
- . 1821. Exposition méthodique des genres de l'ordre des Polypiers, des Zoophytes d'ellis et Solander. Chez Mme. Veuve Agasse. Paris. 115 p., 84 pl.
- . 1822. Dictionnaire classique d'histoire naturelle, par Messieurs J. V. Audouin, Barron et Bory de Saint-Vincent, vol. I–IV. Lamouroux et Cie. Bourda. 450 p.
- Lang, B. 1985. Die ersten Sphinctozoen (segmentierte Kalkschwamme) aus dem Ober-Jura der Frankenalb (Suddeutschland). Mitteilungen Bayerische Staatssammlung für Paläontologie und Historische Geologie 25:3–15.
- Laube, G. C. 1864. Bemerkungen über die Münsterschen Arten von St. Casian. Jahrbuch für Koenigliche Geologischen Reichs-Anstalt, vol. 14. Wien. p. 402–412.
- . 1865. Die Fauna der Schichten von St. Cassian. Ein Beitrag zur Paläontologie der alpinen Trias, I Abtheilung. Spongitarier, Corallen, Echiniden und Crinoiden. Denkschriften der Kaiserlichen Akademie der Wissenschaften, Mathematisch-naturwissenschaftliche Klasse 24:223–296, 10 pl.
- de Laubenfels, M. W. 1932a. The marine and freshwater sponges of California. Proceedings of the U.S. National Museum, Washington, D.C. 81(4):1–140, 79 fig.
- . 1932b. Physiology and morphology of Porifera exemplified by *Iotrochia birotulata* Higgin. Carnegie Institution of Washington Publication 435:37–66, 6 fig., 2 pl.
- . 1934. New sponges from the Puerto Rican deep. Smithsonian Museum Miscellaneous Collections 91(17):1–28.
- . 1936. A discussion of the sponge fauna of the Dry Tortugas in particular, and the West Indies in general, with material for revision of the families and orders of the Porifera. Carnegie Institution of Washington Publication 467:iii + 1–225, 22 pl., 1 map.  
Also published as Papers from Tortugas Laboratory, vol. 30, 225 p., 22 pl.
- . 1947. *Monarchopemmatites*, a new genus name for a fossil sponge. Journal of Paleontology 21:187.
- . 1950. An ecological discussion of the sponges of Bermuda. Transactions of the Zoological Society of London 27:155–201, 4 fig.
- . 1953a. Sponges of the Gulf of Mexico. Bulletin of Marine Science of the Gulf and Caribbean 2(3):511–557, 17 fig.
- . 1953b. Fossil sponges of West Australia. Journal of the Royal Society of Western Australia 37:105–117, 8 fig.
- . 1954. The sponges of the west-central Pacific. Oregon State Monographs, Studies in Zoology 7:306 p., 12 pl.
- . 1955. Porifera. In R. C. Moore, ed., Treatise on Invertebrate Paleontology, Part E, Archaeocyatha and Porifera. Geological Society of America & The University of Kansas Press. New York & Lawrence. p. 21–112, fig. 14–89.
- . 1957. New species and records of Hawaiian sponges. Pacific Science 11:236–251, 15 fig.
- . 1958. Nomenclature of Porifera, especially concerning the so-called “Glass-sponges” or Hyalosponges. Journal of Paleontology 32:611–616.
- Lecompte, Marius. 1936. Contribution à la connaissance des “Recifs” du Frasnien de l'Ardenne. Mémoires de l'Institut Geologique, Université de Louvain 10:93–97, sponges.
- . 1956. Stromatoporoidea. In R. C. Moore, ed., Treatise on Invertebrate Paleontology, Part F, Coelenterata. Geological Society of America & The University of Kansas Press. New York & Lawrence. p. 107–144, fig. 87–114.
- Lees, J. H., & A. O. Thomas. 1919. The Ste. Genevieve marls near Fort Dodge and their fauna. Des Moines Proceedings of the Iowa Academy of Science 25:599–616, pl. 12.
- Leidy, J. 1851. *Spongilla fragilis*. Proceedings of the Academy of Natural Sciences of Philadelphia 5:278.
- . 1868. Description of a new sponge: *Phaeronema Annae*. Proceedings of the Academy of Natural Sciences of Philadelphia 1868:9–11.
- Lejal-Nicol, A. 1976. *Platyphyllum* sp. In C. Babin, D. Goujet, H. Lardeux, A. Lejal-Nicol, F. Lethiers, P. Morzadec, Y. Plusquellec, & M. Weyant, eds., La Formation des Schistes de Porsguen (Dévonien supérieur de la rade de Brest, Massif Armoricain), Lithologie, flore, faune. Annales de la Société géologique du Nord 96(4):341.
- von Lendenfeld, Robert. 1887. On the systematic position and classification of sponges. Zoological Society of London Proceedings 1886:558–662.
- . 1888. Descriptive catalogue of the sponges in the Australian Museum, Sydney. The Australian Museum. Taylor and Francis. London. 260 p., 12 pl.
- . 1889a. A monograph of the horny sponges. Royal Society of London. Trübner and Co. London. 936 p., 50 pl.
- . 1889b. Die Gattung *Stelletta*. Abhandlungen der Königlich Akademie der Wissenschaften zu Berlin (Anh.) 2:75 p.

- . 1889c. Das System der Spongien. *Biologisches Centralblatt* 9(4):113–127.
- . 1903. *Tetragonina: Das Tierreich*. Königliche Preussische Akademie der Wissenschaften, Berlin 19:xv + 168 p.
- . 1904a. Über die Herstellung von Nadelpräparaten von Kieselchwämmen. *Zeitschrift für Wissenschaftliche Mikroskopie und für Mikroskopische Technik* 21:23–24.
- . 1904b. Über die deszendenztheoretische Bedeutung der Spongia. *Biologisches Centralblatt* 24:635–636.
- . 1904c. Porifera. *Tetragonina*. In F. E. Schulze, ed., *Das Tierreich*, vol. 19. Frieländer. Berlin. p. vi-xv, 1–168, 44 fig.
- . 1907. Die *Tetragonina*. *Wissenschaftliche Ergebnisse der Deutschen Tiefsee-Expedition auf dem Dampfer "Valdivia" 1898–1899*, vol. 11, lf. 2. Gustav Fischer. Jena. 373 p., 38 pl.
- . 1910. The sponges. 1. The Geodidae. Reports on the Scientific results the expedition to the Eastern Tropical Pacific, in charge of Alexander Agassiz, by the U.S. Fish Commission Steamer "Albatross," from October 1904 to March 1905, Lieut.-Commander L. M. Garrett, U.S.N., Commanding, and of other expeditions of the "Albatross," 1888–1904. No. 21, *Museum of Comparative Zoology*, Harvard College, *Memoir* 41(1):1–259, pl. 1–48.
- . 1915. Reports on the scientific results of the expedition to the Eastern Tropical Pacific in charge of Alexander Agassiz, by the U.S. Fish Commission Steamer "Albatross," from October 1904 to March 1905, Lieut.-Commander L. M. Garrett U. S. N., Commanding, and of other expeditions of the "Albatross" 1891–1899, no. 29, The Sponges, 3: Hexactinellida. *Museum of Comparative Zoology*, Harvard College *Memoir* 42:1–396 in 2 vol., 109 pl.
- Lentz, T. L. 1966. Histochemical localization of neurohumors in a sponge. *Journal of Experimental Zoology* 162:171–180.
- Leonhard, Richard. 1897. Die Fauna der Kreideformation in Oberschlesien. *Palaeontographica, Beitrage zur Naturgeschichte der Vorzeit*, Stuttgart 44:11–70, pl. 3–6.
- Lesquereux, Leo. 1884. Descriptions of the coal flora of the Carboniferous formations in Pennsylvania and throughout the United States. *Geological Survey of Pennsylvania, Second Report of Progress*. 977 p.
- Lévi, Claude. 1953. Sur une nouvelle classification des Démosponges. *Académie des Sciences (Paris), Comptes Rendus des séances* 236:853–855.
- . 1955. Les Clavaxinellides: demosponges retractinomorphes. *Archives de Zoologie Expérimentale et Générale* 92:78–87.
- . 1956. Étude de *Halisarca* de Roscoff. Embryologie et systématique des Démosponges. *Archives de Zoologie Expérimentale et Générale* 93:1–181, 62 fig.
- . 1957a. Spongiaires des côtes d'Israel. *Research Council of Israel Bulletin* 6B(3):201–212, 13 fig.
- . 1957b. Ontogeny and systematics in sponges. *Systematic Zoology* 6:174–183.
- . 1960. Les Spongiaires à desmas astéroïdes. *Bulletin de l'Institut Océanographique, Monaco* 1179:1–8.
- . 1964. Spongiaires des zones bathyale, abyssale et hadale. *Galathea Report* 7:63–112, 62 fig., 10 pl.
- . 1966. Le glycogène chez les Spongiaires. *Comptes Rendus des Séances, Société de Biologie* 160:651–652, 2 pl.
- . 1968. Spongiaires. Inventaire de la Faune marine de Roscoff. *Travaux de la Station biologique de Roscoff*. Robin & Mareuge. Paris. p. 1–28.
- . 1973. Systématique de la classe des Demospongiaria (Démosponges). In P.-P. Grassé, ed., *Traité de Zoologie*. II. Spongiaires. Masson et Cie. Paris. p. 37–631.
- Lewis, J. R. 1960. The fauna of the rocky shore of Barbados, West Indies. *Canadian Journal of Zoology* 38:391–435, 20 fig.
- . 1965a. A preliminary description of some marine benthic communities from Barbados, West Indies. *Canadian Journal of Zoology* 43(6):1049–1060.
- . 1965b. The ecology of rocky shores. *English University Press, Ltd. London*. p. i–xii, 1–323.
- . 1968. Water movements and their role in rocky shore ecology. *Sarsia* 34:13–36, 3 fig., 8 pl., 3 maps.
- Li Chia-Wei, Chen Jun-Yuan, & Hua Tzu-En. 1998. Precambrian sponges with cellular structures. *Science Magazine* 279:879–882.
- Liaci, L. 1963. Ricerche morfologiche e citochimiche sui tesociti de *Apatos apatos* O.S. (Demospongiae). *Atti, Societa Peloritana di Scienze Fisiche, Matematiche, e Naturali* 9:189–197, 3 fig., 1 pl.
- Librovich, L. S. 1929. *Uralonema karpinski* nov. gen., nov. sp. i drugie kremnevye gubki iz kamennougol'nykh otlozhenii vostochnogo sklona Urala [*Uralonema karpinskii* nov. gen. nov. sp. and other Silicispongia from the Carboniferous of the eastern slope of the Urals]. *Trudy Geologicheskogo Komiteta [Mémoire Committee Geology, new series]*, Leningrad 179:1–57, 1 fig., 3 pl. In Russian with English translation.
- Lieberkühn, N. 1856. Zusätze zur Entwicklungsgeschichte der Spongillen. *Müller Archiv* 1856:496–514.
- . 1859. Neue Beiträge zur Anatomie der Spongien. *Archiv für Anatomie, Physiologie und Wissenschaftliche Medicin* 1859:353–382, 515–529, pl. 9–11.
- Linck, G. 1883. Zwei neue Spongiengattungen. *Neues Jahrbuch für Mineralogie, Geologie und Palaeontologie* 2:59–62, pl. 2–3.
- von Linné, C. 1759. *Systema Naturae, Vegetabilia*, tome 2, 10th ed. Holmiae. Salvii. 1,384 p.
- . 1767. *Systema Naturae*, 12th ed., vol. 1–2. Holmiae. Salvii. 1,327 p.
- Lister, J. J. 1900. *Astrosclera willeyana*. The type of a new family of sponges. In A. Willey's *Zoological Results*, part 4. Cambridge University Press. Cambridge. p. 459–482, fig. 1–3, pl. 45–48.

- Little, F. J. 1963. The sponge fauna of the St. Georges sound, Apalachee Bay, and Panama City regions of the Florida gulf coast. *Tulane Studies in Zoology* 11:31–71.
- Liu, Bingli, J. K. Rigby, Jiang Yanwen, & Zhu Zhongde. 1997. Lower Ordovician lithistid sponges from the eastern Yangtze Gorge area, Hubei, China. *Journal of Paleontology* 71:194–207, 7 fig.
- Liu Bingli, J. K. Rigby, & Zhu Zhongde. 2003. Middle Ordovician lithistid sponges from the Bachu-Kalpin area, Xinjiang, northwestern China. *Journal of Paleontology* 77:430–441, 6 fig.
- Lonsdale, W. 1849. Notes on fossil zoophytes found in the deposits described by Dr. Fitton in his memoir entitled "A Stratigraphical Account of the Section from Atherfield to Rocken End." *The Quarterly Journal of the Geological Society of London* 5:55–103, pl. 4–5.
- Low, E. M. 1951. Halogenated amino acids of the bath sponge. *Journal of Marine Research* 10:239–245, 1 fig.
- Lowenstam, H. A. 1948. Biostratigraphic studies of the Niagaran inter-reef formation in northeastern Illinois. *Illinois State Museum Scientific Papers* 4:1–146, pl. 1–7.
- . 1957. Chapter 10. Niagaran reefs in the Great Lakes area. In H. S. Ladd, ed., *Treatise on Marine Ecology and Paleocology*, volume 2, Paleocology. Geological Society of America Memoir 67:215–248, 4 fig.
- Lutfy, R. G. 1960. Histochemical studies on glycogen in the cells of the freshwater sponge *Ephydatia fluviatilis*. *Cellule* 61:145–149, 1 pl.
- MacGinitie, G. E., & N. MacGinitie. 1968. *Natural History of Marine Animals*. McGraw-Hill Book Company. New York, Toronto, London. 523 p., 286 fig.
- Madri, P. P., G. Claus, S. M. Kunen, & E. E. Moss. 1967. Preliminary studies on the *Escherichia coli* uptake of the redbear sponge (*Microcionia prolifera* Verrill). *Life Sciences* 6:889–894, 1 fig.
- Mägdefrau, Karl. 1932. Über einig Bohrgänge aus dem unteren Muschelkalk von Jena. *Paläontologisches Zeitschrift* 14:513–523.
- . 1933. Zur Entstehung der mitteldeutscher Zechstein-Riffe. *Centralblatt für Mineralogie, Geologie, und Paläontologie (Abt. B)* 11:621–624.
- Maithy, P. K., & R. Babu. 1987 (1986). *Misraea*, a new body fossil from the Lower Vindhyan supergroup (Late Precambrian) around Chopan, Mirzapur, U.P. (India). *Geophytology* 16(2):223–226.
- Makiyama, Jirō. 1931. Stratigraphy of the Kakegawa Pliocene in Tōtōmi. *Memoirs of the College of Science, Kyoto Imperial University (series B)* 7(1):1–52, 4 fig., 3 pl.
- Maldonado, M. 2002. Family Pachastrellidae Carter, 1875. In J. N. A. Hooper & R. W. M. van Soest, eds., *Systema Porifera: A Guide to the Classification of the Sponges*. Kluwer Academic/Plenum Publishers. New York. p. 141–162, 16 fig.
- Malecki, Jerzy. 1996. Die Gattungen *Hyalotragos*, *Aretotragos*, *Pyrgochonia* und *Leiocareus* (Demospongia, Rhizomorina) nach dem Material aus dem Weissen Jura von Zalas. *Bulletin of the Polish Academy of Sciences, Earth Sciences* 44(1):1–16, 9 pl.
- Malfatti, Paolo. 1901 [1900]. Contributo alla spongiofauna del cenozoico italiano. *Palaeontographia Italica, Memorie di Paleontologia* 6:267–302, pl. 20–25.
- Mantell, G. A. 1815. Description of a fossil *Alcyonium* from the Chalk strata of Lewes. *Transactions of the Linnéan Society* 11:401–402.
- . 1822. The fossils of the South Downs or illustrations of the Geology of Sussex. Lupton Relfe. London. 327 p., 42 pl.
- . 1838. *The Wonders of Geology, or, a familiar exposition of geological phenomena*, 2 vol. Relfe and Fletcher. London. 689 p., 6 leaves of plates.
- Manteufel, B. P. 1938. Kratkaya Khasakteristika osnovnih Zakonomesnostei Izmennykh plantona Barentseva Morya [A brief characterization of the principal irregularities in the changes of plankton in the Barents Sea]. *Trudy Polyarny Nauchno-Issledovatel'skii Proektnyi Institut Morskogo Rybnogo Khozyajstve i Okeanografii imeni, N. M. Knipovicha (PINRO)* 1:134–148, fig. 1–8.
- Marek, Jaroslav. 1984 [1982]. *Runia runica* ichnogen. et ichnosp. nov., a new sponge boring from the Silurian of Bohemia. *Acta Universitatis Carolinae (Geologica)* 1982(4):401–408, 2 pl.
- Marsh, O. C. 1867. Notice of a new genus of fossil sponge from the lower Silurian. *American Journal of Science and Arts (series 2)* 44(no. 30, article 11):88.
- Marshall, W. 1875. Untersuchungen über Hexactinelliden. *Zeitschrift für Wissenschaftliche Zoologie, Leipzig* 27:142–243.
- . 1876. Ideen über die Verwandtschaftsverhältnisse der Hexactinelliden. *Zeitschrift für Wissenschaftliche Zoologie, Leipzig* 27:113–136.
- Marshall, W., & A. B. Meyer. 1879. Über einige Neues und wenig bekannte Philippinische Hexactinelliden. *Mitteilungen aus dem kaiserliche zoologischen Museum zu Dresden* 2:261.
- Martin-Wismar, K. 1878a. Untersuchungen über die Organization von *Astylospongia* Ferd. Roemer, und Bemerkungen über die Natur der Wallsteine, Meyn. *Archiv des Vereins der Freunde der Naturgeschichte in Mecklenburg* 31:1–32.
- . 1878b. Niederländische und nordwestdeutsche Sedimentärgeshiebe, ihre Uebereinstimmung, gemeinschaftliche Herkunft und Petrefacten. (*Silurispongia* n. g.). Leiden.
- Masse, D., & D. Vachard. 1979. Le Carbonifère de Libye occidentale: biostratigraphie et micropaléontologie. Position dans le domaine téthysien d'Afrique du Nord. *Revue de l'Institut Français du Pétrole* 34(1):3–65, fig. 1–19, pl. 1–9.
- Masse, P. J. L., G. Termier, & H. Termier. 1989. Nouvelles formes de Spongiaires dans l'Albien de la Sainte-Baume (Provence, France). *Geobios* 22(6):825–839, 6 fig., 4 pl.
- Mastandrea, A., & F. Russo. 1995. Microstructure and diagenesis of calcified demosponges from the Upper Triassic of Northeastern Dolomites (Italy). *Journal of Paleontology* 69:416–431.

- Matsuoka, Keiji. 1983. Pleistocene freshwater sponges (Porifera: Spongillidae) from the Katata Formation of the Kobiwako Group, Shiga Prefecture, Central Japan. *The Journal of Earth Sciences, Nagoya University* 31:1–16, 6 fig., 3 pl.
- . 1987. Malacofaunal succession in Pliocene to Pleistocene non-marine sediments in the Omi and Ueno Basins, Central Japan. *The Journal of Earth Sciences (Nagoya University)* 35(1):23–115, 27 fig.
- Matsuoka, Keiji, & Yoshiki Masuda. 2000. A new potamolepid freshwater sponge (Demospongiae) from the Miocene Nakamura Formation, central Japan. *Paleontological Research* 4(2):131–137, 6 fig.
- Matthew, G. F. 1886. Illustrations of the fauna of the St. John Group continued. No. III.—Descriptions of new genera and species, (including a description of a new species of *Solenopleura* by J. F. Whiteaves). *Transactions of the Royal Society of Canada* 3(section IV):29–84, pl. 5–7.
- . 1891. On Cambrian organisms in Acadia. *Transactions of the Royal Society of Canada* 7(section IV):135–160.
- M'Coy, F. 1846. A synopsis of the Silurian fossils of Ireland, collected from the several districts by Richard Griffith, F.G.S., the whole being named, and the new species drawn and described by Frederick M'Coy, F.G.S.D. M. H. Gill at University Press. Dublin. 72 p., 5 pl.  
Authorship variously listed as M'Coy, as M'Coy in Griffith, as Griffith and M'Coy, and as M'Coy, Griffith, and Salter).
- . 1848. On some new Mesozoic Radiata. *Annals and Magazine of Natural History (series 2)* 2:397.
- . 1849. On some new genera and species of Palaeozoic corals and foraminifera. *Annals and Magazine of Natural History (series 2)* 3:1–20, 119–136.
- . 1850. On some new genera and species of Silurian *Radiata* in the collection of the University of Cambridge. *Annals and Magazine of Natural History (series 2)* 6:270–290.
- . 1855. *Tetragonis danbyi*, *Vioa prisca*. In A. Sedgwick & F. M'Coy, Synopsis of the classification of British Palaeozoic rocks by the Rev. Adam Sedgwick, M.A., F.R.S., with a systematic description of the British Palaeozoic fossils in the Geological Museum of the University of Cambridge by Frederick M'Coy F.G.S. J. W. Parker & Son. London & Cambridge. p. 62, 260.
- Meek, F. B., & A. H. Worthen. 1860. Descriptions of new Carboniferous fossils from Illinois and other western states. *Academy of Natural Sciences of Philadelphia, Proceedings* for 1860:447–472.
- Mehl, Dorte. 1992. Die Entwicklung der Hexactinellida seit dem Mesozoikum- Paläobiologie, Phylogenie und Evolutionsökologie. *Berliner Geowissenschaftliche Abhandlungen (series E)*:164 p., 35 fig., 22 pl.
- . 1996. Phylogenie und Evolutionsökologie der Hexactinellida (Porifera) im Paläozoikum. *Geologisch-Paläontologische Mitteilungen Innsbruck* 4:1–55, 15 fig., 7 pl.
- Mehl, Dorte, & B.-D. Erdmann. 1994. *Sanshapentella dapingi* n. gen., n. sp.—a new hexactinellid sponge from the Early Cambrian (Tommotian) of China. *Berliner Geowissenschaftliche Abhandlungen (series E)* 13:315–319, 1 pl.
- Mehl, Dorte, & F. T. Fürsich. 1997. Middle Jurassic Porifera from Kachchh, western India. *Paläontologische Zeitschrift* 71(1/2):19–33, 8 fig.
- Mehl, D., & Norbert Hauschke. 1995. *Hyalonema cretacea* n. sp., erste körperlich erhaltene Amphidiscophora (Porifera, Hexactinellida) aus dem Mesozoikum. *Geologie und Paläontologie des Westfalen* 38:89–97.
- Mehl, Dorte, & O. Lehnert. 1997. Cambro-Ordovician sponge spicule assemblages in the Ordovician of the Argentine Precordillera and paleoenvironmental ties. *Neues Jahrbuch für Geologie und Paläontologie, Abhandlungen* 204(2):221–246.
- Mehl, Dorte, & Helfried Mostler. 1993. Neue Spicula aus dem Karbon und Perm: Konsequenzen für die Evolutionsökologie der Hexactinellida (Porifera), Strategien ihrer Gerüstbildung im Spätpaläozoikum und frühen Mesozoikum. *Geologisch-Paläontologische Mitteilungen Innsbruck* 19:1–28, 11 fig., 6 pl.
- Mehl, D., J. K. Rigby, & S. R. Holmes. 1993. Hexactinellid sponges from the Silurian-Devonian Roberts Mountains Formation in Nevada and hypotheses of hexactine-stauractine origin. *Brigham Young University Geology Studies* 39:101–124.
- Meylan, A. 1990. Nutritional characteristics of sponges in the diet of the hawksbill turtle, *Eretmochelys imbricata*. In K. Rutzler, ed., *New Perspectives in Sponge Biology, Third International Conference on the Biology of Sponges*. Smithsonian Institution Press. Washington, D.C. p. 472–477.
- Michelin, H. 1840–1847. *Iconographie Zoophytologique, description par localités et terrains des Polypiers fossiles de France et pays environnants*. P. Bertrand, ed. Paris. 348 p., 79 pl.
- Miller, S. A. 1882. Description of two new genera and eight new species of fossils from the Hudson River Group, with remarks upon others. *Journal of the Cincinnati Society* 5:34–44.
- . 1889. Class Porifera. In *North American Geology and Palaeontology*. Published by the author. Cincinnati. p. 152–167, fig. 89–127.
- . 1892. *Paleontology*. Indiana Department of Geologic and Natural Resources, Annual Report 17:611–705.
- Miller, S. A., & C. B. Dyer. 1878. Contributions to Palaeontology. *Cincinnati Society of Natural History Journal* 1:24–39.
- Milne-Edwards, Henri, & Jules Haime. 1848. *Reserches sur les polypes*. *Annales des Sciences Naturelles, Paris (series 3)* 9:37–89, pl. 4–6, 7–10; 10:65–114, 209–320, pl. 1, 5–9.
- . 1850. *Monograph of the British fossil corals, part 1*. *Palaontographical Society Monograph*. London. Introduction, p. i–lxxv; Description of fossil corals, p. 1–322, 11 pl.

- Minchin, E. A. 1889. Éponges coriaces Calcaires. La Clathrine coriace, *Clathrina coriacea* (Montagu). Zoologie Descriptive des Invertébrés, tome I, chapter 5. p. 107–147, fig. 35–72.
- . 1900. Sponges—Phylum Porifera. In E. R. Lankester, ed., A Treatise on Zoology, part 2, chapter 3. The Porifera and Coelenterata. Adam and Charles Black. London. p. 1–178, 97 fig.
- . 1905. A speculation on the phylogeny of the hexactinellid sponges. Zoologische Anzeiger 28:439–448.
- Moiseev, C. R. 1939. New data on Upper Triassic of North Caucasus and the Crimea. Doklady Akademii NAUK SSSR 23(1):816–817.
- . 1944. Vodoroslii, gubki, gidroidnye polipy i korally verkhnego triasa Kavkazskogo khrebtra [Algae, sponges, aqueous polyps and corals of the Upper Trias of the Caucasus]. Uchenye Zapiski Leningradskogo Gosudarstvenno-Geografichskaya [Scientific Publications of the Leningrad State University] 11(70):15–28, 5 pl.
- Molineaux, Ann. 1994. A Late Pennsylvanian encruster: terminal Paleozoic calcified demosponge? Canadian Society of Petroleum Geologists, Memoir 17:967–982, 16 fig.
- Montagu, George. 1818. An essay on sponges, with descriptions of all the species that have been discovered on the coast of Great Britain. Memoirs of the Wernerian Natural History Society 2:67–122, pl. 3–16.
- Montanaro-Gallitelli, Eugenia. 1956. Trachypsammiacea. In R. C. Moore, ed., Treatise on Invertebrate Paleontology, Part F. University of Kansas Press & Geological Society of America. Lawrence, KS & New York. p. 190–192.
- Moore, J. A., ed. 1965. Ideas in modern biology. XVI International Congress of Zoology, Proceedings 6:ix + 563 p., fig.
- Moret, Léon. 1924. Contribution à l'étude des spongiaires siliceux du Miocène de l'Algérie. Mémoires de la Société Géologique de France (new series) 1:5–27, 4 pl.
- . 1925. Appendix. In C. H. Regnard, Notice sur les Spongiaires cénomaniens. Bulletin de la Société Géologique, Paris 25:486–487.
- . 1926a [1925]. Sur quelques Spongiaires de Catalogne (Argovian, Senomanien, Eocène). Bulletin Societat de Ciencias Naturales de Barcelona 4:8–18, 1 pl.
- . 1926b [1925]. Contribution à l'étude des Spongiaires siliceux du Crétacé supérieur français. Mémoires de la Société Géologique de France (new series) 5(2):1–120; 3(1):121–338, 87 fig., 24 pl.
- . 1927. Note préliminaire sur les spongiaires Jurassiques de la Voulte (Ardeche) et de Trept (Isère). Comptes Rendus de l'Association Française pour l'Avancement des Sciences, Paris 50:291–292.
- . 1928. Les spongiaires siliceux du Callovien de la Voulte-sur-Rhone (Ardeche). In F. Roman, Études sur le Callovien de la Vallée du Rhone. Travaux du Laboratoire de Géologie de la Faculté des Sciences de Lyon, Fascicule 13, Mémoire 2:123–140, fig. 23–29, pl. 6–9.
- Morris, S. C., & Chen Menge. 1990. *Blastulospongia polytreta* n. sp., an enigmatic organism from the Lower Cambrian of Hubei, China. Journal of Paleontology 64(1):26–30, 4 fig.
- Morton, J. E. 1967. Mollusks: An introduction to their form and function. Harper and Brothers. New York. 232 p., 23 fig.
- Mostler, Helfried. 1985. Neue heteractinide Spongien (*Calcispongia*) aus dem Unter- und Mittelkambrium Südwestsardiniens. Berichte des Naturwissenschaftlich-Medizinischen Vereins in Innsbruck 72:7–32, 11 fig., 5 pl.
- . 1986. Neue Kieselschwämme aus den Zlambachschichten (Obertrias, Nördliche Kalkalpen). Geologische-Paläontologische Mitteilungen, Innsbruck 13:331–361, 8 fig., 9 pl.
- . 1994. Der erste Nachweis von agelasiden Schwämmen (Demospongiae) aus dem Jungpaläozoikum. Abhandlungen der Geologischen Bundesanstalt 50:341–352, 1 fig., 3 pl.
- . 1996a. Demospongien mit aussergewöhnlich Gebauten anatriaenen Megaskleren. Geologisch-Paläontologische Mitteilungen Innsbruck 21:153–171, 3 fig., 6 pl.
- . 1996b. Polyactinellide Schwämme, eine auf des Paläozoikum beschränkte Calcispongien-Gruppe. Geologisch-Paläontologische Mitteilungen Innsbruck 21:223–243, 15 fig., 3 pl.
- . 1996c. Demospongien mit aussergewöhnlich gebauten anatriaenen megaskleren. Geologisch-Paläontologische Mitteilungen, Innsbruck 21:153–171, 3 fig., 6 pl.
- Mostler, Helfried, & Z. Balogh. 1993–1994. Zur skelettarchitektur, entwicklung und stratigraphischen bedeutung ausgewählter lithistider Schwämme aus dem oberjura. Geologisch-Paläontologische Mitteilungen, Innsbruck 19:33–153.
- Mostler, Helfried, & A. Mosleh-Yazdi. 1976. Neue Poriferen aus oberkambrischen Gesteinen der Milaformation im Elburzgebirge (Iran). Geologisch-Paläontologische Mitteilungen Innsbruck 5(1):1–36, 25 fig., 5 pl.
- Müller, O. F. 1776. Zoologiae Danicae Prodrum seu Animalium Daniae et Norvegiae indigenarum characters, nomina et synonyma imprimis popularium. Icones, fasc. 1 XXXII. Havniae. Copenhagen. Typis Halligeriis. 274 p.
- Müller, W. 1984. Die Kalkschwämme der Unterordnung Inozoa Steinmann aus dem Oberen Jura von Württemberg (SW-Deutschland). Stuttgarter Beiträge Naturkunde (Series B, Geologie und Paläontologie) 100:1–85, 24 pl.
- Munier-Chalmas, E. 1882. *Barroisia*, nouvelle genre des éponges. Bulletin de la Société Géologique de France (series 3) 10:425.
- Münster, G. Graf zu. 1841. Beschreibung und Abbildung der in den Kalkmergelschichten von St. Cassian gefundenene Versteinerungen. Beiträge zur Geognosie und Petrefactenkunde des südöstlichen

- Tirols, vorzüglich des Schichten von St. Cassian. Bayreuth. 152 p., 16 pl.
- Murchison, R. I. 1839. Silurian System, founded on geological researches in the counties of Salop, Hereford, Radnor, Montgomery, Caermarthen, Brecon, Pembroke, Monmouth, Gloucester, Worcester and Stafford; with descriptions of the coal-fields and overlying formations. John Murray. London. Part 1, p. 1–576; Part 2, p. 577–768, 53 pl.
- Myagkova [Miagkova], E. I. 1955a. K kharakteristike klassa Aphrosalpingoida Miagkova, 1955 [On the characteristics of the Class Aphrosalpingoida, Miagkova, 1955]. Akademiya Nauk SSSR Doklady 104:478–481, 2 fig.  
In Russian.
- . 1955b. Novye predstaviteli tipa Archaeocyatha [New representatives of the phylum Archaeocyatha]. Akademiya Nauk SSSR, Doklady 104:638–641, 2 fig.
- Naletov, P. I. 1961. Katalog mestonakhozhdeny iskopaemykh fauny, flory, pyl'tsy i slor tsentral'noi chasti Buryatskoi ASSR. Gosudarstvennoe Nauchno-Tekhnicheskoe Izdatel'stvo Literatury po Geologii i Okhrane Nedr, Moskova 1961:1–64.  
In Russian.
- Nardo, G. D. 1833. Auszug aus einem neuen System der Spongiarien, wornach bereits die Aufstellung in der Universitäts-Sammlung zu Poada gemacht ist. 73, Isis Journal Collection. Oken. Jena. p. 519–523.
- . 1834. De Spongiis. Isis Journal Collection. Oken. Jena. p. 714–716.
- . 1847a. Osservazioni anatomiche sopra l'animale marino detto rognone di mare. Atti del Istituto Veneto di Scienze, lettere ed Arti, Venice 6:221.
- . 1847b. Prospetto della fauna marina volgare del Veneto-Estuario con cenni sulle principali specie commestibili dell'Adriatico, sulle venete pesche, sulle valli, etc. In Venezia e le sue lagune. G. Antonelli. Venezia. p. 113–156.  
p. 1–45 in reprint.
- Nazarov, B. B., & L. E. Popov. 1976. Radiolyarii, bezzamkovye brachiopody i organizmy neyasnogo sistematischeskogo polozheniya iz srednego ordovika vostochnogo Kazakhstana [Radiolarians, inarticulate brachiopods, and organisms of uncertain systematic position from the Middle Ordovician of eastern Kazakhstan]. Paleontologicheskii Zhurnal 1976 (4):33–42.  
In Russian; English translation published in 1977 by the American Geological Institute.
- Neave, S. A. 1936–1940. Nomenclator Zoologicus, 4 vol. The Zoological Society of London. London. vol. 1, A–C, p. 1–957; vol. 2, D–L, p. 1–1025; vol. 3, M–P, p. 1–1065; vol. 4, Q–Z, p. 1–758.
- . 1950. Nomenclator Zoologicus, vol. 5. The Zoological Society of London. London. 308 p.
- Nekvasilová, O. T., & D. Stempřoková. 1960. Die Schwämmenadeln der Branik-Schichten (Unterdevon-Böhmen). Casopis pro Mineralogii a Geologii 5:400–405, 2 pl.
- Nestler, H. 1961. Spongien aus der weissen Schreibkreide (Unt. Maastricht.) der Insel Rugen (Ostsee). Paläontologische Abhandlungen, Berlin 1:13–70.
- Newell, N. D. 1957. Paleocology of Permian reefs in the Guadalupe Mountains area. In H. S. Ladd, ed., Treatise on Marine Ecology and Paleocology, vol. 2, Paleocology. Geological Society of America Memoir 67:407–436, 11 fig.
- Newell, N. D., J. B. Chronic, & T. G. Roberts. 1948. Pennsylvanian and Permian of Peru. Geological Society of America Bulletin 58(12):1212.
- Newell, N. D., J. K. Rigby, A. G. Fischer, A. J. Whiteman, J. E. Hickox, & J. S. Bradley. 1953. The Permian reef complex of the Guadalupe Mountains region, Texas and New Mexico. W. H. Freeman and Co. San Francisco. xix + 239 p., 85 fig., 32 pl.
- Nicol, D. 1962. The biotic development of some Niagaran reefs—an example of an ecological succession or sere. Journal of Paleontology 36:172–176.
- Nicol, J. A. C. 1967. The biology of marine animals. John Wiley & Sons, Inc. New York. 699 p.
- Nitecki, M. H., & F. Debrenne. 1979. The nature of radiocyathids and their relationship to receptaculitids and archaeocyathids. Géobios 12(1):5–27, 5 pl.
- Nutsubidze, K. Sh. 1965. [Liassic sponges of the Dzirulbskogho massif]. Trudy Geologicheskogo Instituta, Tbilisi 14:5–36, 15 pl.  
In Russian.
- Oakley, K. P. 1938. Some facts about Cretaceous sponges. South-Eastern Naturalist, London 43:58–61, 1 pl.
- Odum, E. P. 1959. Homeostasis of the ecosystem in relation to animal populations. Proceedings of the International Congress of Zoology 15:783–784.
- Okada, Y. 1928. On the development of a hexactinellid sponge, *Farrea sollasii*. Tokyo University, Journal of the Faculty of Sciences (Section 4, Zoology) 2:1–27.
- Oken, L. 1815. Lehrbuch der Naturgeschichte. 3 Band., Lehrbuch der Zoologie, 1<sup>te</sup> Abtheilung, Zoologie, Fleischlose Thiere. C. H. Reclam. Leipzig. 846 p., 40 pl.
- Okulitch, V. J. 1935. Cyathospongia—a new class of Porifera to include the Archaeocyathinae. Transactions of the Royal Society of Canada 29:75–106, 2 fig., 2 pl.
- . 1937. Some changes in nomenclature of Archaeocyathi (Cyathospongia). Journal of Paleontology 11:251–253.
- . 1955. Archaeocyatha. In R. C. Moore, ed., Treatise on Invertebrate Paleontology, Part E, Archaeocyatha and Porifera. Geological Society of America & The University of Kansas Press. New York & Lawrence. p. 1–20, fig. 1–13.
- Okulitch, V. J., & W. G. Bell. 1955. *Gallatinospongia*, a new siliceous sponge from the Upper Cambrian of Wyoming. Journal of Paleontology 29:460–461, pl. 48–49.
- Oliver, W. A., Jr. 1951. Middle Devonian coral beds of central New York. American Journal of Science 249(10):705–728.

- . 1956. Biostromes and bioherms of the Onadaga Limestone in eastern New York. New York State Museum and Science Service Circular 45:1–23.
- Olivì, G. 1792. Zoologia Adriatica ossia Catalogo ragionato degli Animali del Golfo e delle Lagune di Venezia; preceduto de una Dissertazione sulla Storia fisica e naturale del Golfo; e accompagnato da Memoria, ed Osservazioni di Fisica Storia naturale ed. Economia dell' Abate. Bassano, Italy. p. xxxi + 1–334.
- Öpik, A. A. 1961. The geology and palaeontology of the headwaters of the Burke River, Queensland. Bureau of Mineral Resources, Geology and Geophysics, Bulletin 53:249 p., 24 pl.
- Oppliger, F. 1907. Spongien aus dem Argovien I (Birmenstorfer-schichten) des Département du Jura, Frankreich. Abhandlungen der Schweizerischen Paläontologischen Gesellschaft 34:1–19.
- . 1915. Die Spongien der Birmensdorfer-schichten des schweizerischen Jura. Abhandlungen der Schweizerischen Paläontologischen Gesellschaft (Mémoires de la Société Paléontologique Suisse), Geneva 40:1–84, 12 pl.
- . 1921a. Über Neues Juraspongien. Actes de la Société Helvétique des Sciences Naturelles, Geneve 101:204–205.
- . 1921b. Über Neues Juraspongien. Eclogae Geologicae Helvetiae 16:133–134.
- . 1926. Kieselspongien des schweizerischen weissen Jura. Abhandlungen der schweizerischen Paläontologischen Gesellschaft (Mémoires de la Société Paléontologique Suisse), Geneva 46:1–76, fig. 1–6, pl. 1–5.
- d'Orbigny, A. D. 1849 [1848]. Note sur la classe des Amorphozoaires. Revue et Magazine de Zoologie pure et appliquée (series 2) 1:545–550.
- . 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. vol. 1, 394 p. (Jan., 1850); vol. 2, 427 p. (Nov. 1850); vol. 3, p. 1–196, and index, p. 1–190 (1852).
- . 1851. Cours élémentaire de Paléontologie et du Géologie stratigraphiques, vol. 2, no. 1. Victor Masson. Paris. 392 p., pl. 1–17.
- Ortmann, P. 1912. Die Mikroscleren der Kieselspongien in Schwammgesteinen der Senonen Kreide. Neues Jahrbuch für Mineralogie, Geologie und Paläontologie 2:127–149.
- Oswald, F. 1847. Über die Petrifacten von Sadewitz. Uebersicht der Arbeiten und Veränderungen. Schlesischer Gesellschaft für Väterlandische Cultur im Jahre 1846. Breslau. p. 56–65.
- . 1850. Über *Aulocopium* und andere Spongien der Sadewitzer Geschiebe. Brieflich Mitth. an Herrn Beyrich. Zeitschrift der Deutschen Geologischen Gesellschaft 2:83–86.
- Ott, Ernst. 1967a. Segmentierte Kalkschwämme (Sphinctozoa) aus der alpinen Mitteltrias und ihre Bedeutung als Riffbildner im Wettersteinkalk. Bayerische Akademie der Wissenschaften Mathematisch-Naturwissenschaftliche Klasse, Abhandlungen (new series) 131:96 p., fig. 1–9, 10 pl.
- . 1967b. Die Beziehung zwischen *Colospongia* Laube, *Takreamina* Fontaine, *Girtycoelia* King und *Dictyocoelia* n. gen. (segmentierte Kalkschwämme). Neues Jahrbuch für Geologie und Paläontologie, Monatshefte 1967:44–58, 3 fig.
- . 1974. *Phragmocoelia* n. g. (Sphinctozoa), ein segmentierter Kalkschwämme mit neuem Füllgewebetyp aus der Alpinen Trias. Neues Jahrbuch für Geologie und Paläontologie, Monatshefte 12:712–723, 4 fig.
- Ott, Ernst, & Wolfgang Volkheimer. 1972. *Palaeospongia chubutensis* n. g. et n. sp.—ein Süßwasserschwamm aus der Kreide Patagoniens. Neues Jahrbuch für Geologie und Paläontologie, Abhandlungen 140:49–63, 6 fig.
- Owen, D. D. 1858 [1857]. Second report on the geological survey in Kentucky, made during the years 1856 and 1857. Frankfurt, Kentucky. 391 p.
- Owen, R. 1841. On the new genus and species of sponge (*Euplectella aspergillum*). Proceedings of the Zoological Society 1841:3.
- Pallas, P. S. 1766. Elenchus zoophytorum, sistens generum abduibrations generaliores specierum cognitarum succinctas descriptiones oum selectes auctorum synonymia. Hagae-Comitum. Petrum van Cleef. The Hague. 451 p.
- . 1776. Reise durch verschiedene Provinzen des Russischen Reichs. Band 3. Kaiserliche Academie des Wissenschaften. St. Petersburg. p. 453–504, pt. 1; p. 701–744, pt. 2; p. 691–760, pt. 3.
- Pantic, S. 1975. *Ceotinella mirunae* gen. nov. (Spongia, Familia 'incertae sedis') from the Middle Triassic of Montenegro. Geoloski Anali Balkanskog Poluostrva 39:153–158.
- Parkinson, James. 1822. Outlines of Oryctology. An introduction to the study of fossil organic remains, especially those found in the British strata. Published by the author, printed by J. Compton, Printer. London. p. 35–61, pl. 1.
- Parona, C. F. 1933. Le spugne della fauna permiana di Palazzo Adriano (Bacino del Sosio) in Sicilia. Memorie della Società Geologica Italiana 1:1–58, 7 fig., 12 pl.
- Pavans de Ceccatty, M. 1960. Les structures cellulaires de type nerveux et de type musculaire de l'éponge siliceuse *Tethya lyncurium* Lamarck. Comptes Rendus de l'Académie des Sciences, Paris 2,451:1,818–1,819.
- . 1966. Connections cellulaires et jonctions polarisées du réseau intramésenchymateaux, chez l'éponge *Hippospongia communis* Lamarck. Comptes Rendus Hebdomadaires des Séances de l'Académie des Sciences, Paris 263D:145–147, 2 fig.
- Penny, J. T., & A. A. Racek. 1968. Comprehensive revision of a worldwide collection of freshwater sponges (Porifera: Spongillidae). United States National Museum Bulletin 272:1–184, 15 pl.
- Phillips, John. 1829–1836. Illustrations of the geology of Yorkshire, Part 1. 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, p. 1–193, 15 pl., T. Wilson and Sons, London; Part 2, The Mountain Limestone District, p. i–xx, + 1–253, 25 pl., John Murray, London.
- . 1875. Illustrations of the Geology of Yorkshire; or a Description of the Strata and Organic Remains, Part I. In R. Etheridge, ed., *The Yorkshire Coast*, 3rd ed. John Murray. London. x + 354 p., 28 pl.
- Pickett, John. 1969. Middle and Upper Palaeozoic sponges from New South Wales. *Memoirs of the Geological Survey of New South Wales, Palaeontology* 16:1–24, 11 pl.  
Dated 1967 but not published until 1969.
- . 1982. *Vaceletia progenitor*, the first Tertiary sphinctozoan (Porifera). *Alcheringa* 6:241–247, fig. 1–6.
- . 1983. An annotated bibliography and review of Australian fossil sponges. *Association of Australasian Palaeontologists Memoir* 1:93–120, 13 fig.
- . 2002. Order Heteractinida Hinde, 1877. In J. N. A. Hooper & R. W. M. Van Soest, eds., *Systema Porifera: A guide to the classification of the sponges*. Kluwer Academic/ Plenum Publishers. New York. p. 1121–1139, 13 fig.
- Pickett, John, & P. A. Jell. 1983. Middle Cambrian Sphinctozoa (Porifera) from New South Wales. *Memoir Association of Australasian Palaeontologists* 1:85–92, 4 fig.
- Pickett, John, & Yves Plusquellec. 1998. Éponges siliceuses du Dévonien Supérieur de la Rade de Brest (France). *Geobios* 31(6):715–723, 2 fig.
- Pickett, John, & J. K. Rigby. 1983. Sponges from the Early Devonian Garra Formation, New South Wales. *Journal of Paleontology* 57:720–741, 9 fig.
- Pisera, A. A. 1997. Upper Jurassic siliceous sponges from the Swabian Alb: taxonomy and paleoecology. *Palaeontologia Polonica* 57:3–216, 35 fig., 54 pl.
- . 2002. Fossil 'Lithistids,' an overview. In J. N. W. Hooper & R. W. M. van Soest, eds., *Systema Porifera: A Guide to the Classification of Sponges*. Kluwer Academic/Plenum Press. New York. p. 388–402, 22 fig.
- Pisera, Andrzej, & Adam Bodzioch. 1991. Middle Triassic lyssacinous sponges from Upper Silesia (southern Poland), and the history of hexactinoid and lychniscous sponges. *Acta Geologica Polonica* 41(3–4):193–207, 4 fig.
- Pisera, A. A., & Pere Busquets. 2002. Eocene siliceous sponges from the Ebro Basin (Catalonia, Spain). *Geobios* 35:321–346, 16 fig.
- Pitcher, M. G. 1964. Evolution of Chazyan (Ordovician) reefs of eastern United States and Canada. *Bulletin of Canadian Petroleum Geology* 12:632–691, 49 fig., 3 pl.
- Playford, P. E. 1967. Devonian reef complexes in the northern Canning Basin, Western Australia. *International Symposium on the Devonian System*, Alberta Society of Petroleum Geologists 2:351–364.
- Playford, P. E., & D.C. Lowry. 1966. Devonian reef complexes of the Canning Basin, Western Australia. *Geological Survey of Western Australia Bulletin* 118:1–150.
- Pocta, P. 1883. Beiträge zur Kenntniss der Spongien der Böhmisches Kreideformation, part 1, Hexactinellidae. *Abhandlungen der Königlich Böhmisches Gesellschaft der Wissenschaften (series 6)* 12:1–45, 3 pl.
- . 1884. Beiträge zur Kenntniss der Spongien der Böhmisches Kreideformation, part 2, Lithistidae. *Abhandlungen der Königlich Böhmisches Gesellschaft der Wissenschaften (series 6)* 12(9):1–42, 2 pl.
- . 1885. Beiträge zur Kenntniss der Spongien der Böhmisches Kreideformation, Tetractinellidae, Monactinellidae, Calcispongidae, Certospongidae, Nachtrag. *Abhandlungen der Königlich Böhmisches Gesellschaft der Wissenschaften (series 7)* 1(3):1–46, 1 pl.
- . 1903a. O nekterych nvch houbachz kridoeho utraru. *Rozpravy Ceske Akademie Cisare Frantiska Josefa pro vedy slovesn ost a umeni* 7(14):8–9.
- . 1903b. Beiträge zur Kenntniss der Calcispongien aus der Kreideformation. *Académie des Sciences de l'Empereur François Joseph 1, Bulletin international Résumés des Travaux présentés (Sciences, Mathématiques et Naturelles)* VII Année:118–124, 2 fig., 2 pl.
- . 1907. Sur quelques éponges du Sénonien de Nice. *Bulletin de la Société Géologique de France, Paris (series 4)* 7:163–173.
- de Poléjaeff, N. 1883. Report on the Calcarea collected by H.M.S. Challenger during the years 1873–1876. Report on the Scientific Results of the Voyage of H.M.S. 'Challenger,' vol. 8, no. 24. London, Edinburgh, & Dublin. p. 1–76, 9 pl.
- . 1884. Report on the Keratosa collected by H.M.S. Challenger during the years 1873–1876. Report on the Scientific Results of the Voyage of the H.M.S. 'Challenger' 1873–1876. *Zoologie* 11. London, Edinburgh, & Dublin. p. 1–88, 10 pl.
- Polunin, N. V. 1960. *Introduction to plant geography and some related sciences*. McGraw-Hill. New York. 640 p.
- Pomel, A. 1872. Paléontologie ou description de animaux fossiles de la Province d'Oran. *Zoophytes, fascicule 5, Spongiaires*. Perrier. Oran. 256 p., 36 pl.
- Portlock, J. E. 1843. Report on the Geology of Londonderry and parts of Tyrone and Fermanagh. Andrew Milliken, Dublin; Hodges and Smith, College-Green; and Longman, Brown, Green, and Longmans. London. 784 p., pl. 1–38 and A–I.
- Potts, E. 1880. On freshwater sponges. *Proceedings of the Academy of Natural Sciences of Philadelphia* 1880:356–357.  
Also published in 1881, *Annals and Magazine of Natural History (series 5)* 8:387–388.
- . 1881. Some new genera of freshwater sponges. *Proceedings of the Academy of Natural Sciences of Philadelphia* 1881:149–150.  
Also published in *Annals and Magazine of Natural History (series 5)* 8:387–388.

- Pourbaix, N. 1931. Contribution à l'étude de la nutrition chez les Spongiaires (éponges siliceuses). Bulletin des Station Océanographique Salammbô, Tunis 23:3–19, 2 pl.
- . 1932. Note sur la nutrition bactérienne des éponges. Annales de la Société Royale Zoologique de Belgique 63:11–15, 5 fig.
- . 1933. Mécanisme de la nutrition chez les Spongillidae. Annales de la Société Royale Zoologique de Belgique 64:11–20, 1 pl.
- . 1939. Activité respiratoire chez les Spongiaires. Annales de la Société Zoologique de Belgique 79:197–199.
- Pray, L. C., & M. Esteban. 1977. Upper Guadalupian Facies, Permian Reef Complex, Guadalupe Mountains, New Mexico and West Texas. 1977 Field Conference Guidebook, vol. 2, Permian Basin Section, Society of Economic Paleontologists and Mineralogists, Publication 17-16:194 p.
- Prosser, C. L. 1960. Mechanical responses of sponges. Anatomical Record 138(3):37.
- Putter, A. 1914. Der stoffwechsel der Kiesel Schwämme. Zeitschrift für Allgemeine Physiologie 16:65–114.
- Qian Jianxin, & Bing Xiao. 1984. An Early Cambrian small shelly fauna from Aksu-Wushi region, Xinjiang. Professional Papers on Stratigraphy and Palaeontology 13:65–90, 4 pl.  
In Chinese with English summary.
- Qian Yi, & Yin Gongzheng. 1985. Small shelly fossils from the lowerest Cambrian in Guizhou. Professional Papers on Stratigraphy and Palaeontology 14:91–121, 6 pl.
- Quenstedt, F. A. 1843. Das Flötzgebirge Würtembergs. H. Laupp'schen, Buchhandlung. Tübingen. p. 407–427, 466–467.
- . 1852. Handbuch der Petrefactenkunde. H. Laupp'schen Buchhandlung. Tübingen. 982 p.  
Sponges on p. 666–678, 62 pl.
- . 1858. Der Jura. H. Laupp'schen Buchhandlung. Tübingen. 842 p., 100 pl.
- . 1877–1878. Petrefactenkunde Deutschlands. Der ersten Abtheilung, funfter Band. Die Schwamme. Leipzig, (1. Leif., p. 1–96, pl. 115–118, April, 1877; 2. Leif., p. 97–224, pl. 119–124, 1877; 3. Leif., 225–320, pl. 125–130; 1877; 4. Leif., p. 321–448, pl. 131–136, Autumn, 1877; 5. Leif., p. I–VIII, 449–612, pl. 137–142, July 1878).
- Radwanski, A. 1964. Boring animals in Miocene littoral environments of southern Poland. Bulletin de l'Académie Polonaise des Sciences, Série des Sciences Géologiques et Géographiques 12:57–62, 6 pl.
- Rafinesque-Schmaltz, Constantine Sam. 1839. Descriptions des genres fossiles Ditaxopus, Trianisitis, Trioxites, Menepites, et Trianistes. Bulletin de la Société Géologique, Paris 10:378–381.
- Ramond de Carbonnière, L. F. É. 1801. Nouveau genre de Polypiers fossiles. *Ocellaria*. Scientifique Société Philomèle, Paris, Bulletin 2:177.
- Randall, J. E., & W. D. Hartman. 1968. Sponge-feeding fishes of the West Indies. Marine Biology 1:216–225.
- Rasmont, R. 1959. L'ultrastructure des choanocytes d'éponges. Annales des Sciences Naturelles, Zoologie (series 12) 1(2):253–263, 2 pl.
- Rauff, Hermann. 1891a. Vorläufige Mitteilung über das Skelet der Anomocladinen, sowie über eine eigenthümliche Gruppe fossiler Kalkschwämme (Polysteganinae), die nach dem Sycones-Typus gebaut sind. Neues Jahrbuch für Mineralogie, Geologie und Paläontologie 1:278–284.
- . 1891b. Über *Palaeospongia prisca* Bornem., *Eophyton* z. Th., *Chondrites antiquus*, *Haliserites* z. Th. und ähnliche Gebilde. Neues Jahrbuch für Mineralogie, Geologie und Paläontologie 2:92–98.
- . 1891c. Über den Bau des Stützskeletes bei den Anomocladinen und Tetracladinen. Sitzungsberichte Niederrheinische Gesellschaft 48:33–37.
- . 1891d. Über eine eigenthümliche Gruppe fossiler Kalkschwämme (Polysteganinae). Sitzungsberichte Niederrheinische Gesellschaft 48:45–50.
- . 1892. Untersuchungen über die Organisation und systematische Stellung der Receptaculitiden. Abhandlungen der Bayerische Akademie der Wissenschaften, Mathematisch-Physikalische Klasse 17:645–722, 12 fig., 7 pl.
- . 1893. Paleospongiologie, Erster oder allgemeiner Theil, und Zweiter Theil, erste Hälfte. Palaeontographica 40:1–232, fig. 1–48.
- . 1894. Paleospongiologie, Erster oder allgemeiner Theil, und Zweiter Theil, erste Hälfte. Palaeontographica 41:233–346, fig. 49–75, pl. 1–17.
- . 1895. Paleospongiologie. Zweiter Theil. Fortsetzung, Spongien des Silurs. Palaeontographica 43:223–272, fig. 76–124, pl. 20–26.
- . 1913. *Barroisia* und die Pharetronenfrage. Palaeontologische Zeitschrift 13:74–144, 2 fig., 2 pl.
- . 1933. Spongienreste aus dem (oberteronen) Grünsand vom Kassenberg in Mülheim-Broich an der Ruhr. Preussischen Geologischen Landesanstalt, Abhandlungen (new series) 158:75 p., 5 pl.
- . 1938. Über einige 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.
- Ravn, J. P. J. 1899. Et par danske Kridtspongen. Meddelanden fra Dansk Geologisk Forening 1(5):24–32.
- Raymond, P. E. 1931. Notes on invertebrate fossils, with descriptions of new species. Bulletin of the Museum of Comparative Zoology at Harvard College 55:165–213, 6 pl.
- Raymond, P. E., & V. J. Okulitch. 1940. Some Chazyan sponges. Bulletin of the Museum of Comparative Zoology at Harvard College 86:197–214, 4 fig., 7 pl.

- Regnard, C.-H. 1926 [1925]. Notice sur les spongiaires Cénomaniens de Coulonges-les-Sablons (Orne). *Bulletin de la Société Géologique de France* 25:469–488, pl. 18–21.
- Reid, R. E. H. 1957a. On Hexactinellida, "Hyalospongia," and the classification of siliceous sponges. *Journal of Paleontology* 31:282–286.
- . 1957b. Notes on hexactinellid sponges—II. *Dactyocalyx* Stutchbury and the Family Dactyocalycidae Gray. *Annals and Magazine of Natural History* (series 12) 10:821–826.
- . 1958a. A monograph of the Upper Cretaceous Hexactinellida of Great Britain and Northern Ireland, part I. *Palaeontographical Society Monograph*. London. p. i–xlvi.
- . 1958b. Remarks on the Upper Cretaceous Hexactinellida of County Antrim. *The Irish Naturalists Journal* 12(9,10):236–268.
- . 1959. A monograph of the Upper Cretaceous Hexactinellida of Great Britain and Northern Ireland, part II. *Palaeontographical Society Monograph*. London. London. p. xlvii–xlvi, 1–26, pl. 1–4.
- . 1961. A monograph on the Upper Cretaceous Hexactinellida of Great Britain and Northern Ireland, part III. *Palaeontographical Society Monograph*. London. p. 27–48, 7 pl.
- . 1962. Notes on hexactinellid sponges—IV. Nine Cretaceous Lychniscosa. *Annals and Magazine of Natural History* (series 13) 5:33–45.
- . 1963a. Notes on a classification of the Hexactinosa. *Journal of Paleontology* 37:218–231.
- . 1963b. Hexactinellida or Hyalospongia. *Journal of Paleontology* 37:232–243.
- . 1963c. *Spiractinella* Hinde is a demosponge. *Irish Naturalists Journal* 14:129–131.
- . 1963d. A classification of the Demospongia. *Neues Jahrbuch für Geologie und Paläontologie, Monatshefte* 4:196–207, 2 fig.
- . 1963e. Preliminary notice of a classification of the Demospongia. *The Irish Naturalists Journal* 14:90–94.
- . 1964. Upper Cretaceous Hexactinellida of Great Britain and Northern Ireland, part IV. *Palaeontographical Society* (London), *Monograph*. *Palaeontographical Society*. London. p. xlix–cliv, fig. 25–61.
- . 1968a. Microscleres in demosponge classification. *University of Kansas Paleontology Contributions Paper* 35:11–37, fig. 1–10.
- . 1968b. *Hyalostelia smithii* (Young & Young) and the sponge genus *Hyalostelia* Zittel (Class Hexactinellida). *Journal of Paleontology* 42:1,243–1,248, pl. 162.
- . 1968c. The Carboniferous sponge "*Doryderma*" *dalryense* Hinde and the origin of heloclones and megaclones. *Journal of Paleontology* 42:1,249–1,254.
- . 1968d. *Tremacystia*, *Barroisia*, and the status of Sphinctozoida (Thalamida) as Porifera. *The University of Kansas Paleontological Contributions* 34:1–10.
- . 1969. Notes on hexactinellid sponges: 5, *Verrucocoelia* gen. nov., with a discussion of the genera *Verrucocelia* Étallon and *Periphragella* Marshall. *Journal of Natural History* 3:485–492.
- . 1970. Tetraxons and demosponge phylogeny. *Zoological Society of London Symposium* 25:63–69.
- Reid, R. P., & R. N. Ginsburg. 1986. The role of framework in Upper Triassic patch reefs in the Yukon (Canada). *Palaios* 1:590–600, 10 fig.
- Reif, W.-E. 1968. Schwammreste aus dem oberen Ordovizium von Estland und Schweden. *Neues Jahrbuch für Geologie und Paläontologie, Monatshefte* 12:733–744, 3 fig.
- Reimann, I. G. 1935. *Pseudohydroceras*, a new Hamilton dictyosponge. *Bulletin of the Buffalo Society of Natural Sciences* 17(1):13–17, 2 pl.
- . 1945a. New Middle Devonian octactinellids. *Paleontological Contributions, Bulletin of the Buffalo Society of Natural Sciences* 19(2):16–21, pl. 2–4.
- . 1945b. New Hamilton lyssacine sponges. *Paleontological Contributions, Bulletin of the Buffalo Society of Natural Sciences* 19(2):43–49, pl. 8–9.
- Reiswig, H. M. 1971. The axial symmetry of sponge spicules and its phylogenetic significance. *Cahiers de Biologie Marine* 12:505–514, 1 fig., 1 table.
- . 1973. Population dynamics of three Jamaican Demospongiae. *Bulletin of Marine Science* 23:191–226.
- . 1974. Water transport, respiration and energetics of three tropical marine sponges. *Journal of Experimental Marine Biology and Ecology* 14(3):231–249, 6 fig., 4 tables.
- . 1975. Bacteria as food for temperate-water marine sponges. *Canadian Journal of Zoology* 53(5):582–589, 5 fig.
- . 2002. Family Dactyocalycidae Gray, 1867. In J. N. A. Hooper & R. W. M. van Soest, eds., *Systema Porifera: A Guide to the Classification of Sponges*. Kluwer Academic/Plenum Press. New York. p. 1293–1300, 4 fig.
- Reitner, Joachim. 1987a. A new calcitic sphinctozoan sponge belonging to the Demospongiae from the Cassian Formation (Lower Carnian; Dolomites, northern Italy) and its phylogenetic relationship. *Géobios* 20(5):571–589, 1 fig., 3 pl.
- . 1987b. 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.
- . 1987c. *Euzkadiella erenoensis* n. gen. n. sp. ein Stromatopore mit spikulärem skelett aus dem Oberapt von Ereño (Prov. Gipuzcoa, Nordspanien) und die systematische Stellung der Stromatoporen. *Paläontologische Zeitschrift* 61:203–222, 11 fig.
- . 1991. Phylogenetic aspects and new descriptions of spicule-bearing hadromerid sponges with a secondary calcareous skeleton (Tetractinomorpha, Demospongiae). In J. Reitner & H. Keupp, eds., *Fossil and Recent Sponges*. Springer-Verlag, Berlin. p. 179–211.

- . 1992. "Coralline Spongien:" Der Versuch einer phylogenetisch-taxonomischen Analyse ["Coralline Sponges:" An attempt of a phylogenetic-taxonomic analysis]. *Berliner Geowissenschaftliche Abhandlungen (Reihe E)* 1:1–325, 90 fig., 62 pl.
- Reitner, Joachim, & Theo Engeser. 1985. Revision der Demospongier mit einem Thalamiden, aragonitischen Basalskelett und trabekulärer Internstruktur ("Sphinctozoa" pars). *Berliner Geowissenschaftliche Abhandlungen (Reihe A)* 60:151–193, 10 fig., 6 pl.
- Reitner, J., & H. Keupp. 1991. The fossil record of the haplosclerid excavating sponge *Aka* de Laubenfels. *In* J. Reitner & H. Keupp, eds., *Fossil and Recent Sponges*. Springer-Verlag, Berlin. p. 102–120, 17 fig.
- Reitner, Joachim, & Felix Schlagintweit. 1990. *Calcsuberites stromatoporoides* n. gen. n. sp., ein neue Taxon der Hadromerida (Demospongiae, Porifera) mit einem kalkigen Basalskelett aus der tethyalen Unterkreide. *Berliner Geowissenschaftliche Abhandlungen (Reihe A, Geologie und Paläontologie)* 124:247–257, 2 fig., 2 pl.
- Rendel, J. M. 1965. The effect of genetic change at different levels. *In* J. A. Moore, ed., *Ideas in modern biology*. XVI International Congress of Zoology, Proceedings 6:285–295.
- Reuss, A. Em. 1840. *Geognostische Skizzen aus Böhmen*, Bd. 1, Die umgebungen von Toplitz und Belin, Ein Beitrag zur Physiographie des böhmischen Mittelgebirges. G. W. Medau & Company. Prague, Leitmeritz, & Toplitz. 298 p., 9 pl.
- . 1844. *Geognostische Skizzen aus Böhmen*. Bd. 2, Die Kreidegebilde des westlichen Böhmens, ein monographischer Versuch., Nebst Bemerkungen über die Braunkohlenlager jenseits der Elbe un eine Uebersicht der fossilen Fischreste Böhmens. G. W. Medau & Company. Prague, Leitmeritz, & Toplitz. 304 p., 3 pl.
- . 1845–1846. *Die versteineringen der Böhmeischen Kreideformation*, 2 Abtheilungen. E. Schweizerbart'sche Verlagsbuchhandlung. Stuttgart. 148 p., 51 pl.
- . 1867. *Die Bryozoen, Anthozoen und Spongarien des braunen Jura von Balin bei Krakau*. K. K. Hof- und Staatsdruckerei. p. 117–214, 11 pl.
- Reyment, R. A. 1971. Multivariate normality in morphometric analyses. *Journal of the International Association for Mathematical Geology* 3(4):357–368.
- Rezvoi, P. D., I. T. Zhuravleva, & V. M. Koltun. 1962. Phylum Porifera. *In* B. S. Sokolov, ed., *Osnovy Paleontologii [Fundamentals of Paleontology]*, vol. 1, number 2, Porifera, Archaeocyatha, Coelenterata, Vermes. Izdatel'stvo Akademii Nauk SSSR. Moscow. p. 17–74, fig. 1–107.  
Translation published in 1972, Israel Program for Scientific Translations Ltd., Jerusalem, p. 5–97.
- Rhebergen, F., R. Eggink, T. Koops, & B. Rhebergen. 2001. *Staringia* 9, Ordovicische zwerfsteensponzen. Grondboor & Hamer, Tweemaandelijks tijdschrift van de Nederlandse Geologisch Vereniging, Jaargang 55 (2001), nummer 1, 143 p., 68 fig., 43 pl.
- Rhebergen, Freek, & Ulrich von Hacht. 2000. *Schismospongia syltensis* gen. n. sp. n. (Porifera) ein neuer Geschiesbeschwamm aus plio/pleistozänen Kaolinsanden von Sylt (Nordwest-Deutschland). *Archiv für Geschiebekunde* 2(1):797–804, 1 fig., 3 pl.
- Rhebergen, F., & T. M. G. van Kempen. 2002. An unusual Silurian erratic astylospongiid (Porifera) from Gotland, Sweden. *GFF (Geologiska Föreningens i Stockholm Förhandlingar)* 124:185–192, 13 fig.
- 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.
- Richter, Gotthard, & Michael Wuttke. 1999. *Lutetiospongilla heili* n. gen. n. sp. und die eoazäne Spongillidenfauna von Messel. *Courier Forschungsinstitut Senckenberg* 216:183–195, 3 pl.
- Ridley, S. O. 1881. XI. Spongida. Horny and siliceous sponges of Magellan Straits, S.W. Chili, and Atlantic off SW Brazil. *In* A. Gunther, ed., *Account of the zoological collections made during the survey of H.M.S. 'Alert' in the Straits of Magellan and on the coast of Patagonia*. Proceedings of the Zoological Society of London 1881:107–137, 140–141, pl. 10–11.
- Ridley, S. O., & Arthur Dendy. 1886. Preliminary report on the Monaxonida collected by H.M.S. 'Challenger.' *Annals and Magazine of Natural History (series 5)* 18:325–351, 470–493.
- . 1887. Report on the Monaxonida collected by H.M.S. Challenger during the years 1873–1876. *Reports of the Scientific Results of the Voyage of H.M.S. Challenger, Report 20(59):lxviii + 275 p., 51 pl.*
- Riedel, R., & B. Senowbari-Daryan. 1991. Pharetronids in Triassic reefs. *In* J. Reitner & H. Keupp, eds., *Fossil and Recent Sponges*. Springer-Verlag, Berlin & Heidelberg. p. 465–476, 4 fig.
- Rietschel, Siegfried. 1968a. Die Octactinellida und ihnen verwandte paläozoische Kalkschwämme (Porifera, Calcarea). *Paläontologische Zeitschrift* 42(1/2):13–32, 4 fig., 1 pl.
- . 1968b. *Devonoscyphia* n. g. und "*Scyphia constricta* Sandberger," Kieselschwämme (Eutaxi-cladina) aus dem Mitteldevon der Lahnmulde (Rhein. Schiefergebirge). *Jahrbücher des Nassauischen Vereins für Naturkunde* 99:98–106, 2 fig., 2 pl.
- . 1970. Beiträge zur Sedimentation und Fossilführung des Hunsrückschiefers. 28. *Rectifungus rudens* n. g., n. sp., ein dictyospongiider Kieselschwamm aus dem Hunsrückschiefer. *Notizblatt des Hessischen Landesamtes für Bodenforschung zu Wiesbaden* 98:30–35, 2 fig., pl. 4.
- Rigby, J. K. 1966a. *Protospongia hicksi* Hinde from the Middle Cambrian of western Utah. *Journal of Paleontology* 40:549–554, 7 fig., pl. 66.

- . 1966b. Microstructure and classification of an Ordovician sponge, *Dystactospongia madisonensis* Foerste, from Indiana. *Journal of Paleontology* 40:1,127–1,130, pl. 146.
- . 1967a. A new polyactinal sponge from the Antelope Valley Formation (Ordovician) in the Toquima Range, Nevada. *Journal of Paleontology* 41:511–515, 4 fig.
- . 1967b. Two new Early Paleozoic sponges and the sponge-like organism *Gaspespongia basalis* Parks, from the Gaspé Peninsula, Quebec. *Journal of Paleontology* 41:766–775, 5 fig., pl. 101–102.
- . 1969. A new Middle Cambrian hexactinellid sponge from western Utah. *Journal of Paleontology* 43:125–128, 2 fig., 1 pl.
- . 1970a. Two new upper Devonian hexactinellid sponges from Alberta. *Journal of Paleontology* 44:7–16, 2 fig., pl. 3–4.
- . 1970b. *Ellesmerespongia feildeni*, a new Permian sponge from the Canadian Arctic. *Journal of Paleontology* 44:1143–1145, 2 fig.
- . 1971. Sponges of the Ordovician Cat Head Member, Lake Winnipeg, Manitoba. In D. C. McGregor, F. H. Cramer, Rousseau H. Flower, & J. K. Rigby, Contributions to Canadian Paleontology, Fossils of the Ordovician Red River Formation (Cat Head Member), Manitoba. Geological Survey of Canada Bulletin 202:35–78, 6 pl.
- . 1974. *Vaurealispongia* and *Twenhofelella*, two new brachiospongid hexactinellid sponges from the Ordovician and Silurian of Anticosti Island, Quebec. *Canadian Journal of Earth Sciences* 11:1,343–1,349, 3 fig.
- . 1975. Some unusual hexactinellid sponge spicules from the Cambrian Wilberns Formation of Texas. *Journal of Paleontology* 49:412–415, 2 fig.
- . 1976a. A new Devonian heteractinid sponge from southwestern Ellesmere Island, Arctic Canada. *Canadian Journal of Earth Sciences* 13:120–125, 8 fig.
- . 1976b. Some observations on occurrence of Cambrian Porifera in western North America and their evolution. *Brigham Young University Geology Studies* 23(2):51–90, 6 fig.
- . 1977a. Two new Middle Ordovician sponges from Foxe Plain, southeastern District of Franklin. *Geological Survey of Canada Bulletin* 269:121–129, 2 pl.
- . 1977b. *Constellatospongia*, a new heteractinid astraeosponge from the Upper Ordovician Churchill River group, Manitoba. In *Geology of Ordovician rocks, Melville Peninsula and region, southeastern District of Franklin*. Geological Survey of Canada Bulletin 269:131–137, 2 fig., 1 pl.
- . 1977c. A new Middle Ordovician sponge from western Newfoundland. *Canadian Journal of Earth Sciences* 14:2,662–2,668, 8 fig.
- . 1977d. A new chiasoclonellid sponge fauna from the Devonian of Michigan. *Journal of Paleontology* 51:1,215–1,219, 3 fig.
- . 1978. Two wewokellid calcareous sponges in North America. *Journal of Paleontology* 52:705–716, 3 fig., 1 pl.
- . 1979. The genus *Ensiferites*, a Devonian astraeosponge of North America. *Journal of Paleontology* 53:475–493, 2 fig., 3 pl.
- . 1980. *Ichnospongia perplexa*, a new sponge from the Mississippian Chainman Shale near Eureka, Nevada. *Journal of Paleontology* 54:1,278–1,281, 3 fig.
- . 1981. The sponge fauna of the Eocene Castle Hayne Limestone from east-central North Carolina. *Tulane Studies in Geology and Paleontology* 16:123–144, 4 fig., 3 pl.
- . 1983a. Sponges of the Middle Cambrian Marjum Limestone from the House Range and Drum Mountains of western Millard County, Utah. *Journal of Paleontology* 57:240–270, 11 fig.
- . 1983b. Heteractinida. In T. W. Broadhead, ed., *Sponges and Spongiomorphs: Notes for a Short Course*. University of Tennessee Department of Geological Sciences, Studies in Geology 7:70–89, 12 fig.
- . 1984. Permian sponges from western Venezuela. *Journal of Paleontology* 58:1,436–1,462, 4 fig.
- . 1986a. Sponges of the Burgess Shale (Middle Cambrian) British Columbia. *Palaeontographica Canadiana* 2:105 p., 27 fig., 20 pl.
- . 1986b. Late Devonian sponges of Western Australia. Geological Survey of Western Australia, Report 18:vii + 59 p., 14 fig., 7 pl.
- . 1986c. The sponge fauna from the Mississippian Heath Formation of central Montana. In J. T. Dutro, Jr. & H. W. Pfefferkorn, eds., *Neuvième Congrès International de Stratigraphie et de Géologie du Carbonifère*. *Compte Rendu*, vol. 5, Paleontology, Paleoecology, Paleogeography. Southern Illinois University Press. Carbondale & Edwardsville. p. 443–456, 5 fig., 2 pl.
- . 1987a. Early Cambrian sponges from Vermont and Pennsylvania, the only ones described from North America. *Journal of Paleontology* 61:451–461, 4 fig.
- . 1987b. Phylum Porifera. In R. S. Boardman, A. H. Cheetham, & A. J. Rowell, eds., *Fossil Invertebrates*. Blackwell Scientific Publications. Palo Alto, California. p. 116–139, 21 fig.
- . 1991a. Evolution of Paleozoic heteractinid calcareous sponges and demosponges—patterns and records. In Joachim Reitner & Helmut Keupp, eds., *Fossil and Recent Sponges*. Springer-Verlag. Berlin & Heidelberg. p. 83–101, 15 fig.
- . 1991b. The new Devonian (Givetian) heteractinid sponge *Gondekia* from Ontario, Canada, and evolution of the astraeospongiids and eiffeliids. *Journal of Paleontology* 65:38–44, 4 fig.
- . 1994. Well-preserved specimens of the sponges *Gondekia* (Heteractinida) and *Pseudohydnocheras* (Hexactinellida), Middle Devonian of New York State. *Journal of Paleontology* 68:727–734, 4 fig.
- Rigby, J. K., & W. I. Ausich. 1981. Lower Mississippian sponges from the Edwardsville Formation, southern Indiana. *Journal of Paleontology* 55:370–382, 2 fig., 1 pl.

- Rigby, J. K., & T. N. Bayer. 1971. Sponges of the Ordovician Maquoketa Formation in Minnesota and Iowa. *Journal of Paleontology* 45:608–627, 9 fig., pl. 69–70.
- Rigby, J. K., & R. B. Blodgett. 1983. Early Middle Devonian sponges from the McGrath Quadrangle of west-central Alaska. *Journal of Paleontology* 57:773–786, 4 fig.
- Rigby, J. K., C. K. Chamberlain, & B. A. Black. 1970. Mississippian and Pennsylvanian sponges from the Ouachita Mountains of Oklahoma. *Journal of Paleontology* 44:816–832, 12 fig., 3 pl.
- Rigby, J. K., & B. D. E. Chatterton. 1989. Middle Silurian Ludlovian and Wenlockian sponges from Baillie-Hamilton and Cornwallis Islands, Arctic Canada. *Geological Survey of Canada Bulletin* 391:69 p., 8 fig., 10 pl.
- . 1999. Silurian (Wenlock) demosponges from the Avalanche Lake area of the Mackenzie Mountains, southwestern District of Mackenzie, Northwest Territories, Canada. *Palaontographica Canadiana* 16:43 p., 2 fig., 10 pl.
- Rigby, J. K., & C. R. Clement. 1995. Demosponges and hexactinellid sponges from the Lower Devonian Ross Formation of west-central Tennessee. *Journal of Paleontology* 69:211–232, 12 fig.
- Rigby, J. K., & D. H. Collins. 2003. Sponges of the Middle Cambrian Burgess and Stephen Shale Formations, British Columbia. *Royal Ontario Museum Bulletin* In press.
- Rigby, J. K., & A. Desrochers. 1995. Lower and Middle Ordovician demosponges of the Mingan Islands, Gulf of St. Lawrence, Quebec. *Paleontological Society Memoir* 41 (*Journal of Paleontology* supplement) 60(4):35 p., 14 pl., 5 fig.
- Rigby, J. K., & O. A. Dixon. 1979. Sponge fauna of the Upper Silurian Read Bay Formation, Somerset Island, District of Franklin, Arctic Canada. *Journal of Paleontology* 53:587–627, 14 fig., 3 pl.
- Rigby, J. K., Patrick Embree, & Michael Murphy. 1996. An unusual Upper Cretaceous (Santonian) hexactinellid sponge from the Great Valley Sequence, western Sacramento Valley, northern California. *Journal of Paleontology* 70:713–717, 3 fig.
- Rigby, J. K., Fan Jiasong, & Zhang Wei. 1989a. Sphinctozoan sponges from the Permian reefs in South China. *Journal of Paleontology* 63:404–439, 20 fig.
- . 1989b. Inozoa calcareous Porifera from the Permian reefs in South China. *Journal of Paleontology* 63:778–800, 13 fig.
- Rigby, J. K., Fan Jiasong, Zhang Wei, Wang Shenghai, & Zhang Xiaolin. 1994. Sphinctozoan and inozoa sponges from the Permian reefs of South China. *Brigham Young University Geology Studies* 40:43–109, 15 pl.
- Rigby, J. K., & J. K. Gilland. 1977. A new fossil sponge from the Ordovician Garden City Limestone of southeastern Idaho. *Great Basin Naturalist* 37:475–480.
- Rigby, J. K., & Q. H. Goodbody. 1986. *Malluviospongia*, a new Devonian heteractinid sponge from the Bird Fiord Formation of southwestern Ellesmere Island, Northwest Territories, Canada. *Canadian Journal of Earth Sciences* 23:344–349, 2 fig.
- Rigby, J. K., & T. C. Gosney. 1983. First reported Triassic lyssakid sponges from North America. *Journal of Paleontology* 57:787–796, 5 fig.
- Rigby, J. K., & R. C. Gutschick. 1976. Two new Lower Paleozoic hexactinellid sponges from Utah and Oklahoma. *Journal of Paleontology* 50:78–85, 1 pl.
- Rigby, J. K., & D. R. Harris. 1979. A new Silurian sponge fauna from northern British Columbia, Canada. *Journal of Paleontology* 53:968–980, 3 fig., 2 pl.
- Rigby, J. K., R. D. Horrocks, & J. M. Cys. 1982. A new hexactinellid brachiosponge from the Upper Permian of west Texas. *Journal of Paleontology* 56:315–323, 2 fig., 1 pl.
- Rigby, J. K., & Hou Xian-Guang. 1995. Lower Cambrian demosponges and hexactinellid sponges from Yunnan, China. *Journal of Paleontology* 69:1,009–1,019, 5 fig.
- Rigby, J. K., R. Keyes Jr., & A. Horowitz. 1979. Two new Mississippian sponges from northeastern Alabama. *Journal of Paleontology* 53:709–719, 4 fig., 1 pl.
- Rigby, J. K., J. E. King, & L. F. Gunther. 1981. The new Lower Ordovician protosponge, *Asthenospongia*, from the Phi Kappa Formation in central Idaho. *Journal of Paleontology* 55:842–847, 1 fig., 1 pl.
- Rigby, J. K., & E. I. Leith. 1989. *Tiddalickia manitobensis*, a new dictyosponge, and an unusual specimen of the lithistid sponge, *Aulocopella winnipegensis* Rauff, from the Ordovician of Manitoba. *Journal of Paleontology* 63:550–553, fig. 1–2.
- Rigby, J. K., & A. C. Lenz. 1978. A new Silurian astylospongid sponge from Baillie-Hamilton Island, Canadian Arctic Archipelago. *Canadian Journal of Earth Sciences* 15:157–162, 5 fig.
- Rigby, J. K., G. Lindner, & C. H. Stevens. 2004 (in press). A new occurrence of the “hydrozoan” *Radiotrabeulopora reticulata* Fan, Rigby, & Zhang, 1991, in the Permian of California. *Journal of Paleontology* 77:000–000, 2 fig.
- Rigby, J. K., & B. J. Maher. 1995. Age of hexactinellid beds of the Roberts Mountains Formation, Snake Mountains, Nevada, and additions to the Silurian sponge fauna. *Journal of Paleontology* 69:1,020–1,029, 4 fig.
- Rigby, J. K., & W. L. Manger. 1994. Morrowan lithistid demosponges and hexactinellids from the Ozark Mountains of northwestern Arkansas. *Journal of Paleontology* 68(4):734–746, 7 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., & Dorte Mehl. 1994. Middle Devonian sponges from the northern Simpson Park Range, Nevada. *Brigham Young University Geology Studies* 40:111–153, 18 fig.

- Rigby, J. K., & R. W. Moyle. 1959. Some Mississippian and Pennsylvanian sponges from Utah. *Journal of Paleontology* 33:399–403, 1 fig., 1 pl.
- Rigby, J. K., & M. A. Murphy. 1983. *Gabelia*, a new late Devonian lyssakid protosponge from the Roberts Mountains, Nevada. *Journal of Paleontology* 57:797–803, 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* 39:341–391, 14 fig.
- Rigby, J. K., A. Pisera, T. T. Wrzolek, & G. Racki. 2001. Upper Devonian (Frasnian) sponges from the Holy Cross Mountains, Central Poland. *Palaeontology* 44(3):447–499, 4 fig., 9 pl.
- Rigby, J. K., & T. L. Pollard Bryant. 1979. Fossil sponges from the Mississippian Fort Payne Chert in northeastern Alabama. *Journal of Paleontology* 53:1,005–1,012, 1 fig., 1 pl.
- Rigby, J. K., & A. W. Potter. 1986. Ordovician sphinctozoan sponges from the eastern Klamath Mountains, northern California. *Journal of Paleontology (Memoir 20)* 60:1–47, 11 fig.
- Rigby, J. K., A. W. Potter, & R. B. Blodgett. 1988. Ordovician sphinctozoan sponges of Alaska and Yukon Territory. *Journal of Paleontology* 62:731–746, 5 fig.
- Rigby, J. K., G. Racki, & T. Wrzolek. 1982. Occurrence of dictyid hexactinellid sponges in the Upper Devonian of the Holy Cross Mountains (Poland). *Acta Geologica Polonica* 31:163–168, 4 pl.
- Rigby, J. K., D. Schumacher, & S. J. Meader. 1979. The genus *Ensiferites*, a Devonian astraeosponge of North America. *Journal of Paleontology* 53:475–493, 2 fig., 3 pl.
- Rigby, J. K., & Baba Senowbari-Daryan. 1995. Permian sponge biogeography and biostratigraphy. In P. A. Scholle, T. M. Peryt, & D. S. Ulmer-Scholle, *The Permian of Northern Pangea*, vol. 1, *Paleogeography, Paleoclimates and Stratigraphy*. Springer-Verlag, Berlin. p. 153–166, 6 fig.
- . 1996a. Upper Permian inozoid, demospongid, and hexactinellid sponges from Djebel Tebaga, Tunisia. *The University of Kansas Paleontological Contributions (new series)* 7:130 p., 81 pl.
- . 1996b. *Gigantospongia*, new genus, the largest known Permian sponge, Capitan Limestone, Guadalupe Mountains, New Mexico. *Journal of Paleontology* 70:347–355, 5 fig.
- Rigby, J. K., Baba Senowbari-Daryan, & Liu Huaibao. 1998. Sponges of the Permian Upper Capitan Limestone, Guadalupe Mountains, New Mexico and Texas. *Brigham Young University Geology Studies* 43:19–117, 19 fig., 13 pl.
- Rigby, J. K., & R. J. Stuart. 1988. Fossil sponges from the Silurian-Devonian Roberts Mountains Formation in northeastern Nevada. In D. L. Wolberg, ed., *Contributions to Paleozoic Paleontology and stratigraphy, in honor of Rousseau H. Flower*. New Mexico Bureau of Mines and Mineral Resources Memoir 44:129–137, 3 fig.
- Rigby, J. K., & F. M. Terrell. 1973. Permian sponges from western Ellesmere Island, Arctic Canada. *Canadian Journal of Earth Sciences* 10:1,431–1,443, 17 fig.
- Rigby, J. K., & A. T. Washburn. 1972. A new hexactinellid sponge from the Mississippian-Pennsylvanian Diamond Peak Formation in eastern Nevada. *Journal of Paleontology* 46:266–270, 3 fig., 1 pl.
- Rigby, J. K., & B. D. Webby. 1988. Late Ordovician sponges from the Malongulli Formation of central New South Wales, Australia. *Palaeontographica Americana* 56:1–147, 24 fig., pl. 1–44.
- Rigby, J. K., T. T. Wrzolek, & G. Racki. 2001. Upper Devonian (Frasnian) sponges from the Holy Cross Mountains, Central Poland. *Palaeontology* 43:447–488, 4 fig., pl. 1–9.
- Rigby, J. K., Wu Xichung, & Fan Jaisong. 1998. Triassic hexactinellid sponges from patch reefs in north-central Sichuan, People's Republic of China. *Brigham Young University Geology Studies* 43:119–165, 11 pl.
- Ringueberg, E. N. S. 1884. New fossils from the four groups of the Niagara period of western New York. *Proceedings of the Academy of Natural Sciences of Philadelphia* 1884:144–150, 3 pl.
- Robinson, P. D., & S. K. Haslett. 1995. A radiolarian dated sponge microclere assemblage from the Miocene Dos Bocas Formation of Ecuador. *Journal of South American Earth Sciences* 8(2):195–200, 2 fig., 1 pl.
- Roemer, C. F. 1848. Über eine neue Art der Gattung *Blumenbachium* (Koenig) und mehr unzweifelhafte Spongien in obersilurischen Kalkschichten der Grafschaft Decatur im State Tennessee in Nord-America. *Neues Jahrbuch für Mineralogie, Geologie, und Paläontologie* 1848:680–686, pl. 9.
- . 1852. *Lethaea geognostica, oder Beschreibung und Abbildung der für die Gebirgs-Formationen bezeichnendsten Versteinerungen*, 3rd ed., theil II. E. Schweizerbart'sche Verlagshandlung. Stuttgart.
- . 1854. *Palaeo-Lethaea: Kohlen Periode (Silur-Devon-, Kohlen- und Zechstein Formation)*, vol. 1, no. 2. In H. G. Brönn & F. Roemer, eds., *Lethaea Geognostica*. E. Schweizerbart. Stuttgart. 788 p.
- . 1860. *Silurische Fauna des westlichen Tennessee. Eine paläontologische Monographie*. Edvard Trewendt Verlag. Breslau. 97 p.
- . 1861. *Die fossile fauna der Silurischen Diluvial-Geschiebe von Sadewitz bei Oels in Nieder-Schlesien*. Breslau. p. 1–15, pl. 1–3; p. 55–56, pl. 7.
- . 1876–1880. *Lethaea geognostica oder Beschreibung und Abbildung der für die Gebirgs-Formationen bezeichnendsten Versteinerungen*. Part 1, *Lethaea palaeozoica*. E. Schweizerbart'sche Verlagshandlung. Stuttgart. 668 p., 2 pl.; atlas, 62 pl.

- . 1883. Notiz über die Gattung *Dictyophyton*. Zeitschrift der Deutsche Geologischen Gesellschaft 35:704–708.
- . 1885. Lethaea erratica oder Aufzählung und Beschreibung der in der norddeutschen Ebene vorkommenden Diluvial-Geschiebe nordischer Sedimentär-Gesteine. Palaeontologische Abhandlungen herausgeber von Dames und Kayser, vol. 2, part 5. Georg Reimer. Berlin. 173 p.
- . 1887. *Trochospongia*, eine neue Gattung silurischer Spongien. Neues Jahrbuch für Mineralogie, Geologie und Palaeontologie 2:174–177, pl. 6.
- Roemer, F. A. 1839. Nachtrag zu Versteinerungen der Norddeutschen Oolithen Gebirges. Hannover.
- . 1840–1841. Die Versteinerungen des norddeutschen Kreidegebirges. Hahn'schen Hofbuchhandlung. Hannover. Lieferung 1, p. 1–48, pl. 1–8, 1840; Lieferung 2, p. i–iv, 49–145, pl. 8–16, 1841.
- . 1864. Die Spongitarren des norddeutschen Kreidegebirges. Palaeontographica 13(1–2):1–64, 19 pl.
- Rogers, W. S., M. Jackson, & K. McKinney. 1964. A new genus of sponge from the Middle Ordovician. Journal of Paleontology 38:135–137, 5 fig.
- Roll, Artur. 1934. Form, bau, und entstehung der Schwammstotzen im südeutschen Malm. Palaeontologische Zeitschrift 16:197–246, 18 fig.
- Romanenko, Y. W. 1968. Kembrijskiye gubki utryada Heteractinellida Alta [Cambrian sponges of the order Heteractinellida in the Altay]. Paleontologicheskii Zhurnal 2:134–137, 3 fig. Translated in Paleontological Journal 2:271.
- Rothpletz, A. 1900. Über einen neuen jurassischen Hornschwamm und die darin eingeschlossenen Diatomeen. Zeitschrift Deutsche Geologische Gesellschaft 52:154–160, 3 fig.
- Row, R. W. H. 1909. Reports on the marine biology of the Sudanese Red Sea. XIII. Report on the sponges collected by Mr. Cyril Crossland in 1904–5. Part 1, Calcareous. Journal of the Linnean Society, Zoology 31:182–214, pl. 19–20.
- Ruedemann, Rudolf. 1921. Report on fossils from the so-called Trenton and Utica beds of Grand Isle, Vermont. Vermont State Geologist Twelfth Report 1919–1920:90–100, 1 pl.
- . 1925. The Utica and Lorraine Formations of New York: Part 2, Systematic paleontology; No. 1, Plants, sponges, corals, graptolites, crinoids, worms, bryozoans, brachiopods. New York State Museum Bulletin 262:1–171, 75 fig., pl. 1–13.
- . 1934. Palaeozoic plankton of North America. Geological Society of America, Memoir 2:141 p., 6 fig., 26 pl.
- Russo, Franco. 1981. Nuove spugne calcaree triassiche di Campo (Cortina d'Ampezzo, Belluno). Bollettino della Società Paleontologica Italiana 20(1):3–17, 4 pl.
- Rützler, K. 1965a. Substratstabilität als ökologischer Faktor im marinen Benthos, dargestellt am Beispiel adriatischer Poriferen. Internationale Revue der gesamten Hydrobiologie 50:281–292.
- . 1965b. Systematik und Ökologie der Poriferen aus Litoral-Schattengebieten der Nordadria. Zeitschrift für Morphologie und Ökologie der Tiere 55:1–82, 41 fig.
- . 1971. Bredin-Archold-Smithsonian Biological survey of Dominica; burrowing sponges, genus *Siphonodictyon* Bergquist, from the Caribbean. Smithsonian Contribution, Zoology 77:1–37, 11 fig., 9 pl.
- . 1973. Clionid sponges from the coast of Tunisia. Bulletin de l'Institut National Scientifique et Technique d'Océanographie et de Pêche de Salammbô 2(4):623–636, 7 fig.
- . 1974. The burrowing sponges of Bermuda. Smithsonian Contributions to Zoology 165:1–32, 26 fig.
- Rützler, K., & G. Rieger. 1973. Sponge burrowing: Fine structure of *Cliona lampa* penetrating calcareous substrata. Marine Biology 21:144–162.
- Salomon, Dorte. 1990. Nomenklatur und taxonomischer status der fossilen Gattung *Cribrospongia* d'Orbigny, 1849 (= *Tremadictyon* Zittel, 1877) (Hexactinosa, Hexactinellida). Berliner geowissenschaftliche Abhandlungen (Reihe A) 124:35–41, 1 fig., 1 pl.
- Salter, J. W. 1861. Descriptions and lists of fossils, Appendix. In Geology of the neighbourhood of Edinburgh. Memoirs of the Geological Survey of Great Britain, London, Sheet 32:132–151, pl. 2.
- . 1864. On some new fossils from the Lingula-Flags of Wales. Quarterly Journal of the Geological Society of London 20:233–241, 3 fig., pl. 13.
- Saper, J., & W. E. White. 1958. Amino-acid composition of scleroprotein of the sponge *Hippospongia equina*. Nature 181(4,614):285–286.
- Sarà, Michele. 1970. Competition and cooperation in sponge populations. In W. G. Fry, ed., Biology of the Porifera. Zoological Society of London Symposium 25:273–284, 4 fig.
- Sarà, Michele, & E. Manara. 1991. Cortical structure and adaptation in the genus *Tethya* (Porifera, Demospongiae). In J. Reitner & H. Keupp, eds., Fossil and Recent Sponges. Springer-Verlag, Berlin & Heidelberg. p. 306–312, 1 fig.
- Sarà, Michele, & J. Vacelet. 1973. Écologie des demosponges. In P. Grassé, ed., Traité de Zoologie, vol. 3. Masson et Cie. Paris. p. 462–576.
- Sars, G. O. 1872. Spongiae. In Kongelige Norske Universitet, ed., On some remarkable forms of animal life from the great depths off the Norwegian coast. I, Partly from posthumous manuscripts of the late Professor Michael Sars. Brøgger & Christie. Christiania, Norway. p. 62–82.
- Schäfer, P., & B. Senowbari-Daryan. 1981. Facies development and paleontologic zonation of four Upper Triassic patch-reefs, Northern Calcareous Alps near Salzburg, Austria. In D. F. Toomey, ed., SEPM Special Publication 30:241–259, 10 fig.
- Schiller, Wolfgang. 2000. Feinstratigraphische Untersuchungen der Kernbohrung Enspel 1991 (2) unter besonderer Berücksichtigung der kiesel Microfossilien. Mainzer Naturwissenschaftliches Archiv 38:39–91, 84 fig.



- von Schlotheim, E. F. 1820. Die Petrefactenkunde auf ihrem jetzigen Standpunkte durch die beschreibung seiner Sammlung versteinertes und fossiler Überreste des Thier- und Pflanzenreichs der vorwelt erläutert. Becher'schen Buchhandlung. Gotha. 437 p.
- Schlüter, C. A. 1868. Über die jungsten Schichten der untern Senon-Bildung en und deren Verbreitung. Sitzungberichte der Niederreinhischen Gesellschaft für Natur- und Heilkunde zu Bonn 1868:92–93.
- . 1870. Über die Spongitarien-Banke der unteren Mucronaten- und oberen Quadraten-Schichten, und über *Lepidospongia rugosa* insbesondere. Sitzungberichte der Niederrheinischen Gesellschaft für Natur- und Heilkunde zu Bonn 8:139–141.
- . 1872. Über die Spongitarien-Banke der oberen Quadraten und unteren Mukronatenschichten des Münsterlandes. Festschrift für 20 Hauptvers de Deutschen Geologischen Gesellschaft zu Bonn. 38 p., 1 pl.
- . 1885. Über eine Spongie des reinischen Devon, *Octacium rhenanum* n. g., et. sp. Sitzungberichte der Niederrheinische Gessellschaft, Naturalhistorische und Heilkunde, Verhandlungen, Bonn 42:151–152.
- Schmidt, Oscar. 1862. Die Spongien des adriatischen Meeres. Wilhelm Engelmann. Leipzig. 88 p., 7 pl.
- . 1864. Supplement der Spongien des adriatischen Meeres. Enthaltend die Histologie und systematische Ergänzungen. Wilhelm Engelmann. Leipzig. iv + 48 p., pl. 1–4.
- . 1868. Die Spongien der Küste von Algier. Mit Nachträgen zu den Spongien des Adriatischen Meeres (Drittes Supplement). Wilhelm Engelmann. Leipzig. vi + 44 p., 5 pl.
- . 1870. Grundzuge einer Spongien-Fauna des atlantischen Gebietes. Jena. Leipzig. iv + 88 p., 6 pl.
- . 1879. Die Spongien des Meerbusen von Mexico und des Caraibischen Meeres, part 1. Verlag von Gustav Fischer. Jena. 32 p., 4 pl.
- . 1880. Die Spongien des Meerbusen von Mexico (und des Caraibischen Meeres), part 2. Verlag von Gustav Fischer. Jena. p. 33–90, pl. 5–10.
- . 1890. Die pliocänen und glacialen Bildungen am Nordabhang des Monte San Salvatore, vol. 2, no. 1. Eclogae geologicae Helvetiae. Mittheilung der Schweizerische Geologisches Gesellschaft. Lausanne. p. 56.
- Schrammen, Anton. 1899. Beitrag zur Kenntnis der oberenen Tetractinelliden. Mitteilungen aus dem Roemer Museum, Hildesheim 10:9 p., 3 pl.
- . 1901. Neue Kieselschwämme aus der oberen Kreide der Umgebung von Hannover und von Hildesheim. Mitteilungen aus dem Roemer Museum, Hildesheim 14:26 p., 5 pl.
- . 1902. Neue Hexactinelliden aus der oberen Kreide. Mitteilungen aus dem Roemer Museum, Hildesheim 15:26 p., 4 pl.
- . 1903. Zur Systematik der Kieselspongien. Mitteilungen aus dem Roemer Museum, Hildesheim 19:21 p.
- . 1910. Die Kieselspongien der oberen Kreide von Nordwestdeutschland, I Teil, Tetraxonia, Monaxonia und Silicea incert. sedis. Palaeontographica, Supplement 5(1):1–175, 8 fig., 24 pl.
- . 1912. Die Kieselspongien der oberen Kreide von Nordwestdeutschland, II Teil, Triaxonia (Hexactinellida). Palaeontographica, Supplement 5(2):177–385, fig. 9–15, pl. 25–45.
- . 1924a. Die Kieselspongien der oberen Kreide von Nordwestdeutschland, III und letzter Teil. In W. Soergel, ed., Monographien zur Geologie und Palaeontologie, serie I, heft 2. Verlag von Gebrüder Borntraeger. Berlin. 159 p., 17 pl.
- . 1924b. Zur Revision der Jura-Spongien von Süddeutschland. Jahresbericht und Mittheilungen Oberrheinischen Geologie (new series) 13:125–154.
- . 1936. Die Kieselspongien des oberen Jura von Süddeutschland. A. Vorwort und Allgemeiner Teil. Palaeontographica (Abt. A) 84:149–194, pl. 14–23 (1–10).
- . 1937 [1936]. Die Kieselspongien des oberen Jura von Süddeutschland. B. Besonderer Teil. Palaeontographica (Abt. A) 85:1–114, pl. 1–17 (11–27).
- Schröder, R. 1963 [1962]. Vertikalverteilung des Zooplanktons und thermokline. Archiv fuer Hydrobiologie, supplement 25(4):401–410, 9 fig.
- Schulze, F. E. 1880. Untersuchungen über den Bau und die Entwicklung der Spongien. IX Mittheilungen. Die Plakiniden. Zeitschrift für Wissenschaftliche Zoologie 34:407–451, pl. xx–xxii.
- . 1885. The Hexactinellida. In T. H. Tizard, H. M. Moseley, J. Y. Buchanan, & J. Murray, eds., Report on the Scientific Results of the Voyage of H.M.S. 'Challenger,' 1873–1876. Narrative 1(1):437–451.
- . 1887a. Report on the Hexactinellida collected by H. M. S. Challenger during the years 1873–1876. Reports of the Scientific Results of the Voyage of H.M.S. Challenger, Zoology 21:513 p., 104 pl., 1 map.
- . 1887b. Über den Bau und das System der Hexactinelliden. Abhandlungen der Königlichen preussischen Akademie der Wissenschaften zu Berlin (Physikalisch-Mathematische Classe) 1886:1–97.
- . 1897. Revision des Systems de Asconematidae und Rossellidae. Königliche Preussische Akademie der Wissenschaften, Berlin, Sitzungberichte 26:520–558.
- . 1899. Amerikanische Hexactinelliden nach dem Materials der Albatross-Expedition. Verlag Gustav Fischer. Jena. 126 p., 19 pl.
- . 1904. Hexactinellida. Wissenschaftliche Ergebnisse der Deutschen Tiefsee-Expedition auf dem Dampfer "Valdivia" 1898–1899, vol. 4. Gustav Fisher. Jena. 266 p., 52 pl.
- Schulze, F. E., & R. Kirkpatrick. 1910a. Preliminary notice on Hexactinellida of the Gause-Expedition. Zoologischer Anzeiger 35:293–302.

- . 1910b. Die Hexactinelliden der deutschen Südpolar-Expedition 1901–1903 (Aus. d. Engl. übers.). Deutsche Südpolar-Expedition 1901–1903, G. Reimer, Berlin 12(1):1–62, 10 pl.
- Schweigger, A. F. 1819. Beobachtungen auf naturhistorischen Reisen von August Friedrich Schweigger. George Reimer. Berlin. 127 p., 8 pl., 12 tables.
- . 1820. Handbuch der Naturgeschichte skeletloser ungegliedeter Thiere. Leipzig. 766 p.
- Sdzuy, Klaus. 1969. Unter- und mittelkambrische Porifera (Chancelloriida und Hexactinellida). Paläontologische Zeitschrift 43(3/4):115–147, 9 fig., pl. 14–16.
- Seecley, H. M. 1885. A new genus of Chazy sponges, *Streplocetus*. American Journal of Science (series 3) 30:355–357, 3 fig.
- . 1902. Some sponges of the Chazy Formation. In G. H. Perkins, The Geology of Grand Isle. Report of the State Geologist on the mineral industries and geology of certain areas of Vermont, Report 3:151–161, 1 pl.
- Seilacher, A. 1962 [1961]. Die Sphinctozoa, eine Gruppe fossiler Kalkschwämme. Akademie der Wissenschaften und der Literatur in Mainz, Abhandlungen der Mathematisch-Naturwissenschaftlichen Klasse jahrgang 1961, 10:721–790, 7 fig., 9 pl.
- Selenka, E. 1879. Über einen Kieselschwamm von achtstrahligen Bau, und über Entwicklung der Schwamm-knospen. Zeitschrift für Wissenschaftliche Zoologie 33:467, pl. 27–28.
- Semper, C. 1868a. (On *Hyalonema schultzei* and on *Eurete*). Einige neue Kieselschwämme der Philippinen. Annals and Magazine of Natural History (series 4) 2:372–373.
- . 1868b. Über einige neue Kieselschwämme der Philippinen. Verhandlungen der physikalisch-medizinische Gesellschaft Würzburg 1:29–30.
- . 1874. Die Stammverwandschaft der Wirbelthiere und Virbelosen. Arbeiten aus dem Zoologisch Zootomischen Institut in Würzburg (new series) 2:25–76, pl. 3–5.
- Senowbari-Daryan, Baba. 1978. Neue Sphinctozoen (segmentierte Kalkschwämme) aus den "oberrhätischen" Riffkalken der nördlichen Kalkalpen (Hintersee/Salzburg). Senckenbergiana lethaea 59:205–227.
- . 1980. Neue Kalkschwämme (Sphinctozoen) aus ober-triadischen Riffkalken von Sizilien (Beitrage zur Paläontologie und Microfazies der obertriadischen Riffe des alpin-mediteranen, Gebietes 15). Mitteilungen Gesellschaft der Geologie, Bergbaustudenten 26:179–203.
- . 1981. Zur paläontologie einer kleinen riffes innerhalb der Amphyclinen-Schichten (Localität: Huda Juzna, Slowenien). Rozpravi IV. Razpreda Slovenska Akademija Znanostu in Umetnosti 23(3):99–118, 1 fig., 10 pl.
- . 1989. Spicula in segmentierten Schwämmen. Berliner Geowissenschaftliche, Abhandlungen (Reihe A) 106:473–515, 4 fig., 14 pl.
- . 1990. Die systematische Stellung der thalaminde Schwämme und ihre Bedeutung in der Erdgeschichte. Münchner Geowissenschaftliche Abhandlungen (Reihe A, Geologie und Paläontologie) 21:1–325, 70 fig., pl. 1–63.
- . 1991. "Sphinctozoa:" an overview. In J. Reitner & H. Keupp, eds., Fossil and Recent Sponges. Springer-Verlag. New York, Berlin. p. 224–241, 8 fig.
- . 1994a. Segmentierte Schwämme ("Sphinctozoen") aus der Obertrias (Nor) des Taurus-Gebirges (S-Türkei). Jahrbuch der Geologischen Bundesanstalt 50:415–446.
- . 1994b. Mesozoic sponges of the Pucará Group, Peru. Palaeontographica (Abt. A) 233:57–74, 3 fig., 12 pl.
- Senowbari-Daryan, B., & Pietro Di Stefano. 1988. Microfacies and sphinctozoan assemblage of some Lower Permian breccias from the Lercara Formation (Sicily). Rivista Italiana di Paleontologia e Stratigrafia 94:3–34, 8 pl.
- Senowbari-Daryan, B., & Theo Engeser. 1996. Ein Beitrag zur Nomenklatur sphinctozoider Schwämme (Porifera). Paläontologische Zeitschrift 70(1/2):269–271.
- Senowbari-Daryan, Baba, & D. C. Garcia-Bellido. 2002. 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. Kluwer Academic/Plenum Publishers. New York. p. 1,511–1,533, 13 fig.
- Senowbari-Daryan, Baba, & Rucha Ingavat-Helmcke. 1994. Sponge assemblage of some Upper Permian reef limestones from Phrae province (Northern Thailand). Geologija 36:3–59, 13 pl.
- Senowbari-Daryan, Baba, & R. P. Reid. 1987. Upper Triassic sponges (Sphinctozoa) from southern Yukon, Stikinia terrane. Canadian Journal of Earth Sciences 24:882–902, 5 fig., 7 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, & P. Schäfer. 1979. Neue Kalkschwämme und ein Problematikum (*Radionura cautica* n. g., n. sp.) aus Oberrhät-Riffen südlich von Salzburg (Nördliche Kalkalpen). Mitteilungen der Österreichischen Geologische Gesellschaft 70:17–42, 2 fig., 7 pl.
- . 1986. Sphinctozoen (Kalkschwämme) aus den norischen Riffen von Sizilien. Facies 14:235–284, pl. 44–53.
- Senowbari-Daryan, Baba, P. Schäfer, & B. Abate. 1982. Obertriadische Riffe und Rifforganismen in Sizilien. Facies 6:165–184, 4 fig., 3 pl.
- Senowbari-Daryan, Baba, Kazem Seyed-Emami, & Ali Aghanabati. 1997. Some inozoid sponges from Upper Triassic (Norian-Rhaetian) Nayband Formation of central Iran. Rivista Italiana di Paleontologia e Stratigrafia 103(3):293–321, 9 pl.
- Senowbari-Daryan, B., & G. D. Stanley. 1988. Triassic sponges ("Sphinctozoa") from Hells Canyon, Oregon. Journal of Paleontology 63(3):419–423, 3 fig.
- . 1992. New thalimid sponges from the Triassic Luning Formation of Nevada. Journal of Paleontology 66:183–193.

- Snowbari-Daryan, B., & Detlef Wurm. 1994. *Radiocella prima* n. g., n. sp., der erste segmentierte Schwamm mit tetracladinen Skelett aus den Dachstein-Riffkalcken (Nor) des Gosaukammes (Nördliche Kalkalpen, Österreich). Festschrift zum 60. Geburtstag von Erik Flügel. Abhandlungen der Geologischen Bundesanstalt (Austria) 50:447–452, 4 fig., 1 pl.
- Snowbari-Daryan, Baba, Rainer Zühlke, Thilo Bechstäd, & 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., pl. 40–65.
- Sherborn, C. D. 1922–1932. Index Animalium, sive index nominum qua ab A. D. MDCCLVIII, generibus et speciebus animalium imposita sunt. Cambridge University Press. Cambridge. Sectio Primo, MDCCLVIII–MDCCLXX, p. i–lix, 1–1,195; Sectio Secundo, MDCCLXXI–MDCCLXXV, parts 1–28, p. i–cxxxii, 1–7,056; part 29, Epilogue, additions to bibliography, additions and corrections, index to trivialia under genera, p. cxxxiii–cxlvii, 1–1,098.
- Sieber, R. A. 1937. Neue Untersuchungen über die Stratigraphie und Ökologie der alpinen Triasfaunen. I. Die Fauna der nordalpinen Rhättriffkalke. Neues Jahrbuch für Mineralogie, Geologie und Paläontologie 78:123–188.
- Siemiradzki, J. R. 1913. Die spongien der Polnischen Juraformation. Beiträge zur Paläontologie und Geologie Österreich-Ungarns und des Orients: Mitteilungen des Geologischen und Paläontologischen Institutes der Universität Wien 26:163–211, 8 pl.
- Simon, L. 1953. Über die Spezifität der Nadeln und die Variabilität der Arten bei den Spongilliden. *Zoologische Jahrbücher für Allgemeine Zoologie* 64:207–234, 19 fig.
- Simonowitsch, S. 1871. Beiträge zur Kenntniss der Bryozoen des Essener Grünsande. Verhandlungen der Naturhistorischen vereins der preussische Rheinland und Westfalens (series 3) 8:27–34, 1 pl.
- Simpson, T. L. 1963. The biology of the marine sponge *Microciona prolifera* (Ellis and Solander). I. A study of cellular function and differentiation. *Journal of Experimental Zoology* 154:135–151, 3 fig., 2 pl.
- Sintzova, I. 1878. O melovykh gubkakh Saratovskoi gubernii (Dopolnenie k state "O yurskikh i melovykh okamenelostyakh Saratovskoi gubernii") [Cretaceous sponges of the Saratov region. Supplement to the article "Jurassic and Cretaceous fossils of the Saratov region"]. *Zapiski Novorossiiskogo Obshchestva Estestvoispytatelei* 6(1):1–40.
- . 1879. On calcareous sponges from the government of Saratow (Russia). *Transactions of the New Russian Society of Natural History* 6:1–40, pl. 1–6.
- Listed in Rauff, 1893, as Kalkspongien des gouvernement Saratow (Russich). *Mémoire, Société Nouvelle Russie, Odessa* 6:1–40.
- Siribelli, Lycia. 1961. Differenze nell' aspetto sterno e nello scheletro fra *Axinella verrucosa* O.S. e *Axinella damicornia* (exper.) O. S. (Demospongiae). *Anali Institute e Museo Zoologica, Universitario Napoli* 13(5):1–23, 3 pl.
- Sirková, A. 1938a. Houby z kopiri ivnického tithonu na Morave. *Rozpravy České Akademie Ved A Umeni, Trída 2*, 48(36):1–31, pl. 7.
- . 1938b. Die Schwämme aus dem Koprivicer Tithon in Mähren. *Bulletin International de l'Académie Tchèque des Sciences, Prague* 39:181–191, 1 pl.
- Smith, J. 1911. Carboniferous limestone rocks of the Isle of Man. *Transactions of the Geological Society, Glasgow* 14(2):119–164.
- Smith, J. Toulmin. 1847. On the Ventriculidae of the Chalk; including the description of peculiar characteristics of structure observed in their tissues. *Annals and Magazine of Natural History (series 1)* 20:74–97, 176–191, pl. 7–8.
- . 1848. On the Ventriculidae of the Chalk; their classification. *Annals and Magazine of Natural History (series 2)* 1:36–48, 203–220, 279–295, 352–372, pl. 13–16.
- van Soest, R. W. M. 1980. Marine sponges from Curaçao and other Caribbean localities. Part II. Haplosclerida. *Studies on the Fauna of Curaçao and other Caribbean Islands* 62(191):1–173.
- . 1991. Demosponge higher taxa classification re-examined. In J. Reitner and H. Keupp, eds., *Fossil and Recent Sponges*. Springer-Verlag. Berlin. p. 54–71.
- Sokolova, M. 1964. Nekotory e zakonomerst raspredeleniya pishchevykh gruppiravok glubokovodnog e bentosa. *Okeanologiya* 4(6):1,079–1,088.
- Sokolova [also Sokoleva], V. Z. 1962. [Feeding resources of benthos in Lake Syamozep]. In S. V. Gerd, *Transactions of the Syamozer Complex Expedition, vol. 2*. ANSSR. Leningrad. p. 36–55, 2 fig.
- Sollas, W. J. 1873. On the coprolites of the upper Greensand Formation and on flints. *Quarterly Journal of the Geological Society of London (new series)* 29:76–81.
- . 1875. Sponges. *Encyclopedia Britannica*, 9th ed. Adam and Charles Black. Edinburgh. p. 427–446, 26 fig.
- . 1876a. On *Eubrochus clausus*, a vitreohexactinellid sponge from the Cambridge "Coprolite" bed. *Geological Magazine (new series, Decade II)* 3:398–403, pl. 14.
- . 1876b. On the foraminifera and sponges of the Cambridge Upper Greensand. *Proceedings of the Cambridge Philosophical Society* 1876:299–300.
- . 1877a. On *Pharetrospongia strahani* Sollas, a fossil holoraphidote sponge. *Journal of the Geological Society (London)* 33:242–255.
- . 1877b. On *Stauronema*, a new genus of fossil hexactinellid sponges, with a description of its two species, *S. carteri* and *S. lobata*. *Annals and Magazine of Natural History (series 4)* 19:1–25, pl. 1–5.

- . 1878. On the structure and affinities of the genus *Catagma*. *Annals and Magazine of Natural History* (series 5) 2:353–364.
- . 1880a. On the structure and affinities of the genus *Protospongia*. *Quarterly Journal of the Geological Society of London* 36:362–367, 2 fig.
- . 1880b. The sponge-fauna of Norway; a report on the Rev. A. M. Norman's collection of sponges from the Norwegian coast. *Annals and Magazine of Natural History; Zoology, Botany and Geology* (series 5) 5:130–144, pl. 6–7, 11–12, 17.
- . 1880c. On sponge spicules from the Chalk of Trimmingham, Norfolk. *Reports of the British Association for the Advancement of Science 1880*:586–587.
- . 1880d. On the flint nodules of the Trimmingham Chalk. *Annals and Magazine of Natural History; Zoology, Botany and Geology* (series 5) 6:384–395, pl. 19–20.
- . 1881. On *Astroconia granti*, a new lyssakine hexactinellid from the Silurian formation of Canada. *Quarterly Journal of the Geological Society, London* 37:254–260, fig. 1–11.
- . 1883. Descriptions of fossil sponges from the Inferior Oolite, with a notice of some from the Great Oolite. *Quarterly Journal of the Geological Society of London* (new series) 39:541–554, pl. 20–21.
- . 1884. On the development of *Halisarca lobularis*. *Quarterly Journal of Microscopical Science* 24:603–621, fig. 1–39, pl. 37.
- . 1885a. A classification of the sponges. *Annals of Natural History* (series 5) 16:395.
- . 1885b. On *Vetulina stalactites* (O.S.) and the skeleton of the Anomocladina. *Proceedings of the Royal Irish Academy of Science* (series 2) 4(4):486–492, pl. 3–4.
- . 1886. Preliminary account of the tetractinellid sponges dredged by the 'Challenger' 1872–1876. *Scientific Proceedings of the Royal Dublin Society* (new series) 5:177–199.
- . 1887. Sponges. *Encyclopaedia Britannica*, 9th ed., vol. 22. Adam and Charles Black. Edinburgh. p. 412–429, 26 fig.
- . 1888. Report on the Tetractinellida collected by H. M. S. Challenger during the years 1873–1876. Report on the Scientific Results of the voyage of H. M. S. Challenger during the years 1873–76, *Zoology*, vol. 25. London, Edinburgh, & Dublin. clxvi + 458 p., 44 pl., 1 map.
- Solle, Gerhard. 1938. Die ersten Bohr-Spongien im europäischen Devon und einige andere Spuren. *Senckenbergiana* 20:154–178, 22 fig.
- Sorokin, J. I. 1964. Quantitative study of the microflora in the Central Pacific Ocean. *Journal Conseil* 29:25–60.
- Spreisterbach, J. 1935. Beiträge zur Kenntnis der Fauna des rheinischen Devon. *Jahrbuch, Preussische Geologische Landesanstalt 1935*:447–483, 2 fig., 2 pl.
- Stearn, C. W., & J. W. Pickett. 1994. The stromatopoid animal revisited: building the skeleton. *Lethaia* 27:1–10.
- Steiner, M. D., D. Mehl, J. Reitner, & B.-D. Erdtmann. 1993. Oldest entirely preserved sponges and other fossils from the lowermost Cambrian and a new facies reconstruction of the Yangtze platform (China). *Berliner Geowissenschaftliche Abhandlungen* (series E) 9:293–329, 13 fig., 7 pl.
- Steinmann, Gustav. 1878. Über fossile Hydrozoen aus der Familie der Coryniden. *Paläontographica* 25(3):101–124.
- . 1881. Über *Prototetraclis linki*. n. f., eine Lithistide des Malms. *Neues Jahrbuch* 2:154–163, pl. 9.
- . 1882. Pharetronen-Studien. *Neues Jahrbuch für Mineralogie, Geologie und Palaeontologie* 2:139–191, pl. 6–9.
- . 1913. Pharetronen. In F. Toula, *Die Kalke von Jägerhaus unweit Baden (Rauchstallbrunnengraben) mit nordalpiner St. Cassianer Fauna*. *Jahrbuch der Kaiserlich-Königliche Geologischen Reichsanstalt, Wien* 63:86–89, fig. 1–4.
- Stempien, M. F. Jr. 1960. The nucleic acids of sponges. *Annals of the New York Academy of Science* 50:910–912.
- Stewart, C. 1870. On a new sponge, *Tethyopsis columnifer*. *Quarterly Journal of Microscopical Science, London* (new series) 10:281–282.
- Stoehr (Stöhr), P. A. 1880. Die Radiolarienfauna der Tripoli von Grotte Provinz Gergenti in Sicilien. *Palaeontographica* 26 (1879–1880):69–124.
- Stoppani, Antonio. 1858. Les Petrifications d'Énsino ou description des fossiles appartenant au dépôt Triasique supérieur des environs d'Énsino en Lombardie. Milan. p. 126–131, pl. 29–31.
- . 1860. Risultati paleontologici dedotti dallo studio dei petrefatti d'Esino: 1, Del parallelismo del deposito di Esino con altri fuori di Lombardia. 2, Del posto occupato dal deposito di Esino nella serie stratigraphica di Lombardia. *Atti della Società Italiana di Scienze naturali, Milano* 2(1859–1860):65–92.
- Strand, E. 1928. *Miscellanea nomenclatorica zoologica et palaeontologica*. *Archiv für Naturgeschichte, Berlin* 72A:31–36.
- Stuckenberg, A. 1895. Korallen und Bryozoen der Steinkohlenablagerungen des Ural und des Timan. *Mémoires du Comité Géologique, St. Petersburg* 10(3):244 p., 24 pl.
- Tanaka-Ichihara, Keiko, & Yoko Watanabe. 1990. Gametogenic cycle in *Halichondria okadai*. In Klaus Rutzler, ed., *New perspectives in sponge biology*, Smithsonian Press. Washington, D.C. & London. p. 170–174, 3 fig.
- Tate, Ralph. 1865. On the correlation of the Cretaceous formations of the north-east of Ireland. *Quarterly Journal of the Geological Society of London* 21:15–44, pl. 3–5.
- Taylor, S., & J. G. Wells. 1975. *Cowries*. T. F. H. Publications Inc., Ltd. Neptune City, New Jersey. 288 p., pl.
- Teichert, Curt. 1958. Cold- and deep-water coral banks. *American Association of Petroleum Geologists Bulletin* 42(5):1,064–1,082.

- Termier, Henri, & Geneviève Termier. 1955. Contribution à l'étude des Spongiaires permien du Djebel Tebaga (Extrême Sud Tunisien). *Bulletin de la Société Géologique de France (series 6)* 5:613–630.
- . 1973. Stromatopores, sclérosponges et Pharétrones: les Ischyrospongia. *Annales des Mines et la Géologie, Tunis* 26:285–297.
- . 1974. Sponges permien du Djebel Tebaga (sud Tunisien). *Comptes Rendus de l'Académie des Sciences, Paris (series D)* 279:247–249.
- . 1977a. Paléontologie des Invertébrés. In Henri Termier, Geneviève Termier, & D. Vachard, *Monographie paléontologique des affleurements Permien du Djebel Tebaga (sud Tunisien)*. *Palaeontographica (Abt. A)* 156:25–99.
- . 1977b. Structure et évolution des spongiaires hypercalcifiés du Paléozoïque supérieur. *Mémoires de l'Institut Géologique de l'Université de Louvain* 29:57–109.
- . 1980. Stromatopores, trépostomes et tabuliatomorphes du Paléozoïque d'Afrique du nord. *Annales de Paléontologie (Invertébrés)* 66(1):1–16, 4 pl.
- . 1981. Descriptions of species. In H. Termier, G. Termier, & H. H. Tsien, *Spongiaires des calcaires récifaux du Frasnien de l'Ardenne*. *Bulletin de la Société belge de Géologie* 90(4):290–292, fig. 3, pl. 3.
- Termier, Henri, Geneviève Termier, & H. H. Tsien. 1981. Spongiaires des calcaires récifaux du Frasnien de l'Ardenne. *Bulletin de la Société belge de Géologie* 90(4):287–298, fig. 3, pl. 3.
- Termier, Henri, Geneviève Termier, & J. Thibieroz. 1990. *Hexactinella Lyssakida liassiques de la bordure sud-est des Cevennes*. *Bulletin Trimestriel de la Société Géologique de Normandie et des Amis du Muséum du Havre* 77(3–4):5–17, 1 fig., 4 pl.
- Termier, Henri, Geneviève Termier, & Daniel Vachard. 1977a. *Monographie paléontologique des affleurements permien du Djebel Tebaga (sud Tunisien)*. *Palaeontographica (Abt. A)* 156:1–109, 52 fig., 18 pl.
- . 1977b. Étude comparative de quelques ischyrosponges. *Géologie Méditerranéenne* 4(2):139–180.
- Thomas, A. O. 1922. Some new Paleozoic glass-sponges from Iowa. *Proceedings of the Iowa Academy of Science* 29:85–91, pl. 1.
- Thomson, C. W. 1868. On the vitreous sponges. *Annals and Magazine of Natural History (series 4)* 1(2):114–132, pl. 4.
- . 1873a. The depths of the sea. Macmillan and Co. London. 527 p., 84 fig.
- . 1873b. Notes from the 'Challenger,' I–VII. *Nature* 8:28–30, 51–53, 109–110, 246–249, 266–267, 347–349, 400–403.
- . 1877. The voyage of the 'Challenger,' The Atlantic, a preliminary account of the general results of the exploring voyage of H.M.S Challenger during the year 1873 and the early part of the year 1876. Macmillan and Co. London. vol. 1., p. 1–424; vol. 2, p. 1–396.
- Tiwari, Meera. 1997. *Nabaviella acanthomorpha* n. sp., a sponge spicule from the Precambrian-Cambrian boundary interval in the Tethys sequence of north-western Kashmir. *Journal Geological Society of India* 50:655–658, 2 fig.
- . 1999. Organic-walled microfossils from the Chert-phosphorite Member, Tal Formation, Precambrian-Cambrian boundary, India. *Precambrian Research* 97:99–113, 4 fig.
- Tiwari, Meera, C. C. Pant, & V. C. Tewari. 2000. Neoproterozoic sponge spicules and organic-walled microfossils from the Gangolihat Dolomite, Lesser Himalaya, India. *Current Science* 79(5):651–654.
- Toomey, D. F. 1964. Ellenburger (Lower Ordovician) sponge beds of central Texas. *Tulsa Geological Society Digest* 32:98–111, 2 fig., 3 pl.
- . 1970. An unhurried look at a Lower Ordovician mound horizon, southern Franklin Mountains, west Texas. *Journal of Sedimentary Petrology* 40:1,318–1,334, 15 fig.
- Toomey, D. F., & R. M. Finks. 1969. The paleoecology of Chazyan (lower Middle Ordovician) "reefs" or "mounds" and Middle Ordovician (Chazyan) mounds, southern Quebec, Canada, a summary report. *New York State Geological Association Guidebook, 41st Annual meeting, Plattsburgh, New York*. State University of New York, Department of Geology. Brockport. p. 93–134.
- Toomey, D. F., & M. H. Nitecki. 1979. Organic buildups in the Lower Ordovician (Canadian) of Texas and Oklahoma. *Field Museum of Natural History, Fieldiana, Geology (new series)* 2:1–181, 85 fig.
- Topsent, Émile. 1892. Contribution à l'étude des Spongiaires de l'Atlantique Nord, fasc. II. Résultats des Campagnes scientifiques accomplies sur son yacht par Albert I, Prince souverain de Monaco. *Publiés sous sa direction, avec le concours du Baron Jul. de Guerne*. Monaco. 165 p., 11 pl.
- . 1898. Introduction à l'étude monographique des Monaxonides de France, Classification des Hadromerina. *Archives de Zoologie expérimentale et générale* 4(3):91–113.
- . 1901a. Les Spongiaires de l'expédition antarctique belge et la biopolarité des faunes. *Comptes Rendus, Académie des Sciences* 132(3):168–169.
- . 1901b. Considérations sur la Faune des Spongiaires des Côtes d'Algérie: Éponges de la Calle. *Archives de Zoologie expérimentale et générale (series 3)* 9:327–370.
- . 1902. Spongiaires. *Expédition Antarctique Belge, Résultats du voyage du S. Y. Belgica en 1897–1898–1899, Rapports Scientifiques, Zoologie*. J. E. Buschmann. Anvers. 54 p., 6 pl.
- . 1904. Spongiaires des Açores, fasc. XXV. Résultats des Campagnes Scientifiques accomplies sur son yacht par Albert I, Prince souverain de Monaco. *Publiés sous sa direction, avec le concours du M. Jules Richard*. Monaco. Imprimerie de Monaco. p. 1–280, 18 pl.

- . 1913. Spongiaires provenant des Campagnes scientifiques de la *Princess-Alice* dans les Mers du Nord (1898–1899–1906–1907). Résultats des Campagnes Scientifiques du Prince de Monaco 45:1–67, 5 pl.
- . 1920a. Spongiaires du Musée zoologique de Strassburg. Monaxonides. Bulletin de l'Institut océanographique, Monaco 381:1–36.
- . 1920b. *Tethya aurantium* et les *Tethya* de Lamarck. Bulletin du Muséum d'Histoire Naturelle, Paris 1920:640–646.
- . 1922. Les mégasclères polytylotes des Monaxonides et la parenté de Latrunculines. Bulletin du l'Institut océanographique, Monaco 415:1–8.
- . 1928a. Une Mycaline productrice de desmes, *Desmatiderma arbuscula*, n. g., n. sp. Bulletin de l'Institut Océanographique, Monaco 519:1–8.
- . 1928b. Spongiaires de l'Atlantique et de la Méditerranée. Résultats des Campagnes Scientifiques du Prince Albert 1<sup>er</sup> de Monaco 74:1–376, 11 pl.
- . 1928c. Sur deux Eurétides du Japon (Note préliminaire). Bulletin de l'Institut océanographique, Monaco 74:1–4.
- Trammer, Jerzy. 1979. Some aspects of the biology of fossil solid-branching demosponges, exemplified by *Reiswigia ramosa* gen. n., sp. n., from the Lower Oxfordian of Poland. Acta Geologica Polonica 29(1):39–49, fig. 1–5, pl. 1–3.
- . 1989. Middle to Upper Oxfordian sponges of the Polish Jura. Acta Geologica Polonica 39(104):49–91.
- Trautschold, H. 1870. Palaeontologischer Nachtrag zu der Abhandlung des Fürsten P. Krapotkin über die geognostischen Verhältnisse des Kreises Meschtschowsk im Gouvernement Kaluga. Bulletin de la Société Impériale des Naturalistes de Moscou 42 (année 1869, no. 4):230–233, 1 pl.
- Trébougoff, G. 1942. Contribution à la connaissance des larves planctoniques d'éponges. Archives de Zoologie Expérimentale et Générale 82:357–399, 7 fig., pl. ix–x.
- Trejo, M. 1967. La esponja fósil *Rhaxella sorbyana* (Blake) y su significación estratigráfica. Boletín de la Asociación Mexicana de geólogos petroleros 19:33–38, 7 pl.
- Trest'yan, G. N. 1972. New Upper Cretaceous glass sponges (Hyalospongiae) from the Dniester region. Paleontologicheskii Zhurnal 1972(2):32–41, 4 fig. In Russian, translated into English in 1972, Paleontological Journal 6(2):171–179.
- van Trigt, H. 1919. A contribution to the physiology of the fresh-water sponges (Spongillidae). Leiden Tijdschrift Nederlands Dierk. Verhandelingen (series 2) 17:1–220, 6 pl.
- Tschernyshev, T. 1898. Über die Artinsk- und Carbon-Schwämme vom Ural und vom Timan. Bulletin of the Academy of Science, St. Petersburg (series 5) 9:1–36, pl. 1–5.
- Tschernyshev, T., & R. Stepanov. 1916. Obercarbon Fauna von König Oskars und vom Heibergs Land. In Report of the Second Norwegian Arctic Expedition in the "Fram" 1898–1902, vol. 4. Videnskabs-Selskabet i Kristiana (Society of Arts and Sciences of Kristiana). A. W. Brogger. Oslo. p. 1–67, 12 pl.
- Tuzet, Odette. 1973a. Introduction et place des spongiaires dans la classification. In P.-P. Grassé, ed., Traité de Zoologie. Anatomie, Systématique, Biologie, III. Spongiaires. Masson et Cie. Paris. p. 1–26, fig. 1–10.
- . 1973b. Éponges calcaires. In P.-P. Grassé, ed., Traité de Zoologie. Anatomie, Systématique, Biologie, III. Spongiaires. Masson et Cie. Paris. p. 27–132, fig. 12–89.
- Tuzet, O., & R. Connes. 1962. Spicules anormaux d'une variété écologique d'*Ephidatia fluviatilis* Linné. Vie et Milieu 13:467–470, 1 fig.
- Tuzet, O., & J. Paris. 1964. La spermatogenèse, l'ovogenèse, la fécondation et les premiers stades du développement chez *Octavella galangau* Tuzet et Paris. Vie et Milieu 15:309–327, 9 fig.
- Tuzet, O., & M. Pavans de Ceccatty. 1959. La spermatogenèse, l'ovogenèse, la fécondation et les premiers stades du développement d'*Hippospongia communis* Lmk. (= *H. equina* O.S.). Bulletin Biologique 92:1,331–1,348, 5 fig.
- Twenhofel, W. H. 1928. The geology of Anticosti Island. Memoir of the Geological Survey of Canada 154:481 p., 60 pl.
- Ulbrich, Hans. 1974. Die Spongien der Ilsenburg-Entwicklung (Oberes Unter-Campan) der Subherzynen Kreidemulde. Freiburger Forschungshefte (Paläontologie) C291:121 p., 19 pl.
- Ulrich, E. O. 1878. Descriptions of new genera and species of fossils from the Lower Silurian about Cincinnati. Journal of the Cincinnati Society of Natural History 2:8–30.
- . 1879 [1878]. Descriptions of some new species of fossils from the Cincinnati group. Journal of the Cincinnati Society of Natural History 1:92–100.
- . 1889. Preliminary description of new lower Silurian sponges. The American Geologist 3:233–248, fig. 1–7.
- . 1890a. American Paleozoic sponges. Illinois Geological Survey (Paleontology of Illinois, part 2, section 3) Bulletin 8:209–241.
- . 1890b. Sponges of the Devonian and Carboniferous systems. Illinois Geological Survey (Paleontology of Illinois, part 2, section 4) Bulletin 8:242–253.
- Ulrich, E. O., & Oliver Everett. 1890. Lower Silurian sponges. Illinois Geological Survey (Paleontology of Illinois, part 2, section 5) Bulletin 8:255–282.
- Ushakov, P. V. 1955. Polychaetes of the far-eastern seas of the Soviet Union. Ed. ZIN, Akademiya Nauk SSSR (Academy of Science, USSR), Tabulation and Analysis of the fauna of the USSR 56:445 p., 164 fig. In Russian.
- Vacelet, J. 1961. Quelques éponges remarquables de Méditerranée. Revue des Travaux, Institut des Pêches Maritimes 25:351–354.

- . 1962. Existence de formations de réserve chez une éponge calcaire pharétronide. *Comptes Rendus, Académie des Sciences*, Paris 254:2,425–2,426, 3 fig.
- . 1965 [1964]. Étude monographique de l'éponge calcaire pharétronide de Méditerranée, *Petrobonia massiliensis* Vacelet et Lévi. Les pharétronides actuelles et fossiles. *Recueil des Travaux aux de la Station Marine d'Endoume* 50(34):1–125.
- . 1967a. Descriptions d'éponges pharétronides actuelles des tunnels obscurs sous-récifaux de Tuléar (Madagascar). *Recueils et Travaux de la Station Marine d'Endoume* 6:37–62, 6 fig., 13 pl.
- . 1967b. Quelques éponges pharétronides et "silico-calcaires" des grottes sous-marines obscures. *Recueils et Travaux de la Station Marine d'Endoume* 58(42):121–132.
- . 1969. Éponges de la roche du large et de l'étage bathyal de Méditerranée. *Muséum National d'Histoire Naturelle (Paris), Mémoires (series A)* 59:145–219, 54 fig., 12 pl.
- . 1977a. Éponges pharétronides actuelles et sclérosponges de Polynésie française, de Madagascar et de la Réunion. *Bulletin du Muséum National d'Histoire Naturelle (Paris), Zoologie* 307(444):345–367, 7 fig., 2 pl.
- . 1977b. Une nouvelle relique du secondaire: un représentant actuel des éponges fossiles sphinctozoaires. *Comptes Rendus Hebdomadaires des Séances de l'Académie des Sciences*, Paris 285(5):509–511, 1 pl.
- . 1979. Description et affinités d'une éponge sphinctozoaire actuelle. *In* C. Lévi & N. Boury-Esnault, eds., *Biologie des Spongiaires*, Colloques Internationaux du Centre National de la Recherche Scientifique 291:483–493.
- . 1980. Squelette calcaire facultatif et corps de régénérations dans le genre *Merlia*, éponges apparentées aux chaetétides fossiles. *Comptes Rendus Hebdomadaires des Séances, Académie des Sciences*, Paris (series D) 290(3):227–230.
- . 1981. Éponges hypercalcifiées ('pharétronides', 'sclérosponges') des cavités des récifs coralliens de Nouvelle-Calédonie. *Bulletin, Muséum National d'Histoire Naturelle (Paris) Zoologie, Biologie et Ecologie Animales* 3(2):313–351.
- . 1983. Les éponges hypercalcifiées, reliques des organismes constructeurs de récifs du Paléozoïque et du Mésozoïque. *Bulletin de la Société Zoologique de France* 108:547–557.
- . 1985. Coralline sponges and the evolution of Porifera. *In* S. Conway-Morris, ed., *Organisms and Relationships of Lower Invertebrates*. Systematics Association Special Volume 28:2–13.
- . 1991. Recent Calcareous with a reinforced skeleton ("Pharétronids"). *In* J. Reitner and H. Keupp, eds., *Fossil and Recent Sponges*, Springer-Verlag, Berlin. p. 252–265.
- . 1994. Porifera. *In* C. Juberthie & V. Decu, eds., *Encyclopaedia Biospeologica*, vol. 1. Société de Biospéologie. Saint-Girons, France. p. 36–38.
- Vacelet, J., N. Boury-Esnault, & J.-G. Harmelin. 1994. Hexactinellid Cave, a unique deep-sea habitat in the scuba zone. *Deep-Sea Research* 1, 41(7):965–973.
- Vacelet, Jean, & Claude Lévi. 1958. Un cas de survivance, en Méditerranée, du groupe d'éponges fossiles des Pharétronides. *Comptes Rendus hebdomadaires des Séances de l'Académie des Sciences*, Paris 246(2):318–320, 3 fig.
- Vacelet, J., & M. J. Uriz. 1991. Deficient spiculation in a new species of *Merlia* (Merliida, Demospongiae) from the Balearic Islands. *In* J. Reitner & H. Keupp, eds., *Fossil and Recent Sponges*. Springer-Verlag, Berlin. p. 170–178.
- Vacelet, J., & P. Vasseur. 1971a. Éponges des récifs coralliens de Tuléar (Madagascar). *Tethys, Supplement* 1:51–126, 77 fig., 4 pl.
- . 1971b. Spongiaires des grottes et surplombs des récifs de Tuléar (Madagascar). *Recueils et Travaux de la Station Marine d'Endoume (Fascicule Hors Serie) Supplement* 4:71–123.
- Vachard, D., & C. Montenat. 1981. Biostratigraphie, micropaléontologie et paléogéographie du Permien de la région de Tezak (Montagnes Centrales d'Afghanistan). *Palaeontographica (Abt. B)* 178:1–88, 15 pl.
- Vandercammen, Antoine. 1950. Contribution à l'étude des spongiaires hétéractinellides. *Bulletin de l'Institut Royal des Sciences de la Société Naturelle de Belgique* 26 (19):1–23, 1 fig., 6 pl.
- Van de Graaf, W. J. E. 1969. Carboniferous Sphinctozoa from the Cantabrian Mountains, Spain. *Leidse Geologische Mededelingen* 42:239–257, 2 pl.
- Vanuxem, Lardner. 1842. *Geology of New York*. Part 3. Comprising a survey of the third geological district. New York Geological Survey. Albany. 306 p.
- Van Weel, P. B. 1949. On the physiology of the tropical fresh water sponge *Spongilla proliferans*. I. Ingestion, digestion and excretion. *Physiologia Comparata Oecologia* 1:110–126.
- Vasserot, Jean. 1961. Caractère hautement spécialisé du régime alimentaire chez les astérides *Echinaster sepotus* et *Henricia sanguinolenta*, prédateurs de spongiaires. *Bulletin de la Société Zoologique de France* 86(6):796–809, 5 fig.
- Vasseur, G. 1880. Reproduction asexuelle de la *Leucosolenia botryoides*. *Archives de Zoologie expérimentale et générale*, Paris 8:59–65.
- Vaughan, T. W., & J. W. Wells. 1943. Revision of the suborders, families, and genera of the Scleractinia. *Geological Society of America Special Paper* 44:363 p., 39 fig., 51 pl.
- Véizer, V., & J. Wendt. 1976a. Mineralogy and chemical composition of Recent and fossil skeletons of calcareous sponges. *Neues Jahrbuch für Geologie und Paläontologie, Monatshefte* 1976(9):558–573, 8 fig.
- . 1976b. The Southern Bükk (N. Hungary) Triassic revisited: The Beruavölgy limestone. *Annales Section Geologique* 27:16–65, 15 pl.
- Vernadsky, W. J. 1934 [1933]. Ozeanographie und Geochemie. *Mineralogische und Petrographische Mitteilungen* 44(2–3):168–192.

- Verrill, A. E. 1907. Porifera of the Bermuda Islands. New Haven, Connecticut, Transactions of the Academy of Arts and Sciences 12:330–344.
- Vinassa de Regny, P. 1901. Trias-spongien aus dem Bakony. Resultatae der Wissenschaften Erforschung der Balatonsees, I, Palaeontologie der Umgebung des Balatonsees, vol. 1. Wien. 22 p., 7 fig., 3 pl.
- . 1911a. Trias-Spongien aus dem Bakony. *In* Resultate der wissenschaftlichen Untersuchungen des Balaton (Plattensee), Anhang I, Band 1911, no. 2. Wien. p. 1–22, 3 pl.
- . 1911b. Neue Schwämme, Tabulaten und Hydrozoen aus dem Bakony. *In* Resultate der wissenschaftlichen Untersuchungen des Balaton (Plattensee), Anhang I, Band 1911, no. 3. Wien. p. 1–18, 4 pl.
- . 1915. VIII. Triadische Algen, Spongien, Anthozoen und Bryozoen aus Timor. Paläontologie von Timor, vol. 4, no. 8. M. Wanner. Stuttgart. p. 75–118, pl. 63–72.
- Vinogradov, A. P. 1953. The elementary chemical composition of marine organisms. Sears Foundation for Marine Research, Memoir 2:176–193.
- Vinogradov, M. E. 1959a. Über die quantitative Verbreitung des Tiefseepanktons im nordwestlichen Teil des Stillen Ozeans. Internationale Revue der Hydrobiologie 44(2):217–225, 3 fig.
- . 1959b. On the vertical distribution of deep-sea plankton in the west part of the Pacific Ocean. Proceedings of the International Congress of Zoology 15:223–225.
- Vinogradov, N. G. 1958. Vertikalnoe raspredelenie glubokovodnogo donnai faune okeana. Trudy Institut Okeanologii Akademii Nauk SSSR, 1958:86–122.
- Volkmer, C. 1963. *Spongilla jewelli* n. sp. from freshwater sponge at Brazil. Anais Academia Brasileira de Ciencia 35(2):271–273.
- Volkmer-Ribeiro, C. 1970. *Oncosclera*—a new genus of freshwater sponges (Porifera-Spongillidae) with redescription of two species. Amazoniana 2(4):435–442.
- Von Brand, Theodor. 1939 [1938]. Further experiments on the decomposition and regeneration of nitrogenous organic matter in sea water. Biological Bulletin 77:285–296.
- Von der Marck, 1876 [1873]. Neue Beiträge zur Kenntniss der fossilen Fische und anderer Theirreste. Palaeontographica 22:55–74, pl. 2, 10.
- Vosmaer, G. C. J. 1880. The sponges of the Leyden Museum, I, The Family of the Desmacidinae. Notes from the Leyden Museum [Rijksmuseum voor de Geschiedenis der Natuurwetenschappen, Leyden] 2:99–136.
- . 1882. Spongien (Porifera). *In* H. G. Brönn, ed., Die Klassen und Ordnungen des Thierreichs, part 1. H. G. Brönn. Leipzig & Heidelberg. p. 1–32, pl. 1, 2, 4.  
Translated by A. Dendy, Annals and Magazine of Natural History (series 5) 19:249–260.
- . 1883. Spongien (Porifera). *In* H. G. Brönn, ed., Die Klassen und Ordnungen des Thierreichs, part 2. H. G. Brönn. Leipzig & Heidelberg. p. 33–64, pl. 5–6.  
Translated by A. Dendy, Annals and Magazine of Natural History (series 5) 19:249–260.
- . 1884. Spongien (Porifera). *In* H. G. Brönn, ed., Die Klassen und Ordnungen des Thierreichs, parts 3–6. H. G. Brönn. Leipzig & Heidelberg. p. 65–176, pl. 3, 7, 8.  
Translated by A. Dendy, Annals and Magazine of Natural History (series 5) 19:249–260.
- . 1885. Spongien (Porifera). *In* H. G. Brönn, ed., Die Klassen und Ordnungen des Thierreichs, parts 7–10. H. G. Brönn. Leipzig & Heidelberg. p. 177–320, pl. 19–25.  
Translated by A. Dendy, Annals and Magazine of Natural History (series 5) 19:249–260.
- . 1887. Spongien (Porifera). *In* H. G. Brönn, ed., Die Klassen und Ordnungen des Thierreichs, parts 11–16. H. G. Brönn. Leipzig & Heidelberg. p. 321–496.  
Translated by A. Dendy, Annals and Magazine of Natural History (series 5) 19:249–260.
- Vosmaer, G. C. J., & H. P. Wijsman. 1904. Ober den Bouw van sommige Kiezelspicula bij Sponzen. I. De styli van *Tethya lyncurium*. Koninklijke Akademie van Wetenschappen te Amsterdam. Verslag van de gewone Vergaderingen der Wisen Natuurkundige Afdeeling. Published by the society. Amsterdam. p. 733–748, 1 fig.
- Waagen, W., & J. Wentzel. 1888. Salt-Range Fossils. Productus Limestones: Coelenterata, Amorphozoa, Protozoa. Memoirs of the Geological Survey of India 1(45):854–998.
- Wagner, Wolfgang. 1963. Die schwammfauna der Oberkreide von Neuberg (Donau). Palaeontographica (Abt. A) 122:166–250, 5 pl.
- . 1964. Kalkschwämme aus dem Korallenkalk des oberen Malm von Laisacker bei Neuburg a. d. Donau. Mitteilungen der Bayer. Staatssammlung für Paläontologie und historische Geologie 4:23–36, 7 fig., pl. 5–7.
- Wähner, F. 1903. Das Sonnwendgebirge im Unterinntal, ein Typus eines alpinen Gebirgsbaues. F. Deuticke. Leipzig-Wien. 356 p., 19 pl., 96 fig.
- Walch, J. E. I. 1768–1776. Recueil des monuments des catastrophes que le globe de la terre a éssuiées contenant des pétrifications et d'autres pierres curieuses, (commencé) par G. W. Knorr (et continué par J. E. I. Walch), vol. II–IV. Nuremberg.
- Walcott, C. D. 1879. Fossils of the Utica Shale. Transactions of the Albany Institute 10:18–19, fig. 16–18, pl. 2.
- . 1886. Second contribution to the studies of the Cambrian faunas of North America. United States Geological Survey Bulletin 30:369 p.
- . 1892. Preliminary notes on the discovery of a vertebrate fauna in Silurian (Ordovician) strata. Bulletin of the Geological Society of America 3:153–172, pl. 3–5.
- . 1912. Notes on fossils from limestones of Steeprock series, Ontario, Canada. Canada Depart-



- ment of Mines, Geological Survey Branch, Memoir 28:16–23, pl. 1–2.
- . 1919. Cambrian geology and paleontology, IV. Middle Cambrian algae. Smithsonian Miscellaneous Collections 67(5):217–260.
- . 1920. Cambrian Geology and Paleontology. IV. no. 6. Middle Cambrian Spongiae. Smithsonian Miscellaneous Collections 67(6):261–364, fig. 4–10, pl. 60–90.
- Walker, W. R., & R. K. Bambach. 1974. Analysis of communities. Sedimenta 4. Principles of benthic community analysis. In A. M. Ziegler, K. R. Walker, E. J. Anderson, E. G. Kauffman, R. N. Ginsberg, and N. P. James. Sedimenta 4, Principles of benthic community analysis, Notes for a short course. Division of Marine Geology, Rosenstiel School of Marine and Atmospheric Sciences, University of Miami. Miami, Florida. p. 2.1–2.20, 10 fig.
- Wallace, S. J. 1878. On the “geodes” of the Keokuk Formation and the genus *Biopalla*, with some new species. American Journal of Science (series 3) 15:366–370.
- Walther, J. 1893–1894. Einleitung in die Geologie als historische Wissenschaft, I Bionomie des Meeres, II. Die Lebensweise der Meeresthiere. G. Fischer. Jena. xxx + 531 p.
- . 1904. Die Fauna der Solnhofener plattenkalke. Denkschriften der Medicinisch-naturwissenschaftlichen Gesellschaft, vol. 11. Festschrift E. Haeckel. Jena. p. 161–163.
- Warburton, F. E. 1960. Influences of currents on form of sponges. Science 133:89, 1 fig.
- Watanabe, Y. 1957. Development of *Tethya serica* Leubwohl, a tetraxonian sponge. Observations on external changes. Natural Science Report, Ochanomizu University 8:97–104.
- Webby, B. D. 1969. Ordovician stromatoporoids from New South Wales. Palaeontology 12:637–662, pl. 117–129.
- Webby, B. D., & Lin Baoyu. 1988. Upper Ordovician cliefdenellids (Porifera: Sphinctozoa) from China. Geological Magazine 125:149–159, 6 fig.
- Webby, B. D., & J. K. Rigby. 1985. Ordovician sphinctozoan sponges from central New South Wales. Alcheringa 9:209–220, 10 fig.
- Webby, B. D., & J. Trotter. 1993. Ordovician sponge spicules from New South Wales, Australia. Journal of Paleontology 67:28–41, 7 fig.
- Weidlich, O., & B. Senowbari-Daryan. 1996. Late Permian “sphinctozoans” from reefal blocks of the Ba’id area, Oman Mountains. Journal of Paleontology 70:27–46.
- Weller, J. M. 1930. Siliceous sponge spicules of Pennsylvanian age from Illinois and Indiana. Journal of Paleontology 4:233–251, pl. 15–20.
- Wells, J. W. 1957. Corals. In J. W. Hedgpeth, ed., Treatise on Marine Ecology and Paleogeology. Volume 1, Ecology. Geological Society of America Memoir 67:1,087–1,104, 1 fig.
- Welter, O. A. 1911 [1910]. Die Pharetronen aus dem Essener Grünsand. Verhandlungen des Naturhistorischen Vereins der preussischen Rheinlande und Westfalens 67:1–82, 10 fig., 3 pl.
- Wendt, J. 1974. Der Skelettbau aragonitischer Kalkschwämme aus der alpinen Obertrias. Neues Jahrbuch für Geologie und Palaeontologie, Monatshefte 1974:498–511, fig. 1–9.
- . 1979. Development of skeletal formation, microstructure, and mineralogy of rigid calcareous sponges from the Late Palaeozoic. Colloque International, Centre National de la Recherche Scientifique 291:449–457.
- Whitelegge, T. 1901. Report on sponges from the coastal beaches of New South Wales. Records of the Australian Museum 4(2):55–118, pl. 10–15.
- Whitfield, R. P. 1881. Remarks on *Dictyophyton* and descriptions of new species of allied forms from the Keokuk beds, at Crawfordsville, Indiana. American Museum of Natural History Bulletin 1:10–20.
- . 1886. Notice of a new fossil body, probably a sponge related to *Dictyophyton*. Bulletin of the American Museum of Natural History 1(8):346–348, pl. 35.
- . 1905. Descriptions of new fossil sponges from the Hamilton group of Indiana. American Museum of Natural History Bulletin 21:301–303.
- Wiedenmayer, F. 1974. Recent marine shallow-water sponges of the West Indies and problems of speciation. In Contributions to the geology and paleoecology of the Caribbean and adjacent areas. Verhandlungen der Naturforschenden Gesellschaft in Basel 84(1):361–376.
- . 1977a. Shallow-water sponges of the western Bahamas. Experientia, Supplementum 28:1–287, 43 pl.
- . 1977b. The Nepheliospongiidae Clarke, 1900 (Demospongiae, Upper Devonian to Recent), an ultraconservative, chiefly shallow-water sponge family. Eclogae Geologicae Helveticae 70(3):885–918.
- . 1994. Contributions to the knowledge of post-Paleozoic neritic and archibenthal sponges (Porifera). Kommission der Schweizerischen Palaeontologischen Abhandlungen 116:5–140.
- 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 (Abt. B) 77:171–211, pl. 6–13.
- Wilson, A. E. 1948. Miscellaneous classes of fossils, Ottawa Formation, Ottawa-St. Lawrence Valley. Canada Department of Mines and Resources, Geological Survey Bulletin 11:116 p., 4 fig., 28 pl.
- Wilson, B. R., & D. S. Gillette. 1971. Australian shells; illustrating and describing 600 species of marine gastropods found in Australian waters. Reed. Sydney. 168 p.
- Wilson, H. V. 1904. Sponges. Reports on an exploration off the west coasts of Mexico, Central and South America, and off the Galapagos Islands, in charge of Alexander Agassiz, by the U. S. Fisheries Commission Steamer “Albatross” during 1891. Memoir of the Museum of Comparative Zoology, Harvard College XXX(1):161 p., 26 pl.

- . 1925. Siliceous and horny sponges collected by the U. S. Fisheries steamer "Albatross" during the Philippine Expedition, 1907–1910. U.S. National Museum Bulletin 100, vol. 2(4):273–506, 16 pl.
- Wilson, J. L. 1950. An Upper Cambrian pleospongid (?). *Journal of Paleontology* 24:591–593, 1 fig., pl. 80.
- Winchell, N. H., & Charles Schuchert. 1893. Sponges, graptolites and corals from the Lower Silurian of Minnesota. Minnesota Geological Survey Final Report 3(1):55–95, pl. F–G.
- Wintermann, G. 1951. Entwicklungs-physiologie Untersuchungen an Süsswasserschwämmen. *Zoologische Jahrbücher, Abteilung für Anatomie und Ontogenie der Tiere* 71(4):428–486, 38 fig.
- Wisniowski, A. 1885. Staniworka gabek w systematyce zwierat wedlug Marshall [Systematic position of sponges according to Marshall]. *Wszeczwiat* 4:563.
- Wisniowski, T. 1888. Wiadomosc o krzemieniach jurajskich okolicy Krakao. *Kosmos Roczniki* 13:175–185.
- . 1889a [1888]. Przyczynek do poznania microfauny krzemieni jurajskich okolicy Krakowa. *Kosmos Roczniki*, vol. 13 [Beitrag zur Kenntniss der Mikrofauna aus den oberjurassischen Feuersteinknollen der Umgegend von Krakau]. *Jahrbuch der Kaiserlich-Königlichen Geologischen Reichsanstalt* 38:657–702.
- . 1889b. Nowy przycznek do zhajomosci górnourajskich Monactinellidów i Tetractinellidów. *Kosmos Roczniki* 14:185–189, 230–237.
- Wolfenden, E. B. 1959. New sponges from Lower Carboniferous reefs of Derbyshire and Yorkshire. *Journal of Paleontology* 33:566–568.
- Wood, R. 1990. Reef-building sponges. *American Scientist* 78:224–235.
- . 1991. Non-spicular biomineralization in calcified demosponges. In J. Reitner & H. Keupp, eds., *Fossil and Recent Sponges*. Springer-Verlag, Berlin. p. 322–340, 9 fig.
- Wood, R., & J. Reitner. 1988. The Upper Cretaceous "chaetetid" demospone *Stromatoaxinella irregularis* n.g. (Michelin) and its systematic implications. *Neues Jahrbuch für Geologie und Paläontologie, Abhandlungen* 177:213–224.
- Wood, R., J. Reitner, & R. R. West. 1989. Systematics and phylogenetic implications of the haplosclerid stromatoporoid *Newellia mira* nov. gen. *Lethaia* 22:85–93.
- Worthen, A. H. 1875. *Cnemidium? trentonensis*. In F. B. Meek & A. H. Worthen, Descriptions of invertebrates. Illinois Geological Survey 6:491.
- Wu S. K. 1965. Comparative functional studies of the digestive systems of the muricid gastropods *Drupa ricina* and *Morula granulata*. *Malacologia* 2:211–233, 5 pl.
- Wu Xichun. 1989. Late Triassic Carnian strata in western Sichuan Basin and a new sponge family. *Acta Palaeontologica Sinica*, Beijing 28(6):766–771, 1 pl.  
In Chinese, with English summary.
- . 1990 [1989]. Late Triassic Lychniscosa fauna in northwestern Sichuan. *Acta Palaeontologica Sinica* 29(3):349–363, 3 pl.  
In Chinese, with English summary.
- 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.
- Wu Xichun, & Zhang L. 1982. Late Triassic (Carnian) sponge patch reefs in northwestern Sichuan basin. *Scientia Geologica Sinica* 10:379–385.  
In Chinese with English abstract.
- Wu Ya Sheng. 1991. Organisms and communities of Permian reef of Xiangbo, China. International Academic Publishers. Beijing. 192 p., 26 pl.
- Wu Ya Sheng, & Fan Jiasong. 2002. Permian-Triassic history of reefal thalomid sponges: evolution and extinction. *Acta Palaeontologica Sinica* 41(2):163–177, 1 fig.  
In Chinese and English.
- Wulff, J. L. 1994. Sponge feeding by Caribbean angelfishes, trunkfishes, and filefishes. In R. W. M. Van Soest, T. M. G. Van Kempen and J.-C. Braekman, eds., *Sponges in Time and Space, Proceedings of the 4th International Porifera Congress, Amsterdam*. A. A. Balkema. Rotterdam. p. 265–271, 1 fig.
- Wyatt, D. J. 1979. Carbonate mud mounds from the Lower Ordovician Wah Wah Limestone of the Ixex area, western Millard County, Utah. *Brigham Young University Geology Studies* 26(2):101–114.
- Xiao Shuhai, Jie Hu, Xunlai Yuan, R. L. Parsley, & Ruiji Cao. 2002 (MS). Articulated sponges from the Early Cambrian Hetang Formation in southern Anhui, South China: Their age and implications for significant gaps in the early sponge record. *Palaeogeography, Palaeoclimatology and Palaeoecology*, v. 00, 49 p., 10 fig.
- Xiao Shuhai, Xunlai Yuan, M. Steiner, & A. H. Knoll. 2002. Macroscopic carbonaceous compressions in a terminal Proterozoic shale: a systematic reassessment of the Miaohu Biota, South China. *Journal of Paleontology* 76(2):347–376, 11 fig.
- Yabe, Hisakatsu, & Toshio Sugiyama. 1934. *Ambly-siphonella* and *Rhabdactinia* gen. and sp. nov. from the Upper Palaeozoic Limestone of Mimikiri, near Sakawa-mati, Tosa Province, Sikoku, Japan. *Japanese Journal of Geology and Geography* 11:175–180, pl. 20–22.
- . 1939. *Marindiqueia mirabilis*, gen. et sp. nov., a sponge-like fossil from the Eocene limestone of Marinduqu Island, Phillipine Islands. *Transactions and Proceedings of the Palaeontological Society of Japan* 15:60.
- Yochelson, E. L. 1968. Biostratigraphy of the Phosphoria, Park City, and Shedham Formations. U.S. Geological Survey Professional Paper 313-D:571–600.
- Young, J., & J. Young. 1876. *Acanthospongia smithii*. In John Armstrong, John Young, & David

- Robertson, Catalogue of western Scottish fossils. British Association for the Advancement of Science. Blackie and Son. Glasgow. p. 38.
- . 1877. On a Carboniferous *Hyalonema* and other sponges from Ayrshire. *Annals and Magazine of Natural History* (series 4) 20:425–432, pl. 14–15.
- Yuan, Xunlai, Shuhai Xiao, R. L. Parsley, Chuanming Zhou, Zhe Chen, & Jie Hu. 2002. Towering sponges in an Early Cambrian lagerstätte: disparity between nonbilaterian and bilaterian epifaunal tierers at the Neoproterozoic–Cambrian transition. *Geology* 30(4):363–366, 4 fig.
- Yurewicz, D. A. 1977a. Evolution of the Capitan massive limestone (Permian) of Guadalupe Mountains, New Mexico and West Texas. *American Association of Petroleum Geologists, Bulletin* 61(5):843–844.
- . 1977b. The origin of the massive facies of the lower and middle Capitan Limestone (Permian), Guadalupe Mountains. In M. E. Hileman & S. J. Mazzullo, eds., *Upper Guadalupian facies, Permian reef complex, Guadalupe Mountains, New Mexico and West Texas*. Society of Economic Paleontologists and Mineralogists, Permian Basin Section, 1977, Field Conference Guidebook, Publication 76-16:45–92.
- Zahálka, Cenek. 1900 [1899]. Pásmo IX—Brezezenské-kridového útvaru v Poohri. (Die IX (Preisner) Etage der Kreideformation im Egergebirge). *Sitzungsberichte der Kaiserlichen Böhmisches Gesellschaft der Wissenschaften*, 1899, article 4:103 p., 6 pl.
- . 1901 [1900]. Pásmo X—Tepliché-kridového útvaru v Poohri. (Die X (Teplitzer) Etage der Kreideformation im Egergebirge). *Sitzungsberichte der Kaiserlichen Böhmisches Gesellschaft der Wissenschaften*, 1900, article 9:51 p., 3 pl.
- Zangerl, Rainer, & E. S. Richardson, Jr. 1963. The paleoecological history of two Pennsylvanian black shales. *Fieldiana, Geological Memoir* 4:352 p., 55 pl.
- 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.
- Zenker, J. C. 1836. *Historisch-topographisches Taschenbuch von Jena und seiner Umgebung, besonders in naturwissenschaftlicher und medicinischer Beziehung*. F. Fromman. Jena. 388 p.
- Zenkovitch, B. 1963. *Biology of the Seas of the U.S.S.R.* Interscience Publishers of John Wiley & Sons & George Allen & Unwin, Ltd. New York & London. 955 p., 427 fig.
- Zhang Wei. 1983. Study on the sphinctozoans of Upper Permian Changxing Formation from Lichuan area, West Hubei, China. In *A collection of Theses for Master's Degree* (1981). Institute of Geology, Academia Sinica. Beijing. p. 1–11.
- . 1987. A new genus *Neoguadalupia* with notes on connections of interrelated genera in Sebargasiidae, Sphinctozoa. *Scientia Geologica Sinica* 7:231–238, 5 fig.
- Zhang Xiaolin, & Zhang Wei. 1990. Paleoeecology of reef-building sponges in Kefeng Reef, Longlin, Quangxi. *Shiyou Yu Tianrangi Dizhi* 11(4):427–535.
- In Chinese with English summary.
- Zhuravleva, I. T. 1962. *Tscheryschevo-Stuckenbergia*. In P. D. Rezvoi, I. T. Zhuravleva, & V. M. Koltun, *Class Porifera (Spongia)*. *Osnovy Paleontologii [Fundamentals of Paleontology]*, Porifera, Archaeocyatha, Coelenterata, Vermes. *Akademii Nauk SSSR, Moscow*. p. 63.
- English translation, p. 72, A. Mercado and H. Mills, Israel Program for Scientific Translations Ltd., 1971, available from U. S. Department of Commerce, National Technical Information Service.
- . 1967. *Girphanovella* Zhuravleva, *gen. nov.* In I. T. Zhuravleva, N. M. Zadorozhnaya, D. V. Osadchaja, N. V. Pokrovskaya, N. M. Rodionova, & V. D. Fonin, *Fauna Nzyhnego Kembryja Tuvy (Opornyy Razrez r. Shivelig-Khem)* [Lower Cambrian fauna of Tuva (the Reference Section of the Shivelig-Khem River)]. *Akademii Nauk SSSR, Moscow*. p. 107, pl. 59.
- Zhuravleva, I. T., & I. A. Pyanovskaya. 1995. Fossil description. In I. A. Pyanovskaya & I. T. Zhuravleva, *Biostratigraphy and new forms of Lower Paleozoic fossils of the Bogambir Ridge (North Nuratau Range, South Tien Shan)*. *Geologiya i Geofizika (Russian Geology and Geophysics) (Novosibirsk)* 36(3):36–44, fig. 1–4.
- Ziegler, Bernhard. 1962. Beobachtungen an hexactinelliden spongien. *Eclogae Geologicae Helvetiae* 55:573–586, 2 fig., 3 pl.
- 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.
- von Zittel, K. A. 1876. Über *Coeloptychium*. In *Beitrag zur Kenntniss der Organisation fossiler Spongien*. *Abhandlungen der mathematisch-physikalischen Classe der Königliche bayerischen Akademie der Wissenschaften (München)* 12(3):1–80, 7 pl.
- . 1877a. Beiträge zur Systematik der fossilen Spongien. *Neues Jahrbuch für Mineralogie, Geologie und Paläontologie* 1877(1):337–378.
- . 1877b. Studien über fossile Spongien, 1 Abt., Hexactinellidae. *Königlich Bayerischen Akademie der Wissenschaften, Mathematisch-Physikalischen Klasse, Abhandlungen* 13(1):1–63, pl. 1–4.
- Translated in *Annals and Magazine of Natural History* (series 5) 20:257–273, 405–424, 501–517.
- . 1877c. *Protachilleum kayseri*. In E. Kayser, *Über primordial und Untersilurische Fossilien aus der Argentine Republik*. *Beiträge Geologie und Paläontologie der Argentine Republik* 2(1):22–23.
- . 1878a. Studien über fossile Spongien, II, Lithistidae. A. Allgemeiner Theil. *Abhandlungen der kaiserliche Bayerischen Akademie der Wissenschaften* 13(1):67–154, pl. 1–10.
- Translated in *Annals and Magazine of Natural History* (series 5) 2:113–135, 235–248, 324–341, 385–394, 467–482.

- . 1878b. Studien über fossile Spongien, Dritte Abtheilung: Monactinellidae, Tetractinellidae und Calcispongiae. Abhandlungen der kaiserliche Bayerischen Akademie der Wissenschaften 13(2):1(93)–48(138), pl. 11–12.  
Translated in *Annals and Magazine of Natural History* (series 5) 3:304–312, 364–379, and vol. 5:61–73, 120–135.
- . 1878c. Handbuch der Palaeontologie: Protozoa, Coelenterata, Echinodermata und Molluscoidea, vol. 1, no. 1, Class Spongia, Seeschwämme. In *Paläozoologie, 1876–1880*. R. Oldenbourg. Munchen & Leipzig, p. 128–202.
- . 1878d. Beiträge zur Systematik der fossilen Spongien, II Theil. *Neues Jahrbuch für Mineralogie, Geologie und Paläontologie*
- . 1879. Beiträge zur Systematik der fossilen Spongien, Dreitter Theil. *Neues Jahrbuch für Mineralogie, Geologie und Paläontologie*, 1879:1–40, 3 pl.
- . 1884. Über Astylospongidae und Anomocladina. *Neues Jahrbuch für Mineralogie, Geologie und Paläontologie* 2:75–80, pl. 1–2.
- . 1895. Grundzüge der Paläontologie (Paläozoologie), Abteilung 1, Invertebrata. R. Oldenbourg. München & Leipzig, p. viii + 1–971.
- . 1903. Grundzüge der Paläontologie (Paläozoologie), ed. 2., Abteilung 1, Invertebrata. R. Oldenbourg. München & Berlin. 558 p., 1,405 fig.

# INDEX

- aaptostanol 207  
aaptostanol-neospongosterol 209  
abundance 243  
abyssal  
  fauna 281  
  plain 246, 279  
  sponge 282  
Acanthascinae 161  
Acanthodictya 145  
acanthostyle 8, 27  
acanthostylostyle 22  
acanthochea 27  
acetate peel 298  
adaptation 216  
adherence 218  
algae 282, 283, 284, 286  
Amblyosiphonella 270  
amino acids 204, 209  
amoebocyte 191, 202, 213  
amphiaser 32  
amphiblastula 192  
amphidisc 34, 132, 268  
Amphidiscophora 133, 134, 148,  
  150, 268, 276, 283  
Amphidiscosa 134, 151, 155, 158  
amphitriaene 21  
amphitruer 52  
anastomoses 231  
anatriaene 40  
Ancorinida 93, 125  
Ancorinidae 82  
angle of supply 211  
anisochea 34  
anomoclone 57, 69  
Anthaspidellidae 248, 262  
Anthracosyon 239  
Anthracosyonidae 249  
aphodi 16  
Aphrocallistidae 170, 175  
Aphrosalpinx 271  
apopore 4  
apopyle 201  
apophysis 10, 164, 165, 168, 169  
aragonite 209  
Archaeocyathus 271  
archaeocyte 2, 191  
Archaeoscyphia 73, 75, 79, 262,  
  289  
Arctic fauna 286  
Asconematidae 155, 157, 160,  
  161  
asconoid 2  
asexual reproduction 191, 199  
aspidaster 23  
aster 29  
Asteractinella 269  
Astraeoconus 269  
Astraeospongiidae 249, 290  
Astraeospongium 269  
astroclone 57  
Astrophora 118  
astrorhizae 97  
Astrosclera 265  
Astroscleridae 83, 97  
Astrotetraxonida 119  
Astylopongia 73, 75, 263  
Astylopongiidae 248, 249, 290  
aulocalycoid skeleton 169  
Aulocopium 73  
autodermalia 131, 155, 156  
autogastralia 132, 155  
axial  
  canal 6  
  filament 5  
Axinella 84, 244  
Axinellida 96, 126, 247  
Axinellidae 82  
  
bacteria 203  
Barents Sea 293  
basalia 9, 132, 140, 141  
basidictyonalia 169  
basiphyte 11  
basiphytous 155, 156, 157, 175  
bathymetric frequency distribution  
  216  
bathymetry 275  
beam 163  
biomass 293  
bipocillus 34  
blastula 192  
Boonderoia 263  
boring sponge  
  218, 247, 253, 254  
Brachiospongia 144, 145, 266,  
  290  
Brachiospongiidae 248  
breeding season 191  
Burgess Shale 248, 261, 289  
  
Calathospongia 147  
Calcarea 248, 269, 271, 276, 279,  
  283, 288, 291, 295  
calcareous sponge 249  
calcisponge 251  
Callyspongia 244  
Calthropellidae 82  
calthrops 7, 27  
Calvaxinellida 264  
Calyptrellidae 173  
Cambrian 289  
Camerospongiidae 174  
canal system 239  
Capsospongia 262  
Carboniferous 290  
Carnosa 94  
Carphites 147  
Carpospongia 72  
Caryospongia 72  
Casariinae 170  
  
Caulophacidae 155  
cavaedia 163, 213  
Ceractinomorpha 100, 101, 115,  
  121, 123, 264  
ceratinomorph 126  
Ceratoporella 265  
Ceratoporellidae 83  
Chalinida 98  
Chalinidae 83  
chela 34  
chelaster 34  
chert 252  
chessman spicule 35  
chiastoclon 57, 69  
Chiastoclonellidae 249  
choanocyte 1, 191, 198, 201, 202  
  collar 243  
choanosome 3  
chondrillasterol 207  
Chondrillidae 82, 96, 247  
chone 212  
choristid 15, 38  
Choristida 91, 92, 93, 94, 278  
circulatory system 205  
clad 51  
cladi 20, 51  
cladome 20  
classification 90  
clavisc 33  
Cleodictya 147  
Cliona 253, 254, 283  
clionasterol 207  
clionasterol-poriferasterol 209  
Clonidae 82, 246, 247  
cloaca 72, 73  
clone 15, 51  
closure 205  
Coelocladia 73  
Coelocladia spinosa 225  
Coeloptychidae 173  
Coeloptychium 226  
colder water 295  
collar 201  
Collatipora 72  
Collatipora? 240  
color 215  
Comitalia 138  
commensal 255  
  association 257  
competition 293  
contraction 205  
Coppatiidae 82  
Corbitellinae 156  
Cornacuspongia 120, 278  
cortex  
  dépandant 166  
  indépandant 166  
Craniellida 125  
Craticulariidae 169, 175  
crepis 50

- Cretaceous 292  
 Cribrospongiidae 169, 175  
 criccalthrops 27  
 cricostyle 27  
 Cyamonidae 83  
 Cyathophycus 267  
 Cypelliidae 174  
 Cystauletes 270, 271  
 Cystispongiidae 170
- Dactylocalycidae 174  
 Deckschichten 166  
 deep-sea sponge 287  
 deeper water 285  
 Defordia 72  
 Demospongea 15, 277, 295  
 Dendroceratida 99  
 dendroclone 54, 57, 69  
 dermal
  - layer 215
  - membrane 128, 214
  - specialization 67
 dermalia 131  
 dermis 16  
 desma 15, 23, 50  
 Desmacidontida 98  
 Desmacidontidae 83  
 Devonian 290  
 diactine 6, 194  
 diaene 21  
 diancistra 33  
 diaphragm 11  
 diarhysis 168, 170  
 dichotriaene 59  
 Dicranocladina
  - 85, 86, 99, 109, 264
 dicranocclone 54, 70  
 Dictyoceratida 99  
 dictyonal
  - cortex 164, 166, 168
  - strand 164, 171
 dictyonalia 131, 162, 163  
 Dictyonina 133  
 dictyonine 162  
 dictyorhysis 168  
 Dictyospongia 145, 267  
 Dictyospongiidae 249, 290  
 Didymmorina 85, 87, 99, 109  
 didymoclone 48, 54, 55, 70  
 Dierespongia 144, 152  
 diffusion 206  
 digestion 203, 204  
 diploclone 60  
 diplorhytic 168  
 Discoderma 86  
 discohexaster 197  
 discostrongyle 59  
 discotriaene 25, 59  
 dissolved organic matter 204  
 distribution 292  
 Docoderma 266  
 dragma 36  
 Dystactospongiidae 248
- Ecionemia 81  
 ecologic succession 250  
 ecological distribution 246  
 Ectyonidae 83  
 Ediacaran beds 248, 261, 289  
 efferent jet 212  
 effluent
  - jet 211
  - water 202
 Eiffelia 261, 269  
 emergence 166  
 encrusting form 218  
 endemism 291  
 Endoplegma 147  
 endosome 3, 12  
 England 291  
 ennomoclone 56  
 Ensiferites 269  
 Epallacidae 82  
 epibenthic suspension feeder 243  
 epifaunal suspension feeder 244  
 Epipolasida 94, 95, 247  
 Epipolasidae 118  
 epirhysis 5, 164, 165, 168, 169  
 Erythrosporgia 148  
 estuarine conditions 246  
 etching 297  
 euaster 30  
 Euastroa 118  
 Euplectellida 160  
 Euplectellidae 155, 156, 158, 160, 161  
 Euretidae 169, 175  
 euretoid 166  
 euretoid skeleton 167  
 eurybathic
  - genera 281
  - generic elements 282
 evolution 110  
 excretion 204  
 exhalant
  - canal 4, 72, 73
  - stream 201
  - system 212
 Exochopora 73  
 external bud 199
- Farreidae 169, 175  
 farreoid 166  
 skeleton 169  
 faunal provinces 286  
 feeding 243  
 fibril 202  
 filter feeder 201  
 filtration rate 201  
 Fissispongia 271  
 fixation 197  
 flabellate 211  
 flagella 201  
 flagellated chamber 1, 201  
 food 203  
 vacuole 204, 205  
 food-specificity 243
- foreign spicule 238, 239  
 France 291  
 freshwater sponge 292
- Gallatinospongia 262  
 gastral membrane 128  
 gastralia 131, 162  
 gemmule 191, 199, 200  
 Geodia 244  
 Geodia barretti 293  
 Geodiidae 82, 247  
 geographical distribution 292  
 Germany 291  
 gigantism 147  
 Girtycoelia 270  
 Girtyocoelia 228  
 Griphodictya 148, 267, 268  
 Guadalupia 226, 244, 245  
 Guizhou 289
- Hadromerida 246  
 Hadromerina 120  
 Halichondria 84  
 Halichondrida 247  
 Halichondriidae 83  
 Halichondrina 98, 120  
 Haliclona bilamellata 225  
 haliclonasterol 207  
 halogens 207  
 Hamacantha 84  
 Hamacanthidae 83  
 Haplistion 239  
 Haplosclerida 98, 247  
 Haplosclerina 120  
 hard bottom 246  
 Hazelia 68, 74, 76, 78, 79, 261, 263  
 Heliospongia 72, 73, 244  
 heloclone 56, 70  
 Helomorina 85, 87, 99, 109  
 hemiamphidiscs 158  
 hemidisc 139, 268  
 Hemidiscosa 134, 151, 158  
 hermit crab 257  
 Heteractinida 248, 268, 283  
 hexactine 6, 129, 155  
 hexactinellid 251  
 Hexactinellida 127, 248, 276, 279, 288, 295  
 Hexactinosa 134, 162, 276, 284, 291  
 hexadisc 132  
 hexaster 130, 158  
 Hexasterophora 133, 134, 148, 268, 276  
 Hindia 72, 263  
 Hindiidae 248, 290  
 Hintzespongia 136, 137, 144, 151, 152  
 holactine 129  
 Hunan 261  
 Hyalonematidae 155, 158, 160, 161

- Hyalospongiae 127  
 Hydnocheras 135, 145, 146  
 Hydnocherina 147  
 Hydnodictya 152  
 hydraulic  
   efficiency 211  
   system 211, 212  
 hydrozoan 251  
 Hymedesmiidae 246  
 hypodermalia 131, 138, 156  
 hypogastralia 132, 138  
  
 India 261, 289  
 Indo-Australian realm 288  
 Indonesia 291  
 Inermia 133  
 infaunal sponges 253  
 inhalant  
   canal 2, 72  
   system 212  
 inquiline 243, 255  
 interactinal buttress 162  
 interior mesh 215  
 internal statoblast 199  
 interstitial sponge 254  
 Iran 261, 291  
 isochela 34  
 isodictyal 63  
  
 Jereina 70  
 jet 202  
 Jurassic 291  
  
 Keratosa 247, 254, 278  
 keratose 8  
   sponge 61  
 Keratosida 98, 99  
  
 Lake Baikal 292  
 lantern 170  
 lantern-spicule 134, 170  
 larva 191  
 lateral outgrowth 213  
 Latrunculidae 82  
 Laurentian-European realm 288  
 Leptomitus 261  
 leuconoid 2  
 Leucopsacadida 160  
 Leucopsacididae 155, 156, 158,  
   160, 161  
 life  
   cycle 200  
   span 210  
 light 260  
 linear-transect method 297  
 Lissocoelia 73  
 lithistid 47, 251, 252  
 Lithistida 91, 99, 247, 275, 278,  
   279, 283, 290, 292  
 lophophyte 11  
 lophophytous 155, 156, 157  
 Lubomirskiidae 83, 247, 275  
 lychnisc 134, 170  
  
 Lychniscosa 134, 162, 275, 277,  
   279, 283, 284, 291, 292  
 Lyssacina 133  
 lyssacine 131  
 Lyssacinosa 134, 149, 155, 158  
 Lyssakina 133  
  
 macrosclere 196  
 Maeandrostia 271  
 magnesian calcite 209  
 marginalia 132, 140  
 mechanical support 211, 214  
 megalone 56, 70  
 Megalithistida 100  
 Megamorina 85, 99, 109  
 megarhizoclone 70  
 Megarhizomorina 99  
 megasclere 9, 18  
 megaspiculation 38, 42  
 Meniscophora 118  
 Merlia 84, 265  
 Merliidae 83  
 mesenchyme 1, 202  
 mesotriaene 21  
 mesotrider 52  
 metastar 29  
 Microcionia 244  
 microhabd 32  
 microsclere 9, 18, 29, 90, 132,  
   196  
 Microsclerophora 118  
 Microstaura 145, 267  
 mode of growth 221  
 monactine 6, 129  
 monaene 21  
 Monolithistida 100  
 monaxial 7  
 monaxon 7  
 Monaxonellida 120  
 monaxonid 15, 42  
 Monaxonida 91, 94, 246, 277,  
   284  
 Monoraphidae 161  
 Monoraphididae 155, 160, 161  
 Morrison Formation 292  
 mud bottom 246  
 Multistella 240  
 Multivasculatus 151, 261  
 Mycale 244, 245  
 Mycalidae 246  
 Myxillidae 246  
  
 nearshore deposit 284  
 neospongosterol 207  
 Nevadoceelia 73  
 Nipterella 263  
 Niutitang Formation 261  
 nodal octahedra 162, 166, 170  
 nonlithistid genera 81  
  
 octactine 7  
 octaster 157  
 olynthus 195  
  
 Oncosella 266  
 ontogenetic variability 228  
 oolites 283, 284, 291  
 ophirhabd 40  
 Orchocladina 100, 109, 289  
 Ordovician 289  
 orientation 297  
 orthodiactine 8, 129  
 orthotetractine 129  
 orthotriaene 25  
 oscula 4  
 oscular collar 240  
 osculum 135, 202, 211  
 ostia 5, 164, 169  
 oviparous 191  
 ovocyte 205  
 oxea 8, 68  
 oxyaster 30  
  
 Pachastrellida 125  
 Pachastrellidae 82  
 Pachyteichismatidae 174  
 Palaeomanon 73, 226  
 paleocurrent direction 245  
 paraclavule 139, 159, 268  
 paragaster 1  
 paratropal pentactine 130  
 paratroppe 130  
 parenchymella 191, 195  
 parietal gap 11  
 Pattersonia 144, 145  
 pentactine 6, 129, 155  
 pentiradiate 7  
 periloph 141  
 Permian 290  
 Peronematidae 161  
 Peronidella 270  
 Peru 291  
 phagocytosis 257  
 Pharetronas 275, 279  
 pharetronid 251  
 Pharetronida 248, 271, 290, 292  
 Pheronematidae 155, 158, 160,  
   161  
 photic zone 295  
 phyllostriaene 25, 59  
 phylogeny 74, 78, 89, 110, 113,  
   117, 174  
 phytoplankton 203  
 pigments 207  
 Pileolites baccatus 226  
 pinacocyte 2, 202  
 pinacoderm 15  
 pinuli 130  
 Placospongiidae 82  
 plagiotriaene 25, 59  
 Plakinida 125  
 Plakinidae 81  
 planktonic propagule 199  
 plesiastr 29  
 pleuralia 132, 140, 141, 142  
 plumicome 157  
 Poecillastridae 82

- Poecilosclerina 98  
 Poecilosclerida 246  
 Poecilosclerina 120  
 point count 297  
 polished section 298  
 polyaxon 7  
 Polymastiidae 82  
 pore 4  
 poriferasterol 207  
 porocyte 2  
 postica 10, 164, 169  
 Potamolepidae 247  
 Precambrian demosponge 289  
 predation 215, 231  
 predator 255  
 preparation 297  
 primary layer 163  
 principalia 131, 175  
 Prismodictya 145, 146  
 prokaryote 243  
 propagule 200  
 prosochete 2  
 prosodi 16  
 prosopyle 201  
 prostalia 132, 140  
 protection 211, 215  
 Protoleucon 270  
 Protospongia 261  
 Protospongiidae 249  
 protriaene 25, 197  
 provincial fauna 287, 291  
 Psammascidae 254
- quadriradiate 8  
 quadrule 135
- Rankenella 262  
 raphide 25  
 Raspailiidae 83  
 ray 5, 51  
 reef 248, 250, 251, 272, 273, 276,  
 282, 283, 284, 285, 291  
 facies 250  
 Regispongia 269  
 relative frequency 231  
 reproduction 191  
 respiration 206  
 rate 206  
 Reticulosa 134, 151  
 reticuloid 135  
 Rhabderemiidae 83  
 rhabdodactine 7, 129, 155, 156,  
 160, 162  
 prostalia 143  
 rhabdome 20  
 rhagon 12, 16  
 rhax 31  
 rhizoclone 51, 54, 69  
 Rhizomorina 85, 87, 99, 109, 284  
 rhizomorine 249  
 rhizophyte 11  
 Rhizopsis 84  
 Rhopalocelia 73
- rhyses 213  
 root tuft 11, 66, 140, 141, 143,  
 220, 246  
 rosette 130  
 Rossellidae 155, 156, 160, 161  
 Russia 291
- Saccospongia 73, 76, 78, 263, 264  
 salinity 260  
 Samidae 82  
 sand 254  
 sanidaster 29, 32  
 sceptrule 130, 162  
 Scheiella 70  
 Scheiia 72  
 schizorhyses 168, 170  
 scleractinian 251  
 scleroblast 2  
 sclerocyte 2  
 sclerosponge 126, 250  
 Sclerospongia 247  
 Sclerospongiae 97  
 Sebergassia 270  
 sexiradiate 7  
 shallow water 285  
 environment 282  
 representative 283  
 shape 213, 216, 244  
 sieve plate 11, 156, 166  
 sigmaspire 32  
 Sigmatophora 118  
 sigmatosclere 33  
 Sigmatotetragonida 119  
 Sigmaxinellidae 83  
 silica 209, 252  
 Silurian 290  
 size  
 limit 213  
 variation 234  
 skeletal  
 canal 10, 12, 72  
 evolution 105  
 net 239  
 pore 10, 12  
 skeletal type 64  
 anthaspidellid 64  
 anthracosyconid 65  
 astylospongiid 65  
 belemnospongioid 66  
 chiasmoclonellid 65  
 haplistiid 65  
 hazeliid 64  
 heliospongiid 64  
 hindiid 66  
 systactospongiid 64  
 skeleton 215  
 Sollasellidae 82  
 sorite 200  
 spatial dispersion 297  
 sphaeraster 23, 30  
 Sphaerocladina 87, 99, 109, 264,  
 284  
 sphaeroclone 22, 57, 70, 71
- sphere 36  
 Sphinctozoa 270  
 sphinctozoan 251  
 spicule 1, 18, 129  
 Spiculispongiae 120  
 spiculite 252  
 spinispira 32  
 Spintharopora 118  
 spiraster 29  
 Spirastrellida 95, 96, 125  
 Spirastrellidae 82, 246  
 Spongillidae 83, 247, 275, 284,  
 292  
 spongin 1, 8, 63  
 spongioblast 2  
 spongocoel 1  
 spongocyte 2  
 Sporadopylidae 174  
 stabilization 211, 218  
 starch 204  
 statoblast 200  
 stauractine 8, 129, 135  
 Staurodermatidae 170  
 staurodisc 132  
 stenobathic  
 abyssal form 281  
 abyssal genera 280  
 stereoblastula 192  
 Stereodictyum 147, 267  
 sterols 207  
 sterraster 23, 30  
 Stioderma 266  
 streptaster 29  
 streptosclere 31  
 Streptosclerophora 119  
 Stromatoporellina 84  
 stromatoporoid 250, 251  
 Stromatoporoidea 265  
 strongyle 8, 70  
 strongylote 20  
 style 8, 68  
 Stylopegma 228, 231  
 Suberitidae 82, 246  
 sublithistid sponge 59  
 substrate 246, 260  
 space 243  
 superficial meshwork 172  
 surface area 211, 213  
 suspended sediment 218  
 syconoid 2  
 symbiotic  
 algae 204  
 cyanophyte 260  
 relationship 257  
 symmetry 216  
 synapticula 16, 131, 156  
 syncytium 127
- tabulate coral 251  
 Taegerinae 156  
 Tajikistan 291  
 Taplowia 263  
 tauactine 129, 155, 160



- technique 297  
 Teganiidae 249  
 temperature 293  
   tolerance 260  
 Tertiary 292  
 Tethya 244, 245  
 Tethyan  
   belt 290  
   realm 288  
 Tethyidae 82  
 Tetilla 244  
 Tetillidae 82, 247  
 Tetracladina 85, 86, 99, 109  
 tetraclonar desma 52  
 tetraclone 52, 69  
 tetractine 6  
 Tetractinellida 120, 247  
 Tetractinomorpha 100, 101, 115,  
   121, 123, 264  
 tetraene 21  
 Tetralithistida 100  
 tetradialate 194  
 tetraxial 7  
 tetraxon 7, 12  
 Theneidae 82, 247  
 thesocyte 205  
 thin sections 298  
 Thoosidae 82, 96  
 Thrombidae 81  
 Thrombus 81  
 Timeidae 82  
 Timor 291  
 Titusvillia 151, 152  
 tornote 20  
 toxaspire 32  
 trab 58  
 Tretodictyidae 170, 175  
 triactine 6  
 triaene 8, 20, 40  
 Triassic 291  
 triaxial 8, 11  
 triaxon 7, 8, 11  
 Tricranocladina 100, 109  
 tricranoclone 48, 58, 70, 71  
 trider 52  
 triod 8  
 triradiate 8, 194  
 tylostyle 24  
 umbel 130  
 Uncinataria 133  
 uncinates 132, 155, 162  
 unfavorable stimuli 205  
 Uralonema 149, 268  
 variability 223, 236  
 variation 223  
 Vauxia 152  
 Ventriculitidae 173  
 Verongia 245  
 viviparous 191  
 Warrigalia 263  
 water pressure 212  
 Wewokella 269  
 Wilburnicyathus 262  
 xenoskeleton 9  
 Yangtze Gorge 261  
 Yukon Territory 291  
 Zittlella 73  
 zygone 15, 51