P Martin Sander

List of Publications by Year
in descending order

102 papers	4,549 citations	94269 37 h-index	114278 63 g-index
104 all docs	104 docs citations	104 times ranked	2069 citing authors

#	Article	IF	Citations
1	Biology of the sauropod dinosaurs: the evolution of gigantism. Biological Reviews, 2011, 86, 117-155.	4.7	306
2	Longbone histology of the Tendaguru sauropods: implications for growth and biology. Paleobiology, 2000, 26, 466-488.	1.3	237
3	Bone histology indicates insular dwarfism in a new Late Jurassic sauropod dinosaur. Nature, 2006, 441, 739-741.	13.7	192
4	Science in Pictures: The Fossils of Monte San Giorgio. Scientific American, 1989, 260, 74-81.	1.0	185
5	Ontogenetic stages in the long bone histology of sauropod dinosaurs. Paleobiology, 2008, 34, 247-263.	1.3	177
6	Dinosaurs and the island rule: The dwarfed dinosaurs from HaÅ£eg Island. Palaeogeography, Palaeoclimatology, Palaeoecology, 2010, 293, 438-454.	1.0	134
7	Histology of ankylosaur osteoderms: implications for systematics and function. Journal of Vertebrate Paleontology, 2004, 24, 874-893.	0.4	127
8	Developmental Plasticity in the Life History of a Prosauropod Dinosaur. Science, 2005, 310, 1800-1802.	6.0	127
9	Postcranial axial skeleton ofEuropasaurus holgeri(Dinosauria, Sauropoda) fromÂtheÂUpper Jurassic of Germany: implications for sauropod ontogeny andÂphylogeneticÂrelationships of basal Macronaria. Journal of Systematic Palaeontology, 2014, 12, 335-387.	0.6	126
10	Ichthyosauria: their diversity, distribution, and phylogeny. Palaontologische Zeitschrift, 2000, 74, 1-35.	0.8	123
11	Small body size and extreme cortical bone remodeling indicate phyletic dwarfism inMagyarosaurus dacus(Sauropoda: Titanosauria). Proceedings of the National Academy of Sciences of the United States of America, 2010, 107, 9258-9263.	3.3	116
12	The norian Plateosaurus bonebeds of central Europe and their taphonomy. Palaeogeography, Palaeoclimatology, Palaeoecology, 1992, 93, 255-299.	1.0	89
13	Sauropod Gigantism. Science, 2008, 322, 200-201.	6.0	86
14	Fossilization transforms vertebrate hard tissue proteins into N-heterocyclic polymers. Nature Communications, 2018, 9, 4741.	5.8	86
15	Reconstructing the evolution of the respiratory apparatus in tetrapods. Respiratory Physiology and Neurobiology, 2004, 144, 125-139.	0.7	82
16	In vitro digestibility of fern and gymnosperm foliage: implications for sauropod feeding ecology and diet selection. Proceedings of the Royal Society B: Biological Sciences, 2008, 275, 1015-1021.	1.2	81
17	Adaptive Patterns in Aquatic Amniote Bone Microanatomyâ€"More Complex than Previously Thought. Integrative and Comparative Biology, 2016, 56, 1349-1369.	0.9	72
18	The skull of the pistosaurAugustasaurusfrom the Middle Triassic of northwestern Nevada. Journal of Vertebrate Paleontology, 2002, 22, 577-592.	0.4	66

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19	A new pistosaurid (Reptilia: Sauropterygia) from the Middle Triassic of Nevada and its implications for the origin of the plesiosaurs. Journal of Vertebrate Paleontology, 1997, 17, 526-533.	0.4	65
20	THE LATE TRIASSIC BLACK SHALES OF THE GUANLING AREA, GUIZHOU PROVINCE, SOUTHâ€WEST CHINA: A UNIQUE MARINE REPTILE AND PELAGIC CRINOID FOSSIL LAGERSTÃ„TTE. Palaeontology, 2008, 51, 27-61.	1.0	65
21	No gastric mill in sauropod dinosaurs: new evidence from analysis of gastrolith mass and function in ostriches. Proceedings of the Royal Society B: Biological Sciences, 2007, 274, 635-640.	1.2	64
22	A Triassic plesiosaurian skeleton and bone histology inform on evolution of a unique body plan. Science Advances, 2017, 3, e1701144.	4.7	61
23	Growth record and histological variation in the dorsal ribs ofCamarasaurussp. (Sauropoda). Journal of Vertebrate Paleontology, 2014, 34, 852-869.	0.4	60
24	Upper Cretaceous titanosaur nesting sites and their implications for sauropod dinosaur reproductive biology. Palaeontographica, Abteilung A: Palaozoologie - Stratigraphie, 2008, 284, 69-107.	1.5	59
25	The shark fauna from the Middle Triassic (Anisian) of North-Western Nevada. Zoological Journal of the Linnean Society, 2001, 133, 285-301.	1.0	58
26	A nearly complete skeleton of an early juvenile diplodocid (Dinosauria: Sauropoda) from the Lower Morrison Formation (Late Jurassic) of north central Wyoming and its implications for early ontogeny and pneumaticity in sauropods. Historical Biology, 2007, 19, 225-253.	0.7	54
27	Histology and postural change during the growth of the ceratopsian dinosaur Psittacosaurus lujiatunensis. Nature Communications, 2013, 4, 2079.	5.8	54
28	An Evolutionary Cascade Model for Sauropod Dinosaur Gigantism - Overview, Update and Tests. PLoS ONE, 2013, 8, e78573.	1.1	54
29	Macropredatory ichthyosaur from the Middle Triassic and the origin of modern trophic networks. Proceedings of the National Academy of Sciences of the United States of America, 2013, 110, 1393-1397.	3.3	53
30	Early permian depositional environments and pond bonebeds in central archer County, Texas. Palaeogeography, Palaeoclimatology, Palaeoecology, 1989, 69, 1-21.	1.0	51
31	Reproduction in Early Amniotes. Science, 2012, 337, 806-808.	6.0	51
32	Bone lamina thickness, bone apposition rates, and age estimates in sauropod humeri and femora. Palaontologische Zeitschrift, 2003, 77, 161-172.	0.8	49
33	Histology shows that elongated neck ribs in sauropod dinosaurs are ossified tendons. Biology Letters, 2012, 8, 1032-1035.	1.0	46
34	Modified Laminar Bone in Ampelosaurus atacis and Other Titanosaurs (Sauropoda): Implications for Life History and Physiology. PLoS ONE, 2012, 7, e36907.	1.1	46
35	Aging, Maturation and Growth of Sauropodomorph Dinosaurs as Deduced from Growth Curves Using Long Bone Histological Data: An Assessment of Methodological Constraints and Solutions. PLoS ONE, 2013, 8, e67012.	1.1	46
36	A New Look at Ichthyosaur Long Bone Microanatomy and Histology: Implications for Their Adaptation to an Aquatic Life. PLoS ONE, 2014, 9, e95637.	1.1	43

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37	Long bone histology ofMetoposaurus diagnosticus(Temnospondyli) from the Late Triassic of KrasiejÃ³w (Poland) and its paleobiological implications. Journal of Vertebrate Paleontology, 2013, 33, 1003-1018.	0.4	41
38	Cranial anatomy of the Late Jurassic dwarf sauropodEuropasaurus holgeri(Dinosauria,) Tj ETQq0 0 0 rgBT /Overlock 10 Tf 50 707 2015, 13, 221-263.	0.6	41
39	The large ichthyosaurCymbospondylus buchseri, sp. nov., from the Middle Triassic of Monte San Giorgio (Switzerland), with a survey of the genus in Europe. Journal of Vertebrate Paleontology, 1989, 9, 163-173.	0.4	40
40	Dinosaur origin of egg color: oviraptors laid blue-green eggs. PeerJ, 2017, 5, e3706.	0.9	38
41	Short-Snouted Toothless Ichthyosaur from China Suggests Late Triassic Diversification of Suction Feeding Ichthyosaurs. PLoS ONE, 2011, 6, e19480.	1.1	37
42	Evolutionary implications of the divergent long bone histologies of Nothosaurus and Pistosaurus (Sauropterygia, Triassic). BMC Evolutionary Biology, 2013, 13, 123.	3.2	35
43	Diverse Aquatic Adaptations in Nothosaurus spp. (Sauropterygia)â€"Inferences from Humeral Histology and Microanatomy. PLoS ONE, 2016, 11, e0158448.	1.1	35
44	Early giant reveals faster evolution of large body size in ichthyosaurs than in cetaceans. Science, 2021, 374, eabf5787.	6.0	35
45	Long and girdle bone histology ofStegosaurus: implications for growth and life history. Journal of Vertebrate Paleontology, 2009, 29, 1087-1099.	0.4	34
46	Developmental palaeontology of Reptilia as revealed by histological studies. Seminars in Cell and Developmental Biology, 2010, 21, 462-470.	2.3	34
47	Bone histology and its implications for the life history and growth of the Early Cretaceous titanosaur Phuwiangosaurus sirindhornae. Geological Society Special Publication, 2009, 315, 217-228.	0.8	33
48	Quantitative histological models suggest endothermy in plesiosaurs. PeerJ, 2018, 6, e4955.	0.9	31
49	The appendicular skeleton of the dwarf macronarian sauropodEuropasaurus holgerifrom the Late Jurassic of Germany and a re-evaluation of its systematic affinities. Journal of Systematic Palaeontology, 2020, 18, 739-781.	0.6	30
50	Structure and evolutionary implications of the earliest (Sinemurian, Early Jurassic) dinosaur eggs and eggshells. Scientific Reports, 2019, 9, 4424.	1.6	29
51	Long bone microstructure gives new insights into the life of pachypleurosaurids from the Middle Triassic of Monte San Giorgio, Switzerland/Italy. Comptes Rendus - Palevol, 2011, 10, 413-426.	0.1	28
52	The three-front model: a developmental explanation of long bone diaphyseal histology of Sauropoda. Biological Journal of the Linnean Society, 2014, 112, 765-781.	0.7	27
53	Postcranial material of Nothosaurus marchicus from the Lower Muschelkalk (Anisian) of Winterswijk, The Netherlands, with remarks on swimming styles and taphonomy. Palaontologische Zeitschrift, 2015, 89, 961-981.	0.8	27
54	Semi-aquatic adaptations in a spinosaur from the Lower Cretaceous of Brazil. Cretaceous Research, 2018, 90, 283-295.	0.6	26

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55	Long Bone Histology and Growth Patterns in Ankylosaurs: Implications for Life History and Evolution. PLoS ONE, 2013, 8, e68590.	1.1	26
56	New marine vertebrate fauna from the Middle Triassic of Nevada. Journal of Paleontology, 1994, 68, 676-680.	0.5	25
57	A new species of Cymbospondylus (Diapsida, Ichthyosauria) from the Middle Triassic of Nevada and a re-evaluation of the skull osteology of the genus. Zoological Journal of the Linnean Society, 2006, 147, 515-538.	1.0	24
58	Beyond the rainbow. Science, 2014, 346, 416-418.	6.0	24
59	The dentition of a well-preserved specimen of Camarasaurus sp.: implications for function, tooth replacement, soft part reconstruction, and food intake. Palaontologische Zeitschrift, 2017, 91, 145-161.	0.8	23
60	Variability of growth pattern observed in Metoposaurus krasiejowensis humeri and its biological meaning. Journal of Iberian Geology, 2018, 44, 99-111.	0.7	23
61	Can secondary osteons be used as ontogenetic indicators in sauropods? Extending the histological ontogenetic stages into senescence. Paleobiology, 2017, 43, 321-342.	1.3	22
62	New Mixosauridae (Ichthyosauria) from the Middle Triassic of the Augusta Mountains (Nevada, USA) and their implications for mixosaur taxonomy. Palaeontographica, Abteilung A: Palaozoologie - Stratigraphie, 2004, 270, 133-162.	1.5	22
63	The first juvenile specimens ofPlateosaurus engelhardtifrom Frick, Switzerland: isolated neural arches and their implications for developmental plasticity in a basal sauropodomorph. PeerJ, 2014, 2, e458.	0.9	21
64	Long bone histology indicates sympatric species ofDimetrodon(Lower Permian,) Tj ETQq0 0 0 rgBT /Overlock 10 Tf 50 387 Td (Sp 2012, 103, 217-236.	0.3	19
65	A New Triassic Primitive Ichthyosaur from Yuanan, South China. Acta Geologica Sinica, 2013, 87, 672-677.	0.8	19
66	The Triassic marine reptileOmphalosaurus: osteology, jaw anatomy, and evidence for ichthyosaurian affinities. Journal of Vertebrate Paleontology, 2003, 23, 799-816.	0.4	18
67	Cymbospondylus (Shastasauridae: Ichthyosauria) from the Middle Triassic of Spitsbergen: filling a paleobiogeographic gap. Journal of Paleontology, 1992, 66, 332-337.	0.5	17
68	New finds ofOmphalosaurus and a review of Triassic ichthyosaur paleobiogeography. Palaontologische Zeitschrift, 1998, 72, 149-162.	0.8	17
69	A large, multiple-tooth-rowed captorhinid reptile (Amniota: Eureptilia) from the Upper Permian of Mallorca (Balearic Islands, western Mediterranean). Journal of Vertebrate Paleontology, 2017, 37, e1251936.	0.4	17
70	Quantitative Interpretation of Tracks for Determination of Body Mass. PLoS ONE, 2013, 8, e77606.	1.1	16
71	Bone Histology of the Stegosaur Kentrosaurus aethiopicus (Ornithischia: Thyreophora) from the Upper Jurassic of Tanzania. Anatomical Record, 2013, 296, 933-952.	0.8	14
72	A comparative study of total organic carbon-Î´13C signatures in the Triassicâ€“Jurassic transitional beds of the Central European Basin and western Tethys shelf seas. Newsletters on Stratigraphy, 2019, 52, 461-486.	0.5	14

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73	A spinosaurid from Thailand (Sao Khua Formation, Early Cretaceous) and a reassessment ofCamarillasaurus cirugedaefrom the Early Cretaceous of Spain. Historical Biology, 2021, 33, 3480-3494.	0.7	14
74	The discrepancy between morphological and microanatomical patterns of anamniotic stegocephalian postcrania from the Early Permian Briar Creek Bonebed (Texas). Comptes Rendus - Palevol, 2016, 15, 103-114.	0.1	13
75	Foramina in plesiosaur cervical centra indicate a specialized vascular system. Fossil Record, 2017, 20, 279-290.	0.5	13
76	Skeletal material from larger Eusauropterygia (Reptilia: Eosauropterygia) with nothosaurian and cymatosaurian affinities from the Lower Muschelkalk of Winterswijk, The Netherlands. Palaontologische Zeitschrift, 2015, 89, 943-960.	0.8	12
77	On the presence ofMixosaurus(Ichthyopterygia: Reptilia) in the Middle Triassic of Nevada. Journal of Paleontology, 1990, 64, 161-164.	0.5	11
78	The Paleobiogeography of Shastasaurus. , 1997, , 17-43.		11
79	Influence of taphonomy on histological evidence for vertebral pneumaticity in an Upper Cretaceous titanosaur from South America. Cretaceous Research, 2020, 108, 104337.	0.6	10
80	Long bone cortices in a growth series ofApatosaurussp. (Dinosauria: Diplodocidae): geometry, body mass, and crystallite orientation of giant animals. Biological Journal of the Linnean Society, 2014, 112, 782-798.	0.7	9
81	Structural, functional, and physiological signals in ichthyosaur vertebral centrum microanatomy and histology. Geodiversitas, 2018, 40, 161.	0.2	9
82	A new cymbospondylid ichthyosaur (Ichthyosauria) from the Middle Triassic (Anisian) of the Augusta Mountains, Nevada, USA. Journal of Systematic Palaeontology, 2020, 18, 1167-1191.	0.6	9
83	High Blood Flow Into the Femur Indicates Elevated Aerobic Capacity in Synapsids Since the Synapsida-Sauropsida Split. Frontiers in Ecology and Evolution, 2021, 9, .	1.1	9
84	The uniquely diverse taphonomy of the marine reptile skeletons (Sauropterygia) from the Lower Muschelkalk (Anisian) of Winterswijk, The Netherlands. Palaontologische Zeitschrift, 2019, 93, 69-92.	0.8	8
85	Hematological convergence between Mesozoic marine reptiles (Sauropterygia) and extant aquatic amniotes elucidates diving adaptations in plesiosaurs. PeerJ, 2019, 7, e8022.	0.9	8
86	The first record of Tyrannoneustes (Thalattosuchia: Metriorhynchidae): a complete skull from the Callovian (late Middle Jurassic) of Germany. Palaontologische Zeitschrift, 2018, 92, 457-480.	0.8	6
87	A large temnospondyl humerus from the Rhaetian (Late Triassic) of Bonenburg (Westphalia, Germany) and its implications for temnospondyl extinction. Journal of Iberian Geology, 2019, 45, 287-300.	0.7	6
88	Palaeontological evidence reveals convergent evolution of intervertebral joint types in amniotes. Scientific Reports, 2020, 10, 14106.	1.6	6
89	Neck mobility in the Jurassic plesiosaurCryptoclidus eurymerus: finite element analysis as a new approach to understanding the cervical skeleton in fossil vertebrates. PeerJ, 2019, 7, e7658.	0.9	6
90	Dinosaurs: Four Legs Good, Two Legs Bad. Current Biology, 2018, 28, R1160-R1163.	1.8	4

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91	Fossil burrow assemblage, not mangrove roots: reinterpretation of the main whale-bearing layer in the late Eocene of Wadi Al-Hitan, Egypt. Palaeobiodiversity and Palaeoenvironments, 2019, 99, 143-158.	0.6	4
92	Pentadactyl manus of the Metoposaurus krasiejowensis from the Late Triassic of Poland, the first record of pentadactyly among Temnospondyli. Journal of Anatomy, 2020, 237, 1151-1161.	0.9	4
93	Ichthyosauria. , 2021, , 458-466.		4
94	On the origin of feathersâ€"Response. Science, 2014, 346, 1466-1467.	6.0	3
95	First record of mawsoniid coelacanths (Actinistia, Sarcopterygii) from the marine Rhaetian (Upper) Tj ETQq1 1 0.784314 rgBT /Overlo	0.4	3
96	Early Triassic ichthyopterygian fossils from the Russian Far East. Scientific Reports, 2022, 12, 5546.	1.6	3
97	The reproductive biology of oviraptorosaurs: a synthesis. Geological Society Special Publication, 2022, 521, 19-34.	0.8	3
98	Determination of muscle strength and function in plesiosaur limbs: finite element structural analyses of Cryptoclidus eurymerus humerus and femur. PeerJ, 0, 10, e13342.	0.9	3
99	How to verify fossil tracks: the first record of dinosaurs from Palestine. Historical Biology, 2023, 35, 924-934.	0.7	2
100	An enigmatic marine reptileâ€"the actual first record of Omphalosaurus in the Muschelkalk of the Germanic basin. Journal of Vertebrate Paleontology, 2017, 37, e1384739.	0.4	1
101	Bone histology and microanatomy of Edaphosaurus and Dimetrodon (Amniota, Synapsida) vertebrae from the Lower Permian of Texas. Anatomical Record, 2021, 304, 570-583.	0.8	1
102	Giant Late Triassic ichthyosaurs from the KÃ¶ssen Formation of the Swiss Alps and their paleobiological implications. Journal of Vertebrate Paleontology, 0, , .	0.4	1