J William Schopf

List of Publications by Year
in descending order

77 papers	5,080 citations	109311 35 h-index	102480 66 g-index
81 all docs	81 docs citations	81 times ranked	3034 citing authors

#	Article	IF	Citations
1	Laserâ€“Raman imagery of Earth's earliest fossils. Nature, 2002, 416, 73-76.	27.8	557
2	Fossil evidence of Archaean life. Philosophical Transactions of the Royal Society B: Biological Sciences, 2006, 361, 869-885.	4.0	396
3	Evidence of Archean life: Stromatolites and microfossils. Precambrian Research, 2007, 158, 141-155.	2.7	312
4	Morphological Biosignatures and the Search for Life on Mars. Astrobiology, 2003, 3, 351-368.	3.0	244
5	Raman Imagery: A New Approach to Assess the Geochemical Maturity and Biogenicity of Permineralized Precambrian Fossils. Astrobiology, 2005, 5, 333-371.	3.0	193
6	PRECAMBRIAN MICROâ€ORGANISMS AND EVOLUTIONARY EVENTS PRIOR TO THE ORIGIN OF VASCULAR PLANTS. Biological Reviews, 1970, 45, 319-352.	10.4	186
7	Precambrian Paleobiology: Problems and Perspectives. Annual Review of Earth and Planetary Sciences, 1975, 3, 213-249.	11.0	174
8	Carbon isotopic composition of individual Precambrian microfossils. Geology, 2000, 28, 707.	4.4	157
9	SIMS analyses of the oldest known assemblage of microfossils document their taxon-correlated carbon isotope compositions. Proceedings of the National Academy of Sciences of the United States of America, 2018, 115, 53-58.	7.1	131
10	The Evolution of the Earliest Cells. Scientific American, 1978, 239, 110-138.	1.0	130
11	Three-dimensional Raman imagery of precambrian microscopic organisms. Geobiology, 2005, 3, 1-12.	2.4	110
12	Confocal laser scanning microscopy and Raman imagery of ancient microscopic fossils. Precambrian Research, 2009, 173, 39-49.	2.7	110
13	Biogenicity of Earth's earliest fossils: A resolution of the controversy. Gondwana Research, 2012, 22, 761-771.	6.0	110
14	Raman spectra of a Lower Cambrian ctenophore embryo from southwestern Shaanxi, China. Proceedings of the National Academy of Sciences of the United States of America, 2007, 104, 6289-6292.	7.1	95
15	Exceptional Seed Longevity and Robust Growth: Ancient Sacred Lotus from China. American Journal of Botany, 1995, 82, 1367.	1.7	94
16	Raman and ion microscopic imagery of graphitic inclusions in apatite from older than 3830 Ma Akilia supracrustal rocks, west Greenland. Geology, 2007, 35, 591.	4.4	92
17	Biostratigraphic usefulness of stromatolitic precambrian microbiotas: A preliminary analysis. Precambrian Research, 1977, 5, 143-173.	2.7	91
18	Three-Dimensional Confocal Optical Imagery of Precambrian Microscopic Organisms. Astrobiology, 2006, 6, 1-16.	3.0	91

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19	Longâ€living lotus: germination and soil Î³â€irradiation of centuriesâ€old fruits, and cultivation, growth, and phenotypic abnormalities of offspring. American Journal of Botany, 2002, 89, 236-247.	1.7	90
20	The paleobiological record of photosynthesis. Photosynthesis Research, 2011, 107, 87-101.	2.9	89
21	Precambrian microbe-like pseudofossils: A promising solution to the problem. Precambrian Research, 2010, 179, 191-205.	2.7	72
22	Preservation and detection of microstructural and taxonomic correlations in the carbon isotopic compositions of individual Precambrian microfossils. Geochimica Et Cosmochimica Acta, 2013, 104, 165-182.	3.9	72
23	Phosphate biomineralization in mid-Neoproterozoic protists. Geology, 2011, 39, 539-542.	4.4	62
24	Gypsum-Permineralized Microfossils and Their Relevance to the Search for Life on Mars. Astrobiology, 2012, 12, 619-633.	3.0	61
25	Abundances and Isotopic Compositions of Carbon and Sulfur Species in Whole Rock and Kerogen Samples. , 1992, , 709-798.		60
26	The development and diversification of Precambrian life. Origins of Life and Evolution of Biospheres, 1974, 5, 119-135.	0.6	58
27	Taxonomy, paleoecology and biostratigraphy of the late Neoproterozoic Chichkan microbiota of South Kazakhstan: the marine biosphere on the eve of metazoan radiation. Journal of Paleontology, 2010, 84, 363-401.	0.8	57
28	Are the oldest ?fossils?, fossils?. Origins of Life and Evolution of Biospheres, 1976, 7, 19-36.	0.6	56
29	Reconstructed ancestral enzymes suggest long-term cooling of Earthâ€™s photic zone since the Archean. Proceedings of the National Academy of Sciences of the United States of America, 2017, 114, 4619-4624.	7.1	53
30	Solution to Darwin's dilemma: Discovery of the missing Precambrian record of life. Proceedings of the National Academy of Sciences of the United States of America, 2000, 97, 6947-6953.	7.1	52
31	Sulfur-cycling fossil bacteria from the 1.8-Ga Duck Creek Formation provide promising evidence of evolution's null hypothesis. Proceedings of the National Academy of Sciences of the United States of America, 2015, 112, 2087-2092.	7.1	51
32	Focussed ion beam preparation and in situ nanoscopic study of Precambrian acritarchs. Precambrian Research, 2005, 140, 36-54.	2.7	50
33	Atomic force microscopy of Precambrian microscopic fossils. Proceedings of the National Academy of Sciences of the United States of America, 2002, 99, 9117-9120.	7.1	47
34	Calcite and aragonite distributions in the skeletons of bimineralic bryozoans as revealed by Raman spectroscopy. Invertebrate Biology, 2008, 127, 87-97.	0.9	47
35	Proterozoic and Selected Early Cambrian Microfossils and Microfossil-Like Objects. , 1992, , 865-952.		45
36	Discovery of a New Chert-Permineralized Microbiota in the Proterozoic Buxa Formation of the Ranjit Window, Sikkim, Northeast India, and Its Astrobiological Implications. Astrobiology, 2008, 8, 735-746.	3.0	39

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37	The Fossil Record of Cyanobacteria. , 2012, , 15-36.		38
38	Confocal laser scanning microscopy and Raman imagery of the late Neoproterozoic Chichkan microbiota of South Kazakhstan. Journal of Paleontology, 2010, 84, 402-416.	0.8	37
39	Characterization of permineralized kerogen from an Eocene fossil fern. Organic Geochemistry, 2009, 40, 353-364.	1.8	35
40	Carbonaceous and siliceous Neoproterozoic vase-shaped microfossils (Urucum Formation, Brazil) and the question of early protistan biomineralization. Journal of Paleontology, 2017, 91, 393-406.	0.8	35
41	Geological evidence of oxygenic photosynthesis and the biotic response to the 2400-2200 Ma â€œGreat Oxidation Eventâ€• Biochemistry (Moscow), 2014, 79, 165-177.	1.5	33
42	Micro- and nano-scale ultrastructure of cell walls in Cryogenian microfossils: revealing their biological affinity. Lethaia, 2010, 43, 129-136.	1.4	31
43	Atlas of Representative Proterozoic Microfossils. , 1992, , 1055-1118.		28
44	An anaerobic â^¼3400 Ma shallow-water microbial consortium: Presumptive evidence of Earthâ€™s Paleoarchean anoxic atmosphere. Precambrian Research, 2017, 299, 309-318.	2.7	28
45	Possible Algal Microfossils from the Late Pre-Cambrian of California. Nature, 1969, 223, 165-167.	27.8	24
46	Application of Raman-based images in the Earth sciences. Springer Series in Optical Sciences, 2012, , 145-187.	0.7	24
47	Proterozoic Biogeochemistry. , 1992, , 81-134.		23
48	A new approach to ancient microorganisms: taxonomy, paleoecology, and biostratigraphy of the Lower Cambrian Berkuta and Chulaktau microbiotas of South Kazakhstan. Journal of Paleontology, 2015, 89, 695-729.	0.8	23
49	A renaissance in studies of ancient life. Geology Today, 2010, 26, 140-145.	0.9	21
50	STRUCTURALLY PRESERVED PHLOEM ZONE TISSUE IN RHYNIA. American Journal of Botany, 1972, 59, 373-376.	1.7	20
51	Carbon isotopic composition of individual Precambrian microfossils. Geology, 2000, 28, 707-710.	4.4	16
52	Images of the Earth's earliest fossils?. Nature, 2002, 420, 477-477.	27.8	14
53	Characterization of the stem anatomy of the Eocene fern Dennstaedtiopsis aerenchymata (Dennstaedtiaceae) by use of confocal laser scanning microscopy. American Journal of Botany, 2013, 100, 1626-1640.	1.7	14
54	Carbonate mineralogy of a tropical bryozoan biota and its vulnerability to ocean acidification. Marine Biology Research, 2016, 12, 776-780.	0.7	13

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55	Microfossils in stromatolitic cherts from the proterozoic allamoore formation of west texas. Precambrian Research, 1981, 16, 129-141.	2.7	12
56	Evolution of the Proterozoic Biosphere: Benchmarks, Tempo, and Mode. , 1992, , 583-600.		12
57	Reply to the comments of D.L. Pinti, R. Mineau and V. Clement, and of A.O. Marshall and C.P. Marshall on â€œBiogenicity of Earth's earliest fossils: A resolution of the controversyâ€• by J. William Schopf and Anatoliy B. Kudryavtsev, Gondwana Research 22 (2012), 761-771. Gondwana Research, 2013, 23, 1656-1658.	6.0	12
58	In situ confocal laser scanning microscopy and Raman spectroscopy of bisaccate pollen from the Irati Subgroup (Permian, ParanÃ¡ Basin, Brazil): Comparison with acid-macerated specimens. Review of Palaeobotany and Palynology, 2016, 233, 169-175.	1.5	12
59	Structurally Preserved Phloem Zone Tissue in Rhynia. American Journal of Botany, 1972, 59, 373.	1.7	12
60	Recent Advances in Precambrian Paleobiology. Grana Palynologica, 1969, 9, 147-168.	0.4	10
61	Evidence of compositional and ultrastructural shifts during the development of calcareous tubes in the biofouling tubeworm, Hydroides elegans. Journal of Structural Biology, 2015, 189, 230-237.	2.8	10
62	Biogenicity of Apex Chert microstructures. Nature Geoscience, 2011, 4, 346-347.	12.9	8
63	Global microfossil changes through the Precambrian-Cambrian phosphogenic event: The Shabakta Formation of the phosphorite-bearing Maly Karatau Range, South Kazakhstan. Precambrian Research, 2020, 349, 105386.	2.7	8
64	Three-Dimensional Morphological (CLSM) and Chemical (Raman) Imagery of Cellularly Mineralized Fossils. Topics in Geobiology, 2010, , 457-486.	0.5	7
65	Geology and Paleobiology of the Archean Earth. , 1992, , 5-42.		5
66	Geochemical and submicron-scale morphologic analyses of individual Precambrian microorganisms. Geochemical Society Special Publications, 2004, 9, 365-375.	0.1	5
67	Confocal Laser Scanning Microscopy and Raman (and Fluorescence) Spectroscopic Imagery of Permineralized Cambrian and Neoproterozoic Fossils. Topics in Geobiology, 2011, , 241-270.	0.5	5
68	Calcitization of aragonitic bryozoans in Cenozoic tropical carbonates from East Kalimantan, Indonesia. Facies, 2016, 62, 1.	1.4	3
69	Application of the apatite oxygen paleobarometer (AOP) across the Neoproterozoic-Cambrian transition. Precambrian Research, 2020, 349, 105404.	2.7	3
70	Carbon isotopes of Proterozoic filamentous microfossils: SIMS analyses of ancient cyanobacteria from two disparate shallow-marine cherts. Geomicrobiology Journal, 2021, 38, 719-731.	2.0	3
71	Precambrian Paleobiology: Precedents, Progress, and Prospects. Frontiers in Ecology and Evolution, 2021, 9, .	2.2	2
72	Extinctions in life's earliest history. , 2004, , 35-60.		1

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73	Precambrian Biochemical Evolution. Short Courses in Paleontology, 1988, 1, 89-97.	0.2	0
74	Precambrian: The Age of Microscopic Life. The Paleontological Society Special Publications, 1996, 8, 345-345.	0.0	0
75	J. William Schopf. Astrobiology, 2011, 11, 9-14.	3.0	0
76	Reply to DvoÅ™Ã¡k et al.: Apparent evolutionary stasis of ancient subseafloor sulfur cycling biocoenoses. Proceedings of the National Academy of Sciences of the United States of America, 2015, 112, E2560-E2560.	7.1	0
77	Palaeontology, Microbial â˜†. , 2017, , .		0