Reassessing the first appearance of eukaryotes and cyar

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Citation Report

#	Article	IF	CITATIONS
1	Life before the rise of oxygen. Nature, 2008, 455, 1051-1052.	13.7	77
4	THE GREAT OXIDATION OF EARTH'S ATMOSPHERE: CONTESTING THE YOYO MODEL VIA TRANSITION STABILITY ANALYSIS. Astrophysical Journal, 2009, 706, L178-L182.	1.6	3
5	Getting a better picture of microbial evolution en route to a network of genomes. Philosophical Transactions of the Royal Society B: Biological Sciences, 2009, 364, 2187-2196.	1.8	71
6	Occurrence, phylogeny, structure, and function of catalases and peroxidases in cyanobacteria. Journal of Experimental Botany, 2009, 60, 423-440.	2.4	116
7	Evidence for microbial life in synsedimentary cavities from 2.75 Ga terrestrial environments. Geology, 2009, 37, 423-426.	2.0	45
8	Planetary targets in the search for extrasolar oxygenic photosynthesis. Plant Ecology and Diversity, 2009, 2, 207-219.	1.0	14
9	Modern Subsurface Bacteria in Pristine 2.7 Ga-Old Fossil Stromatolite Drillcore Samples from the Fortescue Group, Western Australia. PLoS ONE, 2009, 4, e5298.	1.1	23
10	Morphological record of oxygenic photosynthesis in conical stromatolites. Proceedings of the National Academy of Sciences of the United States of America, 2009, 106, 10939-10943.	3.3	142
11	The Continuing Puzzle of the Great Oxidation Event. Current Biology, 2009, 19, R567-R574.	1.8	182
12	Special relationship between sterols and oxygen: Were sterols an adaptation to aerobic life?. Free Radical Biology and Medicine, 2009, 47, 880-889.	1.3	107
13	Oil-bearing fluid inclusions from the Palaeoproterozoic: A review of biogeochemical results from time-capsules >2.0 Ga old. Science in China Series D: Earth Sciences, 2009, 52, 1-11.	0.9	15
14	Distribution of microbial terpenoid lipid cyclases in the global ocean metagenome. ISME Journal, 2009, 3, 352-363.	4.4	47
15	Evidence for an early prokaryotic endosymbiosis. Nature, 2009, 460, 967-971.	13.7	58
16	Less nickel for more oxygen. Nature, 2009, 458, 714-715.	13.7	38
17	Low-risk reprogramming. Nature, 2009, 458, 715-716.	13.7	15
18	Oxygen for heavy-metal fans. Nature, 2009, 461, 179-180.	13.7	43
19	Sent by the scent of death. Nature, 2009, 461, 181-182.	13.7	25
20	Catalysts made thinner. Nature, 2009, 461, 182-183.	13.7	31

ATION RE

#	Article	IF	CITATIONS
21	Deepening the early oxygen debate. Nature Geoscience, 2009, 2, 241-242.	5.4	19
22	The cycling and redox state of nitrogen in the Archaean ocean. Nature Geoscience, 2009, 2, 725-729.	5.4	207
23	Unravelling ancient microbial history with community proteogenomics and lipid geochemistry. Nature Reviews Microbiology, 2009, 7, 601-609.	13.6	43
24	Experimental Articles. Microbiology, 2009, 78, 747-756.	0.5	6
25	INORGANIC CARBON ACQUISITION BY CHRYSOPHYTES ¹ . Journal of Phycology, 2009, 45, 1052-1061.	1.0	94
26	Biomineralization by photosynthetic organisms: Evidence of coevolution of the organisms and their environment?. Geobiology, 2009, 7, 140-154.	1.1	51
27	Coevolution of metal availability and nitrogen assimilation in cyanobacteria and algae. Geobiology, 2009, 7, 100-123.	1.1	141
28	Experimental silicification of the extremophilic Archaea <i>Pyrococcus abyssi</i> and <i>Methanocaldococcus jannaschii</i> : applications in the search for evidence of life in early Earth and extraterrestrial rocks. Geobiology, 2009, 7, 403-418.	1.1	83
29	Life on an Anaerobic Planet. Science, 2009, 323, 471-472.	6.0	15
30	Two-phase increase in the maximum size of life over 3.5 billion years reflects biological innovation and environmental opportunity. Proceedings of the National Academy of Sciences of the United States of America, 2009, 106, 24-27.	3.3	260
31	On the Origin of Photosynthesis. Science, 2009, 323, 1286-1287.	6.0	33
32	Early traces of life investigations in drilling Archean hydrothermal and sedimentary rocks of the Pilbara Craton, Western Australia and Barberton Greenstone Belt, South Africa. Comptes Rendus - Palevol, 2009, 8, 649-663.	0.1	34
33	Goldschmidt Abstracts 2009 – M. Geochimica Et Cosmochimica Acta, 2009, 73, A809-A924.	1.6	6
34	Organic matter heterogeneities in 2.72Ga stromatolites: Alteration versus preservation by sulfur incorporation. Geochimica Et Cosmochimica Acta, 2009, 73, 6579-6599.	1.6	65
36	Introduction: Initial investigations of a Neoarchean shelf margin-basin transition (Transvaal) Tj ETQq0 0 0 rgBT /C	verlock 10) Tf 50 182 T
37	Mass occurrence of benthic coccoid cyanobacteria and their role in the production of Neoarchean carbonates of South Africa. Precambrian Research, 2009, 173, 79-92.	1.2	41
38	Evidence for eukaryotic diversification in the â^¼1800 million-year-old Changzhougou Formation, North China. Precambrian Research, 2009, 173, 93-104.	1.2	104
39	Contributions of anoxygenic and oxygenic phototrophy and chemolithotrophy to carbon and oxygen fluxes in aquatic environments. Aquatic Microbial Ecology, 2009, 56, 177-192.	0.9	154

#	Article	IF	CITATIONS
40	Palaeoproterozoic supercontinents and global evolution: correlations from core to atmosphere. Geological Society Special Publication, 2009, 323, 1-26.	0.8	87
41	Reconstructing Earth's surface oxidation across the Archean-Proterozoic transition. Geology, 2009, 37, 399-402.	2.0	247
42	Lower Cretaceous Fresh-Water Stromatolites from Northern Kyushu, Japan. Paleontological Research, 2009, 13, 139-149.	0.5	9
43	Genome Networks Root the Tree of Life between Prokaryotic Domains. Genome Biology and Evolution, 2010, 2, 379-392.	1.1	80
44	The distribution and stereochemistry of amino acids in rocks and sediments from harsh terrestrial environments: analogues for future studies of ancient extraterrestrial materials. , 2010, , .		0
45	Relationship between genome size and organismal complexity in the lineage leading from prokaryotes to mammals. Paleontological Journal, 2010, 44, 363-373.	0.2	26
46	Ancient Sulfur Cycling and Oxygenation of the Early Biosphere. Elements, 2010, 6, 93-99.	0.5	92
47	Habitability: from stars to cells. Astronomy and Astrophysics Review, 2010, 18, 383-416.	9.1	23
48	Timing of morphological and ecological innovations in the cyanobacteria – a key to understanding the rise in atmospheric oxygen. Geobiology, 2010, 8, 1-23.	1.1	228
49	Analysis of hopanes and steranes in single oilâ€bearing fluid inclusions using timeâ€ofâ€flight secondary ion mass spectrometry (ToFâ€SIMS). Geobiology, 2010, 8, 37-44.	1.1	37
50	CHOLESTEROL AS AN EVOLUTIONARY RESPONSE TO LIVING WITH OXYGEN. Evolution; International Journal of Organic Evolution, 2010, 64, no-no.	1.1	47
51	Organic-walled microfossils in 3.2-billion-year-old shallow-marine siliciclastic deposits. Nature, 2010, 463, 934-938.	13.7	274
52	Large colonial organisms with coordinated growth in oxygenated environments 2.1 Gyr ago. Nature, 2010, 466, 100-104.	13.7	235
53	Ancient acritarchs. Nature, 2010, 463, 885-886.	13.7	40
54	Cosmic jet engines. Nature, 2010, 463, 886-887.	13.7	1
55	Pervasive oxygenation along late Archaean ocean margins. Nature Geoscience, 2010, 3, 647-652.	5.4	233
56	Early life: nature, distribution and evolution. , 2011, , 391-413.		22
57	Early eukaryotes in Precambrian oceans. , 2011, , 414-449.		33

#	Article	IF	Citations
58	Rewiring and regulation of cross-compartmentalized metabolism in protists. Philosophical Transactions of the Royal Society B: Biological Sciences, 2010, 365, 831-845.	1.8	46
59	Redox Cycling in Iron Uptake, Efflux, and Trafficking. Journal of Biological Chemistry, 2010, 285, 26729-26735.	1.6	103
60	Eukaryote-Dominated Biofilms and Their Significance in Acidic Environments. Geomicrobiology Journal, 2010, 27, 534-558.	1.0	34
61	Diversity in the Archean Biosphere: New Insights from NanoSIMS. Astrobiology, 2010, 10, 413-424.	1.5	58
62	Stromatolites in the â^1⁄43400 Ma Strelley Pool Formation, Western Australia: Examining Biogenicity from the Macro- to the Nano-Scale. Astrobiology, 2010, 10, 381-395.	1.5	79
63	Anomalous negative excursion of carbon isotope in organic carbon after the last Paleoproterozoic glaciation in North America. Geochemistry, Geophysics, Geosystems, 2010, 11, .	1.0	7
64	Deep phylogeny, ancestral groups and the four ages of life. Philosophical Transactions of the Royal Society B: Biological Sciences, 2010, 365, 111-132.	1.8	117
65	Grain-scale iron isotopic distribution of pyrite from Precambrian shallow marine carbonate revealed by a femtosecond laser ablation multicollector ICP-MS technique: Possible proxy for the redox state of ancient seawater. Geochimica Et Cosmochimica Acta, 2010, 74, 2760-2778.	1.6	59
66	Iron isotopes constrain biogeochemical redox cycling of iron and manganese in a Palaeoproterozoic stratified basin. Earth and Planetary Science Letters, 2010, 298, 125-134.	1.8	71
67	Hopanoid enrichment in a detergent resistant membrane fraction of Crocosphaera watsonii: Implications for bacterial lipid raft formation. Organic Geochemistry, 2010, 41, 853-856.	0.9	25
68	Biogenic sedimentation factors of mineralization in the Neoproterozoic strata of the Baikal–Patom region. Russian Geology and Geophysics, 2010, 51, 572-586.	0.3	33
69	Neurotoxic cyanobacterial toxins. Toxicon, 2010, 56, 813-828.	0.8	203
70	Phylogeny of Cyanobacteria: An Overview. Progress in Botany Fortschritte Der Botanik, 2010, , 209-224.	0.1	9
71	The Vent and Seep Biota. Topics in Geobiology, 2010, , .	0.6	38
72	The unique mechanistic transformations involved in the biosynthesis of modular natural products from marine cyanobacteria. Natural Product Reports, 2010, 27, 1048.	5.2	103
73	History of biological metal utilization inferred through phylogenomic analysis of protein structures. Proceedings of the National Academy of Sciences of the United States of America, 2010, 107, 10567-10572.	3.3	264
74	Microaerobic steroid biosynthesis and the molecular fossil record of Archean life. Proceedings of the National Academy of Sciences of the United States of America, 2011, 108, 13409-13414.	3.3	86
75	A Universal Molecular Clock of Protein Folds and Its Power in Tracing the Early History of Aerobic Metabolism and Planet Oxygenation. Molecular Biology and Evolution, 2011, 28, 567-582.	3.5	127

#	Article	IF	CITATIONS
76	Using Time-of-Flight Secondary Ion Mass Spectrometry to Study Biomarkers. Annual Review of Earth and Planetary Sciences, 2011, 39, 125-156.	4.6	45
77	Engineered cyanobacteria: Teaching an old bug new tricks. Bioengineered Bugs, 2011, 2, 136-149.	2.0	92
78	Alanine. , 2011, , 24-25.		0
79	Arginine. , 2011, , 85-85.		1
82	Quantifying the Evolution of Early Life. Topics in Geobiology, 2011, , .	0.6	2
83	Early Precambrian Eukaryotes. Encyclopedia of Earth Sciences Series, 2011, , 341-342.	0.1	0
84	Elemental and Isotopic Analysis by NanoSIMS: Insights for the Study of Stromatolites and Early Life on Earth. Cellular Origin and Life in Extreme Habitats, 2011, , 463-493.	0.3	6
85	Bioenergetic Processes of Cyanobacteria. , 2011, , .		13
86	Millimeter-scale concentration gradients of hydrocarbons in Archean shales: Live-oil escape or fingerprint of contamination?. Geochimica Et Cosmochimica Acta, 2011, 75, 3196-3213.	1.6	101
87	Quantification of atmospheric oxygen levels during the Paleoproterozoic using paleosol compositions and iron oxidation kinetics. Geochimica Et Cosmochimica Acta, 2011, 75, 3982-4004.	1.6	45
88	Implications of in situ calcification for photosynthesis in a ~3.3Ga-old microbial biofilm from the Barberton greenstone belt, South Africa. Earth and Planetary Science Letters, 2011, 310, 468-479.	1.8	75
89	Pre-biotic organic synthesis: laboratory simulation experiments and their significance for the origin of life in the solar system. , 2011, , .		3
90	Neoarchean paleoweathering of tonalite and metabasalt: Implications for reconstructions of 2.69Ga early terrestrial ecosystems and paleoatmospheric chemistry. Precambrian Research, 2011, 189, 1-17.	1.2	121
91	Porphyra: a marine crop shaped by stress. Trends in Plant Science, 2011, 16, 29-37.	4.3	324
92	Impacts of extreme air temperatures on cyanobacteria in five deep peri-Alpine lakes. Journal of Limnology, 2011, 70, 186.	0.3	32
93	Chemical Evidence for the Dawn of Life on Earth. Australian Journal of Chemistry, 2011, 64, 16.	0.5	1
94	Underestimated biodiversity as a major explanation for the perceived rich secondary metabolite capacity of the cyanobacterial genus <i>Lyngbya</i> . Environmental Microbiology, 2011, 13, 1601-1610.	1.8	70
95	Insights into chemotaxonomic composition and carbon cycling of phototrophic communities in an artesian sulfurâ€rich spring (Zodletone, Oklahoma, USA), a possible analog for ancient microbial mat systems. Geobiology, 2011, 9, 166-179.	1.1	33

		CITATION REPORT	
#	Article	IF	Citations
96	Rapid evolutionary innovation during an Archaean genetic expansion. Nature, 2011, 469, 93-96	. 13.7	344
97	Multiple sulfur isotopes and the evolution of Earth's surface sulfur cycle. Earth-Science Reviews, 2011, 106, 161-183.	4.0	291
98	Algal chemodiversity and bioactivity: Sources of natural variability and implications for commerce application. Biotechnology Advances, 2011, 29, 483-501.	ial 6.0	463
99	Sea change for the rise of oxygen. Nature, 2011, 478, 194-195.	13.7	12
100	Morphological, biochemical and molecular characterization of Anabaena, Aphanizomenon and N strains (Cyanobacteria, Nostocales) isolated from Portuguese freshwater habitats. Hydrobiologi 2011, 663, 187-203.	lostoc a, 1.0	34
101	The paleobiological record of photosynthesis. Photosynthesis Research, 2011, 107, 87-101.	1.6	89
102	The evolutionary consequences of oxygenic photosynthesis: a body size perspective. Photosynt Research, 2011, 107, 37-57.	hesis 1.6	107
103	Geological constraints on the origin of oxygenic photosynthesis. Photosynthesis Research, 201 11-36.	1, 107, 1.6	200
104	A late origin of the extant eukaryotic diversity: divergence time estimates using rare genomic ch Biology Direct, 2011, 6, 26.	langes. 1.9	63
105	The origin of multicellularity in cyanobacteria. BMC Evolutionary Biology, 2011, 11, 45.	3.2	237
106	Evolutionary inheritance of elemental stoichiometry in phytoplankton. Proceedings of the Royal Society B: Biological Sciences, 2011, 278, 526-534.	1.2	118
107	An rpoB signature sequence provides unique resolution for the molecular typing of cyanobacter International Journal of Systematic and Evolutionary Microbiology, 2011, 61, 170-183.	ia. 0.8	21
108	Estimating the timing of early eukaryotic diversification with multigene molecular clocks. Proceedings of the National Academy of Sciences of the United States of America, 2011, 108, 1	3624-13629. ^{3.3}	747
109	Protracted oxygenation of the Proterozoic biosphere. International Geology Review, 2011, 53, 1424-1442.	1.1	58
111	Cyanobacteria: Habitats and Species. Ecological Studies, 2011, , 11-21.	0.4	15
112	Late Archean euxinic conditions before the rise of atmospheric oxygen. Geology, 2011, 39, 119	-122. 2.0	87
114	The AbrB2 Autorepressor, Expressed from an Atypical Promoter, Represses the Hydrogenase Op Regulate Hydrogen Production in Synechocystis Strain PCC6803. Journal of Bacteriology, 2012 5423-5433.	eron To , 194, 1.0	45
115	Pattern formation in stromatolites: insights from mathematical modelling. Journal of the Royal Society Interface, 2012, 9, 1051-1062.	1.5	13

#	Article	IF	CITATIONS
116	Oxidative Shielding or Oxidative Stress?. Journal of Pharmacology and Experimental Therapeutics, 2012, 342, 608-618.	1.3	121
117	Oxygen-Dependent Morphogenesis of Modern Clumped Photosynthetic Mats and Implications for the Archean Stromatolite Record. Geosciences (Switzerland), 2012, 2, 235-259.	1.0	36
118	Methanotrophy in a <scp>P</scp> aleoproterozoic oil field ecosystem, <scp>Z</scp> aonega <scp>F</scp> ormation, <scp>K</scp> arelia, <scp>R</scp> ussia. Geobiology, 2012, 10, 467-478.	1.1	35
119	Mobile hydrocarbon microspheres from >2â€billionâ€yearâ€old carbonâ€bearing seams in the South African deep subsurface. Geobiology, 2012, 10, 496-505.	1.1	5
120	Silica Biomorphs: Complex Biomimetic Hybrid Materials from "Sand and Chalkâ€: European Journal of Inorganic Chemistry, 2012, 2012, 5123-5144.	1.0	78
121	Biomarkers of black shales formed by microbial mats, Late Mesoproterozoic (1.1Ga) Taoudeni Basin, Mauritania. Precambrian Research, 2012, 196-197, 113-127.	1.2	113
122	The Relevance of Anoxic and Agglutinated Benthic Foraminifera to the Possible Archean Evolution of Eukaryotes. Cellular Origin and Life in Extreme Habitats, 2012, , 615-630.	0.3	1
123	Evidence for free oxygen in the Neoarchean ocean based on coupled iron–molybdenum isotope fractionation. Geochimica Et Cosmochimica Acta, 2012, 86, 118-137.	1.6	135
124	The Evolution of the Sedimentary Sulfur Cycle. Developments in Sedimentology, 2012, 65, 685-766.	0.5	6
125	Fossil Bacteria. Developments in Sedimentology, 2012, 65, 633-683.	0.5	1
126	Origin, Evolution and Division of Plastids. Advances in Photosynthesis and Respiration, 2012, , 35-61.	1.0	5
127	Picosecond Kinetics of Light Harvesting and Photoprotective Quenching in Wild-Type and Mutant Phycobilisomes Isolated from the Cyanobacterium Synechocystis PCC 6803. Biophysical Journal, 2012, 102, 1692-1700.	0.2	87
128	Morphological and chemical evidence of stromatolitic deposits in the 2.75Ga CarajÃis banded iron formation, Brazil. Earth and Planetary Science Letters, 2012, 355-356, 60-72.	1.8	6
129	Taphonomy of very ancient microfossils from the â^¼3400Ma Strelley Pool Formation and â^¼1900Ma Gunflint Formation: New insights using a focused ion beam. Precambrian Research, 2012, 220-221, 234-250.	1.2	91
134	The Anoxic Framvaren Fjord as a Model System to Study Protistan Diversity and Evolution. Cellular Origin and Life in Extreme Habitats, 2012, , 421-448.	0.3	1
136	Origins of the L-amino acid excess in carbonaceous meteorites. Proceedings of SPIE, 2012, , .	0.8	0
137	Multimodal Action and Selective Toxicity of Zerovalent Iron Nanoparticles against Cyanobacteria. Environmental Science & Technology, 2012, 46, 2316-2323.	4.6	118

ARTICLE IF CITATIONS Evolution of a Habitable Planet., 2012, , 115-131. 139 2 141 The Fossil Record of Cyanobacteria., 2012, , 15-36. 38 Biochemistry and Evolution of Anaerobic Energy Metabolism in Eukaryotes. Microbiology and 142 2.9 656 Molecular Biology Reviews, 2012, 76, 444-495. Evolution of Precambrian life in the Brazilian geological record. International Journal of 143 0.9 Astrobiology, 2012, 11, 309-323. Algal evolution in relation to atmospheric CO ₂ : carboxylases, carbon-concentrating 144 mechanisms and carbon oxidation cycles. Philosophical Transactions of the Royal Society B: 231 1.8 Biological Sciences, 2012, 367, 493-507. Processes on the Young Earth and the Habitats of Early Life. Annual Review of Earth and Planetary Sciences, 2012, 40, 521-549. 4.6 188 The Extended Light-Harvesting Complex (LHC) Protein Superfamily: Classification and Evolutionary 146 1.0 24 Dynamics. Advances in Photosynthesis and Respiration, 2012, , 265-284. The Rise of Oxygen and Complex Life. Journal of Eukaryotic Microbiology, 2012, 59, 111-113. 0.8 148 What genomes have to say about the evolution of the Earth. Gondwana Research, 2012, 21, 483-494. 3.0 18 The Neoproterozoic oxygenation event: Environmental perturbations and biogeochemical cycling. Earth-Science Reviews, 2012, 110, 26-57. Early life on land and the first terrestrial ecosystems. Ecological Processes, 2013, 2, . 150 77 1.6 A review of current knowledge on toxic benthic freshwater cyanobacteria – Ecology, toxin 5.3 328 production and risk management. Water Research, 2013, 47, 5464-5479. Carbon Mineral Evolution. Reviews in Mineralogy and Geochemistry, 2013, 75, 79-107. 152 2.2 39 Origin and early evolution of photosynthetic eukaryotes in freshwater environments: reinterpreting proterozoic paleobiology and biogeochemical processes in light of trait evolution. Journal of Phycology, 2013, 49, 1040-1055. 154 1.0 The nature and origin of nucleusâ€like intracellular inclusions in <scp>P</scp>aleoproterozoic 155 1.1 76 eukaryote microfossils. Geobiology, 2013, 11, 499-510. Gene similarity networks provide tools for understanding eukaryote origins and evolution. Proceedings of the National Academy of Sciences of the United States of America, 2013, 110, E1594-603. 59 Manganese-oxidizing photosynthesis before the rise of cyanobacteria. Proceedings of the National 157 3.3189 Academy of Sciences of the United States of America, 2013, 110, 11238-11243. Quantifying the areal extent and dissolved oxygen concentrations of Archean oxygen oases. Chemical 1.4 Geology, 2013, 362, 35-43.

#	Article	IF	CITATIONS
159	7.8 Traces of Life. Frontiers in Earth Sciences, 2013, , 1297-1405.	0.1	0
160	An archaeal origin of eukaryotes supports only two primary domains of life. Nature, 2013, 504, 231-236.	13.7	456
161	The rise of oxygen and the hydrogen hourglass. Chemical Geology, 2013, 362, 26-34.	1.4	50
162	7.4 An Apparent Oxidation of the Upper Mantle versus Regional Deep Oxidation of Terrestrial Surfaces in the Fennoscandian Shield. Frontiers in Earth Sciences, 2013, , 1151-1167.	0.1	0
163	An anoxic, Fe(II)-rich, U-poor ocean 3.46 billion years ago. Geochimica Et Cosmochimica Acta, 2013, 120, 65-79.	1.6	76
164	A common partitioning strategy for photosynthetic products in evolutionarily distinct phytoplankton species. New Phytologist, 2013, 198, 1030-1038.	3.5	81
165	Evolution of multicellularity coincided with increased diversification of cyanobacteria and the Great Oxidation Event. Proceedings of the National Academy of Sciences of the United States of America, 2013, 110, 1791-1796.	3.3	273
166	Microbial cytochromes P450: biodiversity and biotechnology. Where do cytochromes P450 come from, what do they do and what can they do for us?. Philosophical Transactions of the Royal Society B: Biological Sciences, 2013, 368, 20120476.	1.8	180
167	Analysis of single oil-bearing fluid inclusions in mid-Proterozoic sandstones (Roper Group, Australia). Geochimica Et Cosmochimica Acta, 2013, 122, 448-463.	1.6	29
168	The palaeobiology and geochemistry of Precambrian hydrocarbon source rocks. Marine and Petroleum Geology, 2013, 40, 1-47.	1.5	113
169	Micro-ablation, a new technique to remove drilling fluids and other contaminants from fragmented and fissile rock material. Organic Geochemistry, 2013, 61, 57-65.	0.9	40
170	Characterisation of Antarctic cyanobacteria and comparison with New Zealand strains. Hydrobiologia, 2013, 711, 139-154.	1.0	21
171	Reading the Archive of Earthâ \in Ms Oxygenation. Frontiers in Earth Sciences, 2013, , .	0.1	28
172	Unifying concepts in anaerobic respiration: Insights from dissimilatory sulfur metabolism. Biochimica Et Biophysica Acta - Bioenergetics, 2013, 1827, 145-160.	0.5	182
173	<scp>N</scp> ano <scp>SIMS</scp> : Technical Aspects and Applications in Cosmochemistry and Biological Geochemistry. Geostandards and Geoanalytical Research, 2013, 37, 111-154.	1.7	216
174	High phosphate availability as a possible cause for massive cyanobacterial production of oxygen in the Paleoproterozoic atmosphere. Earth and Planetary Science Letters, 2013, 362, 225-236.	1.8	50
175	Bacteriohopanepolyols in a stratified cyanobacterial mat from Kiritimati (Christmas Island, Kiribati). Organic Geochemistry, 2013, 55, 55-62.	0.9	14
176	7.6 Enhanced Accumulation of Organic Matter: The Shunga Event. Frontiers in Earth Sciences, 2013, , 1195-1273.	0.1	13

		CITATION REPO	RT	
#	Article	IF	-	Citations
177	8.1 The Great Oxidation Event. Frontiers in Earth Sciences, 2013, , 1517-1533.	0	0.1	7
178	Impact of prebiotic synthesis and diagenesis on the distribution, stereochemistry, and stable composition of amino acids in carbonaceous meteorites. Proceedings of SPIE, 2013, , .	e isotope o	0.8	0
179	Smaller, better, more: Five decades of advances in geochemistry. , 2013, , .			5
180	Metabolic Engineering of Hydrocarbon Biosynthesis for Biofuel Production. , 0, , .			3
181	Microbiological processes in banded iron formation deposition. Sedimentology, 2013, 60, 1	733-1754. 1.	.6	73
183	The Nonlinear Effects of Evolutionary Innovation Biospheric Feedbacks on Qualitative Enviro Change: From the Microbial to Metazoan World. American Naturalist, 2013, 181, S100-S11	nmental 1.	.0	9
184	Molecular fossils probe life's origins. EMBO Reports, 2013, 14, 964-967.	2	.0	5
185	Exceptional preservation of microbial lipids in Paleozoic to Mesoproterozoic sediments. Geo 2013, 41, 287-288.	logy, 2	.0	7
186	Historical Review and Current Perspective of Stromatolite Studies. Journal of Geography (Ch	igaku) Tj ETQq0 0 0 rgB	T /Overlo	ock 10 Tf 50
187	4. Carbon Mineral Evolution. , 2013, , 79-108.			5
188	The oxygen revolution. , 0, , 203-214.			0
189	RNA-Seq Analysis Provides Insights for Understanding Photoautotrophic Polyhydroxyalkano Production in Recombinant Synechocystis Sp PLoS ONE, 2014, 9, e86368.	ate 1.	.1	32
190	Spectral Radiation Dependent Photoprotective Mechanism in the Diatom Pseudo-nitzschia ı PLoS ONE, 2014, 9, e87015.	nultistriata. 1.	.1	57
192	Nanoscale Secondary Ion Mass Spectrometry (NanoSIMS) as an Analytical Tool in the Geosc Detection Science, 2014, , 1-34.	iences. RSC o	0.0	14
194	Oxygen and Early Animal Evolution. , 2014, , 231-250.			20
195	Organic Geochemical Signatures of Early Life on Earth. , 2014, , 33-46.			10
196	Paleobiological Clues to Early Atmospheric Evolution. , 2014, , 139-155.			2
197	Diverse capacity for 2-methylhopanoid production correlates with a specific ecological niche Journal, 2014, 8, 675-684.	. ISME 4	.4	85

# 198	ARTICLE Assessing Possibilities and Limitations for Biomarker Analyses on Outcrop Samples: A Case Study on Carbonates of the Shibantan Member (Ediacaran Period, Dengying Formation, South China). Acta Geologica Sinica, 2014, 88, 1696-1704.	IF 0.8	Citations
199	Flower-like apatite recording microbial processes through deep geological time and its implication to the search for mineral records of life on Mars. American Mineralogist, 2014, 99, 2116-2125.	0.9	18
200	The <i>ca</i> 2.74 Ga Mopoke Member, Kylena Formation: a marine incursion into the northern Fortescue Group?. Australian Journal of Earth Sciences, 2014, 61, 1095-1108.	0.4	7
201	Lipidomics for Geochemistry. , 2014, , 291-336.		27
202	The Geologic History of Seawater. , 2014, , 569-622.		40
203	Cyanobacteria at work. Nature Geoscience, 2014, 7, 253-254.	5.4	21
204	Photosynthesis in Early Land Plants: Adapting to the Terrestrial Environment. Advances in Photosynthesis and Respiration, 2014, , 29-58.	1.0	18
205	Biogenicity and Syngeneity of Organic Matter in Ancient Sedimentary Rocks: Recent Advances in the Search for Evidence of Past Life. Challenges, 2014, 5, 260-283.	0.9	22
206	Formation of single domain magnetite by green rust oxidation promoted by microbial anaerobic nitrate-dependent iron oxidation. Geochimica Et Cosmochimica Acta, 2014, 139, 327-343.	1.6	55
207	Evidence for ancient halophiles? Testing biomarker syngeneity of evaporites from Neoproterozoic and Cambrian strata. Organic Geochemistry, 2014, 72, 46-58.	0.9	26
208	Paleobiological Perspectives on Early Eukaryotic Evolution. Cold Spring Harbor Perspectives in Biology, 2014, 6, a016121-a016121.	2.3	298
209	The rise of oxygen in Earth's early ocean and atmosphere. Nature, 2014, 506, 307-315.	13.7	1,966
210	Progress and perspective on frontiers of geobiology. Science China Earth Sciences, 2014, 57, 855-868.	2.3	16
211	A Neoproterozoic Transition in the Marine Nitrogen Cycle. Current Biology, 2014, 24, 652-657.	1.8	113
212	Origin and Evolution of Plastids and Photosynthesis in Eukaryotes. Cold Spring Harbor Perspectives in Biology, 2014, 6, a016105-a016105.	2.3	75
213	The Architecture of Cyanobacteria, Archetypes of Microbial Innovation. Advances in Photosynthesis and Respiration, 2014, , 249-275.	1.0	0
214	Evidence for oxygenic photosynthesis half a billion years before the Great Oxidation Event. Nature Geoscience, 2014, 7, 283-286.	5.4	444
215	The Structural Basis of Biological Energy Generation. Advances in Photosynthesis and Respiration, 2014, , .	1.0	4

#	Article	IF	CITATIONS
216	The hybrid nature of the Eukaryota and a consilient view of life on Earth. Nature Reviews Microbiology, 2014, 12, 449-455.	13.6	124
217	Assessing the syngeneity and indigeneity of hydrocarbons in the â^1⁄41.4Ga Velkerri Formation, McArthur Basin, using slice experiments. Organic Geochemistry, 2014, 77, 115-125.	0.9	46
218	The fitness of the environments of air and water for photosynthesis, growth, reproduction and dispersal of photoautotrophs: An evolutionary and biogeochemical perspective. Aquatic Botany, 2014, 118, 4-13.	0.8	47
220	The Early History of Life. , 2014, , 1-42.		15
221	Role of Rhizobium, a plant growth promoting bacterium, in enhancing algal biomass through mutualistic interaction. Biomass and Bioenergy, 2014, 69, 95-105.	2.9	231
222	Airborne hydrocarbon contamination from laboratory atmospheres. Organic Geochemistry, 2014, 76, 26-38.	0.9	33
223	On the Age of Eukaryotes: Evaluating Evidence from Fossils and Molecular Clocks. Cold Spring Harbor Perspectives in Biology, 2014, 6, a016139-a016139.	2.3	203
224	Geochemistry of Fine-Grained, Organic Carbon-Rich Facies. , 2014, , 141-179.		10
225	Redox heterogeneity of subsurface waters in the <scp>M</scp> esoproterozoic ocean. Geobiology, 2014, 12, 373-386.	1.1	115
226	Study on Variation of Lipids during Different Growth Phases of Living Cyanobacteria Using Easy Ambient Sonic-Spray Ionization Mass Spectrometry. Analytical Chemistry, 2014, 86, 7096-7102.	3.2	24
227	Investigating Microbe-Mineral Interactions: Recent Advances in X-Ray and Electron Microscopy and Redox-Sensitive Methods. Annual Review of Earth and Planetary Sciences, 2014, 42, 271-289.	4.6	46
229	Quantitative hopanoid analysis enables robust pattern detection and comparison between laboratories. Geobiology, 2015, 13, 391-407.	1.1	22
230	Cyanobacteria and the Great Oxidation Event: evidence from genes and fossils. Palaeontology, 2015, 58, 769-785.	1.0	207
231	Origin of marine planktonic cyanobacteria. Scientific Reports, 2015, 5, 17418.	1.6	143
232	The terrestrial biota prior to the origin of land plants (embryophytes): a review of the evidence. Palaeontology, 2015, 58, 601-627.	1.0	117
233	Potential effects of UV radiation on photosynthetic structures of the bloom-forming cyanobacterium Cylindrospermopsis raciborskii CYRF-01. Frontiers in Microbiology, 2015, 6, 1202.	1.5	25
234	The ancient roots of calcium signalling evolutionary tree. Cell Calcium, 2015, 57, 123-132.	1.1	74
235	Arsenic Demethylation by a C·As Lyase in Cyanobacterium <i><i>Nostoc</i></i> sp. PCC 7120. Environmental Science & Technology, 2015, 49, 14350-14358.	4.6	55

#	Article	IF	CITATIONS
236	Heterogeneous redox conditions and a shallow chemocline in the Mesoproterozoic ocean: Evidence from carbon–sulfur–iron relationships. Precambrian Research, 2015, 257, 94-108.	1.2	68
237	Comparative microbial diversity and redox environments of black shale and stromatolite facies in the Mesoproterozoic Xiamaling Formation. Geochimica Et Cosmochimica Acta, 2015, 151, 150-167.	1.6	89
238	On the evolution of bacterial multicellularity. Current Opinion in Microbiology, 2015, 24, 21-28.	2.3	157
239	Early evolution of the Eukaryota. Palaeontology, 2015, 58, 5-17.	1.0	161
240	Photoheterotrophic Fluxome in Synechocystis sp. Strain PCC 6803 and Its Implications for Cyanobacterial Bioenergetics. Journal of Bacteriology, 2015, 197, 943-950.	1.0	53
241	Benthic perspective on Earth's oldest evidence for oxygenic photosynthesis. Proceedings of the National Academy of Sciences of the United States of America, 2015, 112, 995-1000.	3.3	175
244	Origin and Evolution of Water Oxidation before the Last Common Ancestor of the Cyanobacteria. Molecular Biology and Evolution, 2015, 32, 1310-1328.	3.5	96
245	Phylogenetic analysis of HpnP reveals the origin of 2â€methylhopanoid production in Alphaproteobacteria. Geobiology, 2015, 13, 267-277.	1.1	40
246	The Evolution of Photosynthesis and Its Environmental Impact. , 2015, , 207-230.		10
247	Cyanobacteria: the bright and dark sides of a charming group. Biodiversity and Conservation, 2015, 24, 711-738.	1.2	47
248	A polyphasic approach leading to the revision of the genus Planktothrix (Cyanobacteria) and its type species, P. agardhii, and proposal for integrating the emended valid botanical taxa, as well as three new species, Planktothrix paucivesiculata sp. nov.ICNP, Planktothrix tepida sp. nov.ICNP, and Planktothrix serta sp. nov.ICNP, as genus and species names with nomenclatural standing under the	1.2	34
249	ICNP. Systematic and Applied Microbiology, 2015, 38, 141-158. Microbial Cytochromes P450. , 2015, , 261-407.		17
250	Lichenization: The Origins of a Fungal Life-Style. , 2015, , 1-10.		10
251	Reappraisal of hydrocarbon biomarkers in Archean rocks. Proceedings of the National Academy of Sciences of the United States of America, 2015, 112, 5915-5920.	3.3	230
252	Hydrocarbons preserved in a ~2.7ÂGa outcrop sample from the <scp>F</scp> ortescue <scp>G</scp> roup, <scp>P</scp> ilbara <scp>C</scp> raton, <scp>W</scp> estern <scp>A</scp> ustralia. Geobiology, 2015, 13, 99-111.	1.1	12
253	Oldest Fossil Records of Marine Protists and the Geologic History Toward the Establishment of the Modern-Type Marine Protist World. , 2015, , 359-394.		8
254	Cyanobacterial Inhabitation on Archean Rock Surfaces in the Pilbara Craton, Western Australia. Astrobiology, 2015, 15, 559-574.	1.5	16
255	Biosignatures on Mars: What, Where, and How? Implications for the Search for Martian Life. Astrobiology, 2015, 15, 998-1029.	1.5	209

#	Article	IF	CITATIONS
256	The biodiversity of carbon assimilation. Journal of Plant Physiology, 2015, 172, 76-81.	1.6	48
258	Revolutions in energy input and material cycling in Earth history and human history. Earth System Dynamics, 2016, 7, 353-370.	2.7	37
259	Evolution of Eukaryotes with Respect to Atmosphere Oxygen Appearance and Rise. , 2016, , 145-159.		0
260	An Evolutionary Framework for Understanding the Origin of Eukaryotes. Biology, 2016, 5, 18.	1.3	23
261	Early sponges and toxic protists: possible sources of cryostane, an age diagnostic biomarker antedating Sturtian Snowball Earth. Geobiology, 2016, 14, 129-149.	1.1	82
262	Complex patterns in fossilized stromatolites revealed by hyperspectral imaging (400–2496Ânm). Geobiology, 2016, 14, 419-439.	1.1	6
263	Cyanobacterial evolution during the Precambrian. International Journal of Astrobiology, 2016, 15, 187-204.	0.9	108
264	Rising levels of atmospheric oxygen and evolution of Nrf2. Scientific Reports, 2016, 6, 27740.	1.6	52
265	The Transcriptional Landscape of the Photosynthetic Model Cyanobacterium Synechocystis sp. PCC6803. Scientific Reports, 2016, 6, 22168.	1.6	47
266	Molecular preservation of 1.88 Ga Gunflint organic microfossils as a function of temperature and mineralogy. Nature Communications, 2016, 7, 11977.	5.8	71
267	Cellular and Molecular Biological Approaches to Interpreting Ancient Biomarkers. Annual Review of Earth and Planetary Sciences, 2016, 44, 493-522.	4.6	39
268	From hopanoids to cholesterol: Molecular clocks of pentameric ligand-gated ion channels. Progress in Lipid Research, 2016, 63, 1-13.	5.3	31
269	Their World: A Diversity of Microbial Environments. Advances in Environmental Microbiology, 2016, , .	0.1	10
270	Microbes and the Fossil Record: Selected Topics in Paleomicrobiology. Advances in Environmental Microbiology, 2016, , 69-169.	0.1	16
271	Evolution of Oxygenic Photosynthesis. Annual Review of Earth and Planetary Sciences, 2016, 44, 647-683.	4.6	334
272	The changing view of eukaryogenesis – fossils, cells, lineages and how they all come together. Journal of Cell Science, 2016, 129, 3695-3703.	1.2	77
273	Tubular microfossils from â^1⁄42.8 to 2.7Ga-old lacustrine deposits of South Africa: A sign for early origin of eukaryotes?. Precambrian Research, 2016, 286, 180-194.	1.2	15
274	Structural and functional dynamics of tyrosine amino acid in phycocyanin of hot-spring cyanobacteria: A possible pathway for internal energy transfer. Gene Reports, 2016, 5, 83-91.	0.4	13

ARTICLE IF CITATIONS # In search of early life: Carbonate veins in Archean metamorphic rocks as potential hosts of 276 1.8 9 biomarkers. Earth and Planetary Science Letters, 2016, 453, 44-55. Developing ecospheres on transiently habitable planets: the genesis project. Astrophysics and Space Science, 2016, 361, 1. Potential therapeutic targets and the role of technology in developing novel cannabinoid drugs from 278 2.5 15 cyanobacteria. Biomedicine and Pharmacotherapy, 2016, 83, 362-371. Cyanobacterial Biofuels: Strategies and Developments on Network and Modeling. Advances in 279 Biochemical Engineering/Biotechnology, 2016, 160, 75-102. Trace elements at the intersection of marine biological and geochemical evolution. Earth-Science 280 4.0 135 Reviews, 2016, 163, 323-348. How Embryogenesis Began in Evolution., 2016, , 1-74. Carbon and sulfur isotopic signatures of ancient life and environment at the microbial scale: 282 1.1 52 Neoarchean shales and carbonates. Geobiology, 2016, 14, 105-128. Carbonate rocks and related facies with vestiges of biomarkers: Clues to redox conditions in the 10 Mesoproterozoic ocean. Gondwana Research, 2016, 35, 411-424. Unique marine derived cyanobacterial biosynthetic genes for chemical diversity. Natural Product 284 5.2 56 Reports, 2016, 33, 348-364. Algae–bacteria interactions: Evolution, ecology and emerging applications. Biotechnology Advances, 6.0 2016, 34, 14-29. The role of biology in planetary evolution: cyanobacterial primary production in lowâ€oxygen 286 151 1.8 Proterozoic oceans. Environmental Microbiology, 2016, 18, 325-340. The Argyre Region as a Prime Target for<i>in situ</i>Astrobiological Exploration of Mars. 1.5 Astrobiology, 2016, 16, 143-158. Extremely low oxygen concentration in mid-Proterozoic shallow seawaters. Precambrian Research, 288 1.2 91 2016, 276, 145-157. Early Microbial Evolution: The Age of Anaerobes. Cold Spring Harbor Perspectives in Biology, 2016, 8, 2.3 a018127. Sufficient oxygen for animal respiration 1,400 million years ago. Proceedings of the National Academy 290 3.3 259 of Sciences of the United States of America, 2016, 113, 1731-1736. A novel periplasmic protein (Slr0280) tunes photomixotrophic growth of the cyanobacterium, Synechocystis sp. PCC 6803. Gene, 2016, 575, 313-320. Cambrian trilobites as archives for Anthropocene biomarkers and other chemical compounds. 292 1.6 2 Anthropocene, 2017, 17, 99-106. Natural Product Molecular Fossils. Progress in the Chemistry of Organic Natural Products, 2017, 104, 1-126.

		CITATION R	EPORT	
#	Article		IF	CITATIONS
295	A theory of atmospheric oxygen. Geobiology, 2017, 15, 366-384.		1.1	73
296	Prevention of Cyanobacterial Blooms Using Nanosilica: A Biomineralization-Inspired Str Environmental Science & Technology, 2017, 51, 12717-12726.	ategy.	4.6	28
297	Evolution of nitrogen-fixing symbioses on the basis of bacterial migration from mycorrl and soil into plant tissues. Biology Bulletin Reviews, 2017, 7, 355-368.	nizal fungi	0.3	4
298	The origin and evolution of cyanobacteria. Biology Bulletin Reviews, 2017, 7, 259-272.		0.3	20
299	Witnessing Genome Evolution: Experimental Reconstruction of Endosymbiotic and Ho Transfer. Annual Review of Genetics, 2017, 51, 1-22.	rizontal Gene	3.2	69
300	Searching for Life on Mars Before It Is Too Late. Astrobiology, 2017, 17, 962-970.		1.5	61
301	Eukaryotic origins and the Proterozoic Earth system: A link between global scale glacia eukaryogenesis?. Earth-Science Reviews, 2017, 174, 22-38.	tions and	4.0	5
302	The Shape of Life: Morphological Signatures of Ancient Microbial Life in Rocks. , 0, , 57	-74.		0
303	Early photosynthetic eukaryotes inhabited low-salinity habitats. Proceedings of the Nator of Sciences of the United States of America, 2017, 114, E7737-E7745.	ional Academy	3.3	244
305	Chromium geochemistry of the ca. 1.85ÂGa Flin Flon paleosol. Geobiology, 2017, 15, 3	30-50.	1.1	40
306	From an environmental sample to a long-lasting culture: the steps to better isolate and cyanobacterial strains. Journal of Applied Phycology, 2017, 29, 309-321.	l preserve	1.5	11
307	Specific interaction of IM30/Vipp1 with cyanobacterial and chloroplast membranes res membrane remodeling and eventually in membrane fusion. Biochimica Et Biophysica A Biomembranes, 2017, 1859, 537-549.	ults in cta -	1.4	53
308	Hopanoids in Cyanobacteria Biomass and Related Samples. Studies in Natural Products 54, 87-107.	S Chemistry, 2017,	0.8	3
309	Inhabited or Uninhabited? Pitfalls in the Interpretation of Possible Chemical Signatures Extraterrestrial Life. Frontiers in Microbiology, 2017, 8, 1622.	of	1.5	16
310	Remarkable Preservation of Microfossils and Biofilms in Mesoproterozoic Silicified Bitu Concretions from Northern China. Geofluids, 2017, 2017, 1-12.	men	0.3	4
311	The Atmosphere. , 2017, , e1-e9.			0
313	Modern rather than Mesoarchaean oxidative weathering responsible for the heavy stat signatures of the 2.95†Ga old Ijzermijn iron formation (South Africa). Geochimica Et Acta, 2018, 228, 157-189.	le Cr isotopic Cosmochimica	1.6	78
314	Oxygenation of the Mesoproterozoic ocean and the evolution of complex eukaryotes. Geoscience, 2018, 11, 345-350.	Nature	5.4	124

#	Article	IF	CITATIONS
315	Microbial diversity and biomarker analysis of modern freshwater microbialites from Laguna Bacalar, Mexico. Geobiology, 2018, 16, 319-337.	1.1	13
316	Variations in the Properties of Extractable "Humic Matter―and Associated Kerogen in Sediments through Geologic Time: Their Significance for Precambrian Biological Evolution and Paleoecology. Geomicrobiology Journal, 2018, 35, 334-353.	1.0	1
317	Functional Overlap of <i>hetP</i> and <i>hetZ</i> in Regulation of Heterocyst Differentiation in Anabaena sp. Strain PCC 7120. Journal of Bacteriology, 2018, 200, .	1.0	16
318	Cyanotoxins as the "common suspects―for the Dalmatian pelican (Pelecanus crispus) deaths in a Mediterranean reconstructed reservoir. Environmental Pollution, 2018, 234, 779-787.	3.7	32
319	Horizontal gene transfer constrains the timing of methanogen evolution. Nature Ecology and Evolution, 2018, 2, 897-903.	3.4	109
320	Energy Conversion in Natural and Artificial Photosynthesis. Springer Series in Chemical Physics, 2018,	0.2	11
321	Still challenging: the ecological function of the cyanobacterial toxin microcystin – What we know so far. Toxin Reviews, 2018, 37, 87-105.	1.5	87
322	The Paleoproterozoic fossil record: Implications for the evolution of the biosphere during Earth's middle-age. Earth-Science Reviews, 2018, 176, 68-86.	4.0	109
323	Fe isotopes of a 2.4†Ga hematite-rich IF constrain marine redox conditions around the GOE. Precambrian Research, 2018, 305, 218-235.	1.2	19
324	FTIR microspectroscopy of carbonaceous matter in ~ 3.5 Ga seafloor hydrothermal deposits in the North Pole area, Western Australia. Progress in Earth and Planetary Science, 2018, 5, .	1.1	10
325	Molecular fossils from phytoplankton reveal secular <i>P</i> <scp>co</scp> ₂ trend over the Phanerozoic. Science Advances, 2018, 4, eaat4556.	4.7	85
326	Importance of Prokaryotes in the Functioning and Evolution of the Present and Past Geosphere and Biosphere. , 2018, , 57-129.		4
327	Manipulation of Pattern of Cell Differentiation in a hetR Mutant of Anabaena sp. PCC 7120 by Overexpressing hetZ Alone or with hetP. Life, 2018, 8, 60.	1.1	8
328	Geochemistry and the Origin of Life: From Extraterrestrial Processes, Chemical Evolution on Earth, Fossilized Life's Records, to Natures of the Extant Life. Life, 2018, 8, 39.	1.1	17
329	What is the meaning of hydrogen-to-carbon ratio determined in Archean organic matter?. Organic Geochemistry, 2018, 122, 140-146.	0.9	12
330	Bacterial diversification through geological time. Nature Ecology and Evolution, 2018, 2, 1458-1467.	3.4	81
331	cis-carotene biosynthesis, evolution and regulation in plants: The emergence of novel signaling metabolites. Archives of Biochemistry and Biophysics, 2018, 654, 172-184.	1.4	46
332	Paleoclimatology. Encyclopedia of Earth Sciences Series, 2018, , 1147-1160.	0.1	0

#	Article	IF	CITATIONS
333	History of Life from the Hydrocarbon Fossil Record. , 2018, , 1-35.		1
334	The slow rise of complex life as revealed through biomarker genetics. Emerging Topics in Life Sciences, 2018, 2, 191-199.	1.1	11
335	The transition from a cyanobacterial to algal world and the emergence of animals. Emerging Topics in Life Sciences, 2018, 2, 181-190.	1.1	50
336	Everything is not everywhere: a tale on the biogeography of cyanobacteria. Hydrobiologia, 2018, 820, 23-48.	1.0	39
337	The Ladder of Life Detection. Astrobiology, 2018, 18, 1375-1402.	1.5	162
338	Trace, Rare-Earth Elements and C, O Isotope Systematics of Carbonate Rocks of Proterozoic Bhima Group, Eastern Dharwar Craton, India: Implications for the Source of Dissolved Components, Redox Condition and Biogeochemical Cycling of Mesoproterozoic Ocean. Society of Earth Scientists Series, 2019. , 297-326.	0.2	7
339	Preparation of electrospun polycaprolactone nanofiber mats loaded with microalgal extracts. Engineering in Life Sciences, 2019, 19, 691-699.	2.0	5
340	Capsid Structure of a Freshwater Cyanophage Siphoviridae Mic1. Structure, 2019, 27, 1508-1516.e3.	1.6	21
341	Biodiversity and Global Change. , 2019, , 34-79.		4
342	Decimeter-scale mapping of carbonate-controlled trace element distribution in Neoarchean cuspate stromatolites. Geochimica Et Cosmochimica Acta, 2019, 261, 56-75.	1.6	5
343	Organo-mineral associations in chert of the 3.5 Ga Mount Ada Basalt raise questions about the origin of organic matter in Paleoarchean hydrothermally influenced sediments. Scientific Reports, 2019, 9, 16712.	1.6	13
344	Modern weathering in outcrop samples versus ancient paleoredox information in drill core samples from a Mesoarchaean marine oxygen oasis in Pongola Supergroup, South Africa. Geochimica Et Cosmochimica Acta, 2019, 265, 330-353.	1.6	28
345	Eukaryotes. , 2019, , 155-231.		0
346	Moving to the Light: The Evolution of Photosynthesis. , 2019, , 99-127.		0
347	Macroscopic and Microscopic Morphological Features of Stromatolites Related To Activity of Eukaryote-Dominated Biofilms in an Acid Mine Drainage Environment: Biosignatures and Understanding Preservation of Stromatolites as Trace Fossils. Geomicrobiology Journal, 2019, 36, 651-671.	1.0	3
348	Cyanobacteria evolution: Insight from the fossil record. Free Radical Biology and Medicine, 2019, 140, 206-223.	1.3	116
349	Role of stellar physics in regulating the critical steps for life. International Journal of Astrobiology, 2019, 18, 527-546.	0.9	16
350	How to resurrect ancestral proteins as proxies for ancient biogeochemistry. Free Radical Biology and Medicine, 2019, 140, 260-269.	1.3	45

#	Article	IF	CITATIONS
351	Middle–late Mesoproterozoic tectonic geography of the North Australia Craton: U–Pb and Hf isotopes of detrital zircon grains in the Beetaloo Sub-basin, Northern Territory, Australia. Journal of the Geological Society, 2019, 176, 771-784.	0.9	23
352	Metabolite profiles reveal interspecific variation in operation of the Calvin–Benson cycle in both C4 and C3 plants. Journal of Experimental Botany, 2019, 70, 1843-1858.	2.4	47
353	Conflict and complementarity of paleontological and molecular chronologies?. Paleobiology, 2019, 45, 7-20.	1.3	10
354	Impact of drill core contamination on compound-specific carbon and hydrogen isotopic signatures. Organic Geochemistry, 2019, 128, 161-171.	0.9	6
355	Tissue cell differentiation and multicellular evolution via cytoskeletal stiffening in mechanically stressed microenvironments. Acta Mechanica Sinica/Lixue Xuebao, 2019, 35, 270-274.	1.5	18
356	Heterogeneity of free and occluded bitumen in a natural maturity sequence from Oligocene Lake Enspel. Geochimica Et Cosmochimica Acta, 2019, 245, 240-265.	1.6	9
357	Organic geochemical characteristics of highly mature Late Neoproterozoic black shales from South China: Reappraisal of syngeneity and indigeneity of hydrocarbon biomarkers. Precambrian Research, 2020, 336, 105508.	1.2	11
358	Archaeal Ribosomal Proteins Possess Nuclear Localization Signal-Type Motifs: Implications for the Origin of the Cell Nucleus. Molecular Biology and Evolution, 2020, 37, 124-133.	3.5	17
359	On the origin of oxygenic photosynthesis and Cyanobacteria. New Phytologist, 2020, 225, 1440-1446.	3.5	132
360	A single mutation converts Alr5027 from cyanobacteria Nostoc sp. PCC 7120 to a heme-binding protein with heme-degrading ability. Journal of Inorganic Biochemistry, 2020, 203, 110916.	1.5	0
362	How to survive winter?. , 2020, , 101-125.		1
363	Vertebrate viruses in polar ecosystems. , 2020, , 126-148.		0
365	Life in the extreme environments of our planet under pressure. , 2020, , 151-183.		0
366	Chemical ecology in the Southern Ocean. , 2020, , 251-278.		1
370	Physiological traits of the Greenland sharkSomniosus microcephalusobtained during the TUNU-Expeditions to Northeast Greenland. , 2020, , 11-41.		0
371	Metazoan adaptation to deep-sea hydrothermal vents. , 2020, , 42-67.		4
372	Extremophiles populating high-level natural radiation areas (HLNRAs) in Iran. , 2020, , 68-86.		1
374	Metazoan life in anoxic marine sediments. , 2020, , 89-100.		0

#	ARTICLE	IF	CITATIONS
375	The ecophysiology of responding to change in polar marine benthos. , 2020, , 184-217.		0
376	The Southern Ocean: an extreme environment or just home of unique ecosystems?. , 2020, , 218-233.		1
377	Metabolic and taxonomic diversity in antarctic subglacial environments. , 2020, , 279-296.		2
378	Analytical astrobiology: the search for life signatures and the remote detection of biomarkers through their Raman spectral interrogation. , 2020, , 301-318.		1
379	Adaptation/acclimatisation mechanisms of oxyphototrophic microorganisms and their relevance to astrobiology. , 2020, , 319-342.		0
380	Life at the extremes. , 2020, , 343-354.		О
381	Microorganisms in cryoturbated organic matter of Arctic permafrost soils. , 2020, , 234-250.		0
384	A possible environmental-friendly removal of Microcystis aeruginosa by using pyroligneous acid. Ecotoxicology and Environmental Safety, 2020, 205, 111159.	2.9	11
385	Study of the Effect of Lower Eukaryotes on Tacrolimus (FK-506) Biosynthesis by the Streptomyces tsukubensis Strain VKM Ac-2618D. Applied Biochemistry and Microbiology, 2020, 56, 847-853.	0.3	0
386	Expression from DIF1-motif promoters of hetR and patS is dependent on HetZ and modulated by PatU3 during heterocyst differentiation. PLoS ONE, 2020, 15, e0232383.	1.1	10
387	Signatures of early microbial life from the Archean (4 to 2.5ÂGa) eon. Earth-Science Reviews, 2020, 209, 103296.	4.0	71
388	History of Life from the Hydrocarbon Fossil Record. , 2020, , 409-443.		Ο
391	Sources of solutes and carbon cycling in perennially ice-covered Lake Untersee, Antarctica. Scientific Reports, 2020, 10, 12290.	1.6	12
392	Contrasting environmental preferences of photosynthetic and nonâ€photosynthetic soil cyanobacteria across the globe. Global Ecology and Biogeography, 2020, 29, 2025-2038.	2.7	24
393	Weathering, alteration and reconstructing Earth's oxygenation. Interface Focus, 2020, 10, 20190140.	1.5	25
394	Carbon sequestration in microalgae photobioreactors building integrated. , 2020, , 161-200.		1
395	Cyanobacterial peroxiredoxins and their role in cyanobacterial stress biology. , 2020, , 249-268.		1
396	Yeast engineered translucent cell wall to provide its endosymbiont cyanobacteria with light. Archives of Microbiology, 2020, 202, 1317-1325.	1.0	2

	Cı	tation Report	
#	Article	IF	CITATIONS
397	Cyanobacteria: Review of Current Potentials and Applications. Environments - MDPI, 2020, 7, 13.	1.5	86
398	Microfossils from the Paleoproterozoic Hutuo Group, Shanxi, North China: Early evidence for eukaryotic metabolism. Precambrian Research, 2020, 342, 105650.	1.2	7
399	An Alternative Approach for Assessing Biogenicity. Astrobiology, 2021, 21, 151-164.	1.5	18
400	Earth's First Redox Revolution. Annual Review of Earth and Planetary Sciences, 2021, 49, 337-366.	4.6	42
401	Changes in ATP Sulfurylase Activity in Response to Altered Cyanobacteria Growth Conditions. Microbes and Environments, 2021, 36, n/a.	0.7	2
402	Origins of eukaryotic excitability. Philosophical Transactions of the Royal Society B: Biological Sciences, 2021, 376, 20190758.	1.8	44
403	Molecular Fossils. , 2021, , 1-8.		0
404	Photosynthetic microalgae–based carbon sequestration and generation of biomass in biorefinery approach for renewable biofuels for a cleaner environment. Biomass Conversion and Biorefinery, 2023, 13, 7403-7421.	2.9	20
405	Targeted metabolite profiling as a top-down approach to uncover interspecies diversity and identify key conserved operational features in the Calvin–Benson cycle. Journal of Experimental Botany, 202 72, 5961-5986.	.1, 2.4	16
406	Ancient Oil as a Source of Carbonaceous Matter in 1.88-Billion-Year-Old Gunflint Stromatolites and Microfossils. Astrobiology, 2021, 21, 655-672.	1.5	13
407	Extended series of tricyclic terpanes in the Mesoproterozoic sediments. Organic Geochemistry, 2021, 156, 104245.	0.9	7
408	Cyanobacterial Harmful Algal Blooms in Aquatic Ecosystems: A Comprehensive Outlook on Current and Emerging Mitigation and Control Approaches. Microorganisms, 2021, 9, 1472.	1.6	72
409	Development of a N-Acetylneuraminic Acid-Based Sensing and Responding Switch for Orthogonal Ger Regulation in Cyanobacterial Synechococcus Strains. ACS Synthetic Biology, 2021, 10, 1920-1930.	ie 1.9	6
410	Proteogenomic Analysis Provides Novel Insight into Genome Annotation and Nitrogen Metabolism in <i>Nostoc</i> sp. PCC 7120. Microbiology Spectrum, 2021, 9, e0049021.	1.2	5
411	Shedding Light on Primary Donors in Photosynthetic Reaction Centers. Frontiers in Microbiology, 2021, 12, 735666.	1.5	19
412	Biosignatures in Rocks. Encyclopedia of Earth Sciences Series, 2011, , 189-201.	0.1	55
413	Written in Stone: The Fossil Record of Early Eukaryotes. Social and Ecological Interactions in the Galapagos Islands, 2013, , 107-124.	0.4	12
414	The Deep-Sea Chemoautotroph Microbial World as Experienced by the Mediterranean Metazoans Through Time. Lecture Notes in Earth Sciences, 2011, , 277-295.	0.5	17

#	Article	IF	CITATIONS
415	The Single Primary Endosymbiotic Event. , 2014, , 39-52.		12
416	Microbial Chemofossils in Specific Marine Hydrothermal and Methane Cold Seep Settings. Topics in Geobiology, 2010, , 73-106.	0.6	7
417	Reconstructing Deep-Time Biology with Molecular Fossils. Topics in Geobiology, 2011, , 355-401.	0.6	22
418	In situ Morphologic, Elemental and Isotopic Analysis of Archean Life. Modern Approaches in Solid Earth Sciences, 2014, , 351-365.	0.1	2
419	For Three Billion Years, Microorganisms Were the Only Inhabitants of the Earth. , 2015, , 75-106.		6
420	Current knowledge and recent advances in understanding metabolism of the model cyanobacterium <i>Synechocystis</i> sp. PCC 6803. Bioscience Reports, 2020, 40, .	1.1	55
422	Elements, biochemicals, and structures of microbes. , 2011, , 19-34.		1
423	Microbial primary production and phototrophy. , 2011, , 55-78.		2
424	Degradation of organic material. , 2011, , 79-98.		3
425	Microbial growth, biomass production, and controls. , 2011, , 99-116.		3
426	Ecology of viruses. , 2011, , 137-156.		1
430	Did natural reactors form as a consequence of the emergence of oxygenic photosynthesis during the Archean?. GSA Today, 2009, 19, 4-10.	1.1	15
431	Photosynthetic Apparatus in Cyanobacteria and Microalgae. Books in Soils, Plants, and the Environment, 2016, , 349-367.	0.1	1
432	Three-dimensional preservation of cellular and subcellular structures suggests 1.6 billion-year-old crown-group red algae. PLoS Biology, 2017, 15, e2000735.	2.6	192
433	Light-Dependent Electrogenic Activity of Cyanobacteria. PLoS ONE, 2010, 5, e10821.	1.1	215
434	Genome Erosion in a Nitrogen-Fixing Vertically Transmitted Endosymbiotic Multicellular Cyanobacterium. PLoS ONE, 2010, 5, e11486.	1.1	178
436	On the origin of molecular compositions in the Proterozoic extractable organic matter from the Jixian section, Northern China. Geochemical Journal, 2017, 51, 167-180.	0.5	4
437	Life on Earth Originated Where Later Microbial Oxygenic Photosynthesis Precipitated Banded Iron Formation, Suppressing Life Diversification for 1.4 Ga. International Journal of Geosciences, 2013, 04, 1382-1391.	0.2	4

#	Article	IF	CITATIONS
438	In vitro studies of anti-inflammatory and anticancer activities of organic solvent extracts from cultured marine microalgae. Algae, 2013, 28, 111-119.	0.9	76
439	The Power of a Systems Approach to Mineral and Petroleum Exploration in Sedimentary Basins. , 2018, , 39-62.		2
440	Future Prospects and Health Benefits of Functional Ingredients from Marine Bio-resources: A review. Fisheries and Aquatic Sciences, 2014, 17, 275-290.	0.3	7
441	Phylogenetic, Functional, and Geological Perspectives on Complex Multicellularity. , 2011, , 251-270.		16
442	Methylation at the C-2 position of hopanoids increases rigidity in native bacterial membranes. ELife, 2015, 4, .	2.8	38
443	Industrial Applications of Cyanobacteria. , 0, , .		2
444	Row brews over when photosynthesis emerged. Nature, 0, , .	13.7	0
445	Chromium isotopes track oxygen's rise. Nature, 0, , .	13.7	0
447	Accretion and Shifts of the Levels of O2 and CO2 in the Biosphere. , 2011, , 1-29.		0
448	Functional Designs of the Gas Exchangers. , 2011, , 141-221.		1
450	Genomes and metagenomes of microbes and viruses. , 2011, , 177-194.		0
451	Symbiosis and microbes. , 2011, , 257-276.		0
452	Community structure of microbes in natural environments. , 2011, , 157-176.		0
453	Physical-chemical environment of microbes. , 2011, , 35-54.		0
454	Introduction to geomicrobiology. , 2011, , 237-256.		0
455	Predation and protists. , 2011, , 117-136.		0
457	Processes in anoxic environments. , 2011, , 195-216.		0
458	The nitrogen cycle. , 2011, , 217-236.		0

#	Article	IF	CITATIONS
461	Extreme Character of Evolution in Trophic Pyramid of Biological Systems and the Maximum Energy Dissipation/Least Action Principle. , 2012, , 187-286.		0
462	Planctomycetes: Their Evolutionary Implications for Models for Origins of Eukaryotes and the Eukaryote Nucleus and Endomembranes. , 2013, , 243-270.		0
463	Systematics: The Science of Biological Diversity. , 2013, , 234-255.		0
464	The Golden Apples of the Sun: the History of Photosynthesis—so Far. Advanced Topics in Science and Technology in China, 2013, , 834-839.	0.0	0
465	Carbon-Concentrating Mechanism of Cyanobacteria. SpringerBriefs in Materials, 2014, , 39-61.	0.1	0
466	La vida temprana en la Tierra y los primeros ecosistemas terrestres. Boletin De La Sociedad Geologica Mexicana, 2014, 66, 65-83.	0.1	1
467	Molecular Fossils. , 2014, , 1-9.		0
468	Endogenicity. , 2014, , 1-3.		Ο
469	Archean Traces of Life. , 2014, , 1-15.		0
470	Archean Traces of Life. , 2015, , 142-154.		Ο
471	Molecular Fossils. , 2015, , 1600-1607.		0
473	Endogenicity. , 2015, , 725-727.		Ο
474	Excess Light and Limited Carbon: Two Problems with Which Cyanobacteria and Microalgae Cope. Books in Soils, Plants, and the Environment, 2016, , 369-396.	0.1	0
476	Genomes. , 2017, , 1-20.		Ο
477	Precambrian Organic Matter. Encyclopedia of Earth Sciences Series, 2018, , 1-8.	0.1	0
478	Precambrian Organic Matter. Encyclopedia of Earth Sciences Series, 2018, , 1266-1273.	0.1	Ο
479	Oxygenic Photosynthesis—A Brief Overview. Springer Series in Chemical Physics, 2018, , 3-8.	0.2	0
481	Gas Chromatography-Mass Spectrometric Analysis of a Counterfeit Sildenafil product and its Potential Hepatotoxicity in Mice. Mansoura Journal of Forensic Medicine and Clinical Toxicology, 2019, 27, 43-56	0.1	3

	CITATION RI	CITATION REPORT	
#	Article	IF	CITATIONS
482	Early Life from the Proterozoic Sedimentary Basins of India. Springer Geology, 2020, , 195-212.	0.2	0
483	The Probable Metapelite Nature of Sapphirine–Spinel and Garnet Gedritites of the Aulandzha Block of the Omolon Massif. Russian Geology and Geophysics, 2020, 61, 689-699.	0.3	1
484	RAZÃO N/P, CIANOBACTÉRIAS E ÃNDICE DE ESTADO TRÓFICO EM TRÊS RESERVATÓRIOS SOB ESTIAGEM PROLONGADA NO NORDESTE. Revista AIDIS De IngenierÃa Y Ciencias Ambientales Investigación Desarrollo Y Práctica, 2020, 13, 334.	0.0	0
485	Nickel and Arsenite Responsive Proteomic Alterations in Cyanobacterium Anabaena PCC7120. Journal of Scientific Research, 2020, 64, 151-158.	0.1	0
486	Microcystin-Induced Immunotoxicity in Fishes: A Scoping Review. Toxins, 2021, 13, 765.	1.5	15
490	Femtosecond Laser Desorption Postionization MS vs ToF-SIMS Imaging for Uncovering Biomarkers Buried in Geological Samples. Analytical Chemistry, 2021, 93, 15949-15957.	3.2	5
491	Seeding the Solar System with Life: Mars, Venus, Earth, Moon, Protoplanets. Open Astronomy, 2020, 29, 124-157.	0.2	2
492	Microalgae-based technologies for circular wastewater treatment. , 2022, , 81-112.		2
493	Sedimentary Ce anomalies: Secular change and implications for paleoenvironmental evolution. Earth-Science Reviews, 2022, 229, 104015.	4.0	30
494	"Life is short, and art is longâ€: RNA degradation in cyanobacteria and model bacteria. , 2022, 1, 21-39.		13
495	Active Microbial Airborne Dispersal and Biomorphs as Confounding Factors for Life Detection in the Cell-Degrading Brines of the Polyextreme Dallol Geothermal Field. MBio, 2022, 13, e0030722.	1.8	5
496	Acritarch-like Microorganisms from the 1.9 Ga Gunflint Chert, Canada. Astrobiology, 2022, 22, 568-578.	1.5	1
498	Eukaryogenesis and oxygen in Earth history. Nature Ecology and Evolution, 2022, 6, 520-532.	3.4	48
499	Wide Range Applications of Spirulina: From Earth to Space Missions. Marine Drugs, 2022, 20, 299.	2.2	29
500	GABA as a signalling molecule: Possible mechanism for its enhanced commercial production by cyanobacteria. Journal of Applied Phycology, 2022, 34, 2355-2369.	1.5	3
501	Structural mechanics of filamentous cyanobacteria. Journal of the Royal Society Interface, 2022, 19, .	1.5	5
503	Organic molecular evidence in the â^¼1.40ÂGa Xiamaling Formation black shales in North China Craton for biological diversity and paleoenvironment of mid-Proterozoic ocean. Precambrian Research, 2022, 381, 106848.	1.2	5
504	Virtual 2D map of cyanobacterial proteomes. PLoS ONE, 2022, 17, e0275148.	1.1	1

#	Δρτιςι ε	IF	CITATIONS
" 505	Screening of cyanotoxin producing genes in Ecuadorian freshwater systems. Acta Limnologica Brasiliensia, 0, 34, .	0.4	0
506	Perceptions of Freshwater Algal Blooms, Causes and Health among New Brunswick Lakefront Property Owners. Environmental Management, 0, , .	1.2	2
507	Biomarkers in the Precambrian: Earth's Ancient Sedimentary Record of Life. Elements, 2022, 18, 93-99.	0.5	4
508	Advanced treatment of food processing effluent by indigenous microalgae-bacteria consortia: Population dynamics and enhanced nitrogen uptake. Algal Research, 2023, 69, 102913.	2.4	6
509	Characterization and Developmental Background of Global Precambrian Hydrocarbon Source Beds. Springer Geology, 2022, , 229-249.	0.2	0
510	Charge-transfer states in photosynthesis and organic solar cells. Frontiers in Photonics, 0, 3, .	1.1	2
511	Versatile Applications of Cyanobacteria in Biotechnology. Microorganisms, 2022, 10, 2318.	1.6	11
512	Microbial biosignatures in ancient deepâ€sea hydrothermal sulfides. Geobiology, 2023, 21, 355-377.	1.1	1
513	Cyanobacteria Application Ameliorates Floral Traits and Outcrossing Rate in Diverse Rice Cytoplasmic Male Sterile Lines. Plants, 2022, 11, 3411.	1.6	3
514	CyanoMapDB: a database integrating experimentally validated protein–protein interactions in cyanobacteria. Plant Physiology, 2023, 191, 1535-1545.	2.3	1
515	Detection and Characterization of Nodularin by Using Label-Free Surface-Enhanced Spectroscopic Techniques. International Journal of Molecular Sciences, 2022, 23, 15741.	1.8	2
516	Algal-Bacterial Consortiums, from Fundamental Interactions to Environmental Applications. Environmental Challenges and Solutions, 2023, , 65-77.	0.5	1
517	Exceptional preservation of organic matter and iron-organic colloidal mineralization in hydrothermal black smoker-type sulfide mineralization from the Paleoarchean seafloor. Chemical Geology, 2023, 618, 121296.	1.4	1
518	Biosignatures—The prime targets in the search for life beyond Earth. , 2023, , 167-200.		0
520	Earth's surface oxygenation and the rise of eukaryotic life: Relationships to the Lomagundi positive carbon isotope excursion revisited. Earth-Science Reviews, 2023, 240, 104398.	4.0	2
521	Toxicological effects of cyanobacterial metabolites on zebrafish larval development. Harmful Algae, 2023, 125, 102430.	2.2	4
522	Rapid Screening for Mycosporine-like Amino Acids (MAAs) of Irish Marine Cyanobacteria and Their Antioxidant Potential. Sustainability, 2023, 15, 3792.	1.6	4
523	The growth characteristics of algae in the presence of N-acylhomoserine lactones. Water Science and Technology: Water Supply, 2023, 23, 1057-1068.	1.0	0

#	Article	IF	CITATIONS
524	Natural variation in metabolism of the Calvin-Benson cycle. Seminars in Cell and Developmental Biology, 2023, , .	2.3	5
525	Origin of Mitochondria. , 2024, , 25-39.		0
529	Microbial applications for sustainable space exploration beyond low Earth orbit. Npj Microgravity, 2023, 9, .	1.9	7
532	Endogenicity. , 2023, , 894-895.		0
533	Molecular Fossils. , 2023, , 1979-1986.		0
544	Cyanobacteria—the pioneering photoautotrophs. , 2024, , 1-18.		0
547	Cyanobacteria/Blue-Green Algae. , 2024, , 25-99.		0