David Johnston

List of Publications by Year
in descending order

82 papers	8,500 citations	44069 48 h-index	60623 81 g-index
85 all docs	85 docs citations	85 times ranked	5333 citing authors

#	Article	IF	Citations
1	Calibrating the Cryogenian. Science, 2010, 327, 1241-1243.	12.6	488
2	Statistical analysis of iron geochemical data suggests limited late Proterozoic oxygenation. Nature, 2015, 523, 451-454.	27.8	484
3	Authigenic Carbonate and the History of the Global Carbon Cycle. Science, 2013, 339, 540-543.	12.6	398
4	Late Archean Biospheric Oxygenation and Atmospheric Evolution. Science, 2007, 317, 1900-1903.	12.6	327
5	Mass-dependent fractionation of quadruple stable sulfur isotope system as a new tracer of sulfur biogeochemical cycles. Geochimica Et Cosmochimica Acta, 2006, 70, 2238-2252.	3.9	303
6	Multiple sulfur isotopes and the evolution of Earth's surface sulfur cycle. Earth-Science Reviews, 2011, 106, 161-183.	9.1	291
7	Anoxygenic photosynthesis modulated Proterozoic oxygen and sustained Earth's middle age. Proceedings of the National Academy of Sciences of the United States of America, 2009, 106, 16925-16929.	7.1	282
8	Influence of sulfate reduction rates on the Phanerozoic sulfur isotope record. Proceedings of the National Academy of Sciences of the United States of America, 2013, 110, 11244-11249.	7.1	279
9	Isotopic evidence for Mesoarchaean anoxia and changing atmospheric sulphur chemistry. Nature, 2007, 449, 706-709.	27.8	261
10	A Contemporary Microbially Maintained Subglacial Ferrous "Ocean". Science, 2009, 324, 397-400.	12.6	243
11	Multiple sulphur isotopic interpretations of biosynthetic pathways: implications for biological signatures in the sulphur isotope record. Geobiology, 2003, 1, 27-36.	2.4	234
12	A protein trisulfide couples dissimilatory sulfate reduction to energy conservation. Science, 2015, 350, 1541-1545.	12.6	216
13	Active Microbial Sulfur Disproportionation in the Mesoproterozoic. Science, 2005, 310, 1477-1479.	12.6	215
14	Sulfur isotope insights into microbial sulfate reduction: When microbes meet models. Geochimica Et Cosmochimica Acta, 2007, 71, 3929-3947.	3.9	206
15	An emerging picture of Neoproterozoic ocean chemistry: Insights from the Chuar Group, Grand Canyon, USA. Earth and Planetary Science Letters, 2010, 290, 64-73.	4.4	194
16	Multiple sulfur isotope fractionations in biological systems: A case study with sulfate reducers and sulfur disproportionators. Numerische Mathematik, 2005, 305, 645-660.	1.4	179
17	Dominance of sulfur-fueled iron oxide reduction in low-sulfate freshwater sediments. ISME Journal, 2015, 9, 2400-2412.	9.8	172
18	Organic haze, glaciations and multiple sulfur isotopes in the Mid-Archean Era. Earth and Planetary Science Letters, 2008, 269, 29-40.	4.4	161

#	Article	IF	Citations
19	Uncovering the Neoproterozoic carbon cycle. Nature, 2012, 483, 320-323.	27.8	155
20	Multiple sulfur isotope constraints on the modern sulfur cycle. Earth and Planetary Science Letters, 2014, 396, 14-21.	4.4	152
21	The stratigraphic relationship between the Shuram carbon isotope excursion, the oxygenation of Neoproterozoic oceans, and the first appearance of the Ediacara biota and bilaterian trace fossils in northwestern Canada. Chemical Geology, 2013, 362, 250-272.	3.3	148
22	Patterns of sulfur isotope fractionation during microbial sulfate reduction. Geobiology, 2016, 14, 91-101.	2.4	136
23	Explaining the Structure of the Archean Mass-Independent Sulfur Isotope Record. Science, 2010, 329, 204-207.	12.6	128
24	Fractionation of multiple sulfur isotopes during phototrophic oxidation of sulfide and elemental sulfur by a green sulfur bacterium. Geochimica Et Cosmochimica Acta, 2009, 73, 291-306.	3.9	124
25	Implications of conservation of mass effects on mass-dependent isotope fractionations: Influence of network structure on sulfur isotope phase space of dissimilatory sulfate reduction. Geochimica Et Cosmochimica Acta, 2007, 71, 5862-5875.	3.9	123
26	Protracted development of bioturbation through the early Palaeozoic Era. Nature Geoscience, 2015, 8, 865-869.	12.9	123
27	Revisiting the dissimilatory sulfate reduction pathway. Geobiology, 2011, 9, 446-457.	2.4	121
28	Late Ediacaran redox stability and metazoan evolution. Earth and Planetary Science Letters, 2012, 335-336, 25-35.	4.4	119
29	A basin redox transect at the dawn of animal life. Earth and Planetary Science Letters, 2013, 371-372, 143-155.	4.4	117
30	Redox heterogeneity of subsurface waters in the <scp>M</scp>esoproterozoic ocean. Geobiology, 2014, 12, 373-386.	2.4	115
31	A 200-million-year delay in permanent atmospheric oxygenation. Nature, 2021, 592, 232-236.	27.8	105
32	Biotic replacement and mass extinction of the Ediacara biota. Proceedings of the Royal Society B: Biological Sciences, 2015, 282, 20151003.	2.6	103
33	Evolution of the oceanic sulfur cycle at the end of the Paleoproterozoic. Geochimica Et Cosmochimica Acta, 2006, 70, 5723-5739.	3.9	102
34	Anaerobic methane oxidation in metalliferous hydrothermal sediments: influence on carbon flux and decoupling from sulfate reduction. Environmental Microbiology, 2012, 14, 2726-2740.	3.8	98
35	Sedimentary talc in Neoproterozoic carbonate successions. Earth and Planetary Science Letters, 2011, 306, 11-22.	4.4	97
36	Clay mineralogy, organic carbon burial, and redox evolution in Proterozoic oceans. Geochimica Et Cosmochimica Acta, 2010, 74, 1579-1592.	3.9	94

#	Article	IF	Citations
37	Biologically induced initiation of Neoproterozoic snowball-Earth events. Proceedings of the National Academy of Sciences of the United States of America, 2011, 108, 15091-15096.	7.1	90
38	Sulfur and oxygen isotope study of sulfate reduction in experiments with natural populations from FÃ¦llestrand, Denmark. Geochimica Et Cosmochimica Acta, 2008, 72, 2805-2821.	3.9	86
39	Placing an upper limit on cryptic marine sulphur cycling. Nature, 2014, 513, 530-533.	27.8	86
40	Searching for an oxygenation event in the fossiliferous Ediacaran of northwestern Canada. Chemical Geology, 2013, 362, 273-286.	3.3	78
41	Sulphur isotopes and the search for life: strategies for identifying sulphur metabolisms in the rock record and beyond. Geobiology, 2008, 6, 425-435.	2.4	77
42	Sulfur isotope biogeochemistry of the Proterozoic McArthur Basin. Geochimica Et Cosmochimica Acta, 2008, 72, 4278-4290.	3.9	67
43	Oxygen, facies, and secular controls on the appearance of Cryogenian and Ediacaran body and trace fossils in the Mackenzie Mountains of northwestern Canada. Bulletin of the Geological Society of America, 2016, 128, 558-575.	3.3	66
44	Development of in situ sulfur four-isotope analysis with multiple Faraday cup detectors by SIMS and application to pyrite grains in a Paleoproterozoic glaciogenic sandstone. Chemical Geology, 2014, 383, 86-99.	3.3	64
45	Geobiology of the late Paleoproterozoic Duck Creek Formation, Western Australia. Precambrian Research, 2010, 179, 135-149.	2.7	61
46	Ediacaran reorganization of the marine phosphorus cycle. Proceedings of the National Academy of Sciences of the United States of America, 2020, 117, 11961-11967.	7.1	55
47	Phosphorus sources for phosphatic Cambrian carbonates. Bulletin of the Geological Society of America, 2014, 126, 145-163.	3.3	52
48	Triple oxygen and multiple sulfur isotope constraints on the evolution of the post-Marinoan sulfur cycle. Earth and Planetary Science Letters, 2016, 435, 74-83.	4.4	52
49	Determination and application of the equilibrium oxygen isotope effect between water and sulfite. Geochimica Et Cosmochimica Acta, 2014, 125, 694-711.	3.9	47
50	Sulfur Isotope Effects of Dissimilatory Sulfite Reductase. Frontiers in Microbiology, 2015, 6, 1392.	3.5	47
51	Triple oxygen isotope insight into terrestrial pyrite oxidation. Proceedings of the National Academy of Sciences of the United States of America, 2020, 117, 7650-7657.	7.1	39
52	Oxygen and sulfur isotopes in sulfate in modern euxinic systems with implications for evaluating the extent of euxinia in ancient oceans. Geochimica Et Cosmochimica Acta, 2017, 205, 331-359.	3.9	37
53	Tracking the onset of Phanerozoic-style redox-sensitive trace metal enrichments: New results from basal Ediacaran post-glacial strata in NW Canada. Chemical Geology, 2017, 457, 24-37.	3.3	35
54	The triple oxygen isotope composition of Precambrian chert. Earth and Planetary Science Letters, 2020, 537, 116167.	4.4	30

#	Article	IF	Citations
55	Multiple sulfur isotope signatures of sulfite and thiosulfate reduction by the model dissimilatory sulfate-reducer, Desulfovibrio alaskensis str. G20. Frontiers in Microbiology, 2014, 5, 591.	3.5	26
56	The Sedimentary Geochemistry and Paleoenvironments Project. Geobiology, 2021, 19, 545-556.	2.4	26
57	TAPHONOMY OF CAMBRIAN PHOSPHATIC SMALL SHELLY FOSSILS. Palaios, 2014, 29, 295-308.	1.3	25
58	Thallium isotope ratios in shales from South China and northwestern Canada suggest widespread O2 accumulation in marine bottom waters was an uncommon occurrence during the Ediacaran Period. Chemical Geology, 2020, 557, 119856.	3.3	25
59	High-precision measurement and standard calibration of triple oxygen isotopic compositions (Î´18O,) Tj ETQq1 1 0.784314 rgBT /Overlo	3.3	21
60	The minor sulfur isotope composition of Cretaceous and Cenozoic seawater sulfate. Paleoceanography, 2016, 31, 779-788.	3.0	21
61	The Oxygen Cycle of the Terrestrial Planets: Insights into the Processing and History of Oxygen in Surface Environments. Reviews in Mineralogy and Geochemistry, 2008, 68, 463-492.	4.8	19
62	Fractionation of sulfur and hydrogen isotopes in<i>Desulfovibrio vulgaris</i>with perturbed DsrC expression. FEMS Microbiology Letters, 2016, 363, fnw226.	1.8	17
63	Oxygen isotope effects during microbial sulfate reduction: applications to sediment cell abundances. ISME Journal, 2020, 14, 1508-1519.	9.8	17
64	Unraveling multiple phases of sulfur cycling during the alteration of ancient ultramafic oceanic lithosphere. Geochimica Et Cosmochimica Acta, 2018, 223, 279-299.	3.9	15
65	Expanded Genomic Sampling Refines Current Understanding of the Distribution and Evolution of Sulfur Metabolisms in the Desulfobulbales. Frontiers in Microbiology, 2021, 12, 666052.	3.5	15
66	Phanerozoic radiation of ammonia oxidizing bacteria. Scientific Reports, 2021, 11, 2070.	3.3	14
67	Simultaneous combustion preparation for mercury isotope analysis and detection of total mercury using a direct mercury analyzer. Analytica Chimica Acta, 2021, 1154, 338327.	5.4	14
68	Deconstructing the Dissimilatory Sulfate Reduction Pathway: Isotope Fractionation of a Mutant Unable of Growth on Sulfate. Frontiers in Microbiology, 2018, 9, 3110.	3.5	11
69	Interâ€domain horizontal gene transfer of nickelâ€binding superoxide dismutase. Geobiology, 2021, 19, 450-459.	2.4	11
70	Volcanic controls on seawater sulfate over the past 120 million years. Proceedings of the National Academy of Sciences of the United States of America, 2020, 117, 21118-21124.	7.1	8
71	Snowball prevention questioned. Nature, 2008, 456, E7-E7.	27.8	7
72	Draft Genome Sequence of Desulfofundulus thermobenzoicus subsp. thermosyntrophicus DSM 14055, a Moderately Thermophilic Sulfate Reducer. Microbiology Resource Announcements, 2020, 9, .	0.6	7

#	Article	IF	Citations
73	Touring the Biogeochemical Landscape of a Sulfur-Fueled World. Elements, 2010, 6, 101-106.	0.5	6
74	Draft Genome Sequence of Acidianus ambivalens DSM 3772, an Aerobic Thermoacidophilic Sulfur Disproportionator. Microbiology Resource Announcements, 2020, 9, .	0.6	6
75	Calibrating the triple oxygen isotope composition of evaporite minerals as a proxy for marine sulfate. Earth and Planetary Science Letters, 2022, 578, 117320.	4.4	4
76	Isotopically anomalous organic carbon in the aftermath of the Marinoan snowball Earth. Geobiology, 2020, 18, 476-485.	2.4	3
77	Calibrating the triple oxygen isotope signature of cultured diatoms. Limnology and Oceanography, 2021, 66, 4254-4266.	3.1	3
78	Oxygen isotope insights into the Archean ocean and atmosphere. Earth and Planetary Science Letters, 2022, 591, 117603.	4.4	3
79	Genomic sequence analysis of Dissulfurirhabdus thermomarina SH388 and proposed reassignment to Dissulfurirhabdaceae fam. nov.. Microbial Genomics, 2020, 6, .	2.0	2
80	Isotopic Fractionation Associated With Sulfate Import and Activation by Desulfovibrio vulgaris str. Hildenborough. Frontiers in Microbiology, 2020, 11, 529317.	3.5	2
81	The influence of reactive oxygen species on â€œrespirationâ€• isotope effects. Geochimica Et Cosmochimica Acta, 2022, 324, 86-101.	3.9	2
82	16. The Oxygen Cycle of the Terrestrial Planets: Insights into the Processing and History of Oxygen in Surface Environments. , 2008, , 463-492.		0