Mark Claire

List of Publications by Year
in descending order

47 papers	4,318 citations	159585 30 h-index	233421 45 g-index
47 all docs	47 docs citations	47 times ranked	4403 citing authors

#	Article	IF	Citations
1	Nitrogen Cycling and Biosignatures in a Hyperarid Mars Analog Environment. Astrobiology, 2022, 22, 127-142.	3.0	4
2	Massive perturbations to atmospheric sulfur in the aftermath of the Chicxulub impact. Proceedings of the National Academy of Sciences of the United States of America, 2022, 119, e2119194119.	7.1	10
3	Sedimentology and isotope geochemistry of transitional evaporitic environments within arid continental settings: From erg to saline lakes. Sedimentology, 2021, 68, 907-942.	3.1	5
4	Photochemical modelling of atmospheric oxygen levels confirms two stable states. Earth and Planetary Science Letters, 2021, 561, 116818.	4.4	24
5	Spatial Variability of Microbial Communities and Salt Distributions Across a Latitudinal Aridity Gradient in the Atacama Desert. Microbial Ecology, 2021, 82, 442-458.	2.8	17
6	Unraveling biogeochemical phosphorus dynamics in hyperarid Marsâ€analogue soils using stable oxygen isotopes in phosphate. Geobiology, 2020, 18, 760-779.	2.4	12
7	The Great Oxidation Event preceded a Paleoproterozoic â€œsnowball Earthâ€. Proceedings of the National Academy of Sciences of the United States of America, 2020, 117, 13314-13320.	7.1	90
8	The Great Oxidation Event Preceded a Paleoproterozoic â€˜snowball Earthâ€™. , 2020, , .		5
9	Anaerobic nitrogen cycling on a Neoarchaean ocean margin. Earth and Planetary Science Letters, 2019, 527, 115800.	4.4	10
10	Nitrates as a Potential N Supply for Microbial Ecosystems in a Hyperarid Mars Analog System. Life, 2019, 9, 79.	2.4	10
11	Indigenous Organicâ€Oxidized Fluid Interactions in the Tissint Mars Meteorite. Geophysical Research Letters, 2019, 46, 3090-3098.	4.0	25
12	Evaluation of the Tindouf Basin Region in Southern Morocco as an Analogue Site for Soil Geochemistry on Noachian Mars. Astrobiology, 2018, 18, 1318-1328.	3.0	8
13	Two-billion-year-old evaporites capture Earthâ€™s great oxidation. Science, 2018, 360, 320-323.	12.6	112
14	Long-Term Planetary Habitability and the Carbonate-Silicate Cycle. Astrobiology, 2018, 18, 469-480.	3.0	20
15	Triple oxygen isotope analysis of nitrate using isotope exchange cavity ringdown laser spectroscopy. Rapid Communications in Mass Spectrometry, 2018, 32, 1949-1961.	1.5	5
16	Anoxic atmospheres on Mars driven by volcanism: Implications for past environments and life. Icarus, 2017, 290, 46-62.	2.5	24
17	Onset of the aerobic nitrogen cycle during the Great Oxidation Event. Nature, 2017, 542, 465-467.	27.8	114
18	Biological regulation of atmospheric chemistry en route to planetary oxygenation. Proceedings of the National Academy of Sciences of the United States of America, 2017, 114, E2571-E2579.	7.1	64

#	Article	IF	Citations
19	High-frequency fluctuations in redox conditions during the latest Permian mass extinction. Palaeogeography, Palaeoclimatology, Palaeoecology, 2017, 485, 210-223.	2.3	21
20	The Pale Orange Dot: The Spectrum and Habitability of Hazy Archean Earth. Astrobiology, 2016, 16, 873-899.	3.0	229
21	Spectral identification and quantification of salts in the Atacama Desert. , 2016, , .		2
22	Multiple oscillations in Neoarchaean atmospheric chemistry. Earth and Planetary Science Letters, 2015, 431, 264-273.	4.4	67
23	Using Dimers to Measure Biosignatures and Atmospheric Pressure for Terrestrial Exoplanets. Astrobiology, 2014, 14, 67-86.	3.0	88
24	Evidence of martian perchlorate, chlorate, and nitrate in Mars meteorite EETA79001: Implications for oxidants and organics. Icarus, 2014, 229, 206-213.	2.5	133
25	The formation of sulfate, nitrate and perchlorate salts in the martian atmosphere. Icarus, 2014, 231, 51-64.	2.5	108
26	Modeling the signature of sulfur mass-independent fractionation produced in the Archean atmosphere. Geochimica Et Cosmochimica Acta, 2014, 141, 365-380.	3.9	80
27	ABIOTIC OZONE AND OXYGEN IN ATMOSPHERES SIMILAR TO PREBIOTIC EARTH. Astrophysical Journal, 2014, 792, 90.	4.5	164
28	Atmospheric sulfur rearrangement 2.7 billion years ago: Evidence for oxygenic photosynthesis. Earth and Planetary Science Letters, 2013, 366, 17-26.	4.4	74
29	The rise of oxygen and the hydrogen hourglass. Chemical Geology, 2013, 362, 26-34.	3.3	50
30	Habitable Zone Lifetimes of Exoplanets around Main Sequence Stars. Astrobiology, 2013, 13, 833-849.	3.0	92
31	Pathways for Neoarchean pyrite formation constrained by mass-independent sulfur isotopes. Proceedings of the National Academy of Sciences of the United States of America, 2013, 110, 17638-17643.	7.1	125
32	A bistable organic-rich atmosphere on the Neoarchaean Earth. Nature Geoscience, 2012, 5, 359-363.	12.9	201
33	THE EVOLUTION OF SOLAR FLUX FROM 0.1 nm TO 160 Î¼m: QUANTITATIVE ESTIMATES FOR PLANETARY STUDIES. Astrophysical Journal, 2012, 757, 95.	4.5	192
34	Ensemble properties of comets in the Sloan Digital Sky Survey. Icarus, 2012, 218, 571-584.	2.5	61
35	High rates of anaerobic methanotrophy at low sulfate concentrations with implications for past and present methane levels. Geobiology, 2011, 9, 131-139.	2.4	58
36	Using Biogenic Sulfur Gases as Remotely Detectable Biosignatures on Anoxic Planets. Astrobiology, 2011, 11, 419-441.	3.0	144

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37	Detecting active comets in the SDSS. Icarus, 2010, 205, 605-618.	2.5	11
38	Modeling aqueous perchlorate chemistries with applications to Mars. Icarus, 2010, 207, 675-685.	2.5	102
39	Atmospheric origins of perchlorate on Mars and in the Atacama. Journal of Geophysical Research, 2010, 115, .	3.3	245
40	Photochemical and climate consequences of sulfur outgassing on early Mars. Earth and Planetary Science Letters, 2010, 295, 412-418.	4.4	102
41	Nitrogen-enhanced greenhouse warming on earlyÂEarth. Nature Geoscience, 2009, 2, 891-896.	12.9	247
42	Stellar SEDs from 0.3 to 2.5 Î¼m: Tracing the Stellar Locus and Searching for Color Outliers in the SDSS and 2MASS. Astronomical Journal, 2007, 134, 2398-2417.	4.7	351
43	Anaerobic methanotrophy and the rise of atmospheric oxygen. Philosophical Transactions Series A, Mathematical, Physical, and Engineering Sciences, 2007, 365, 1867-1888.	3.4	50
44	Biogeochemical modelling of the rise in atmospheric oxygen. Geobiology, 2006, 4, 239-269.	2.4	156
45	The loss of mass-independent fractionation in sulfur due to a Palaeoproterozoic collapse of atmospheric methane. Geobiology, 2006, 4, 271-283.	2.4	246
46	The Ultraviolet, Optical, and Infrared Properties of Sloan Digital Sky Survey Sources Detected byGALEX. Astronomical Journal, 2005, 130, 1022-1036.	4.7	31
47	How Earth's atmosphere evolved to an oxic state: A status report. Earth and Planetary Science Letters, 2005, 237, 1-20.	4.4	329