Itay Halevy

List of Publications by Year
in descending order

#	Article	IF	Citations
1	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
2	The geologic history of seawater pH. Science, 2017, 355, 1069-1071.	12.6	234
3	Intracellular metabolite levels shape sulfur isotope fractionation during microbial sulfate respiration. Proceedings of the National Academy of Sciences of the United States of America, 2014, 111, 18116-18125.	7.1	210
4	A Sulfur Dioxide Climate Feedback on Early Mars. Science, 2007, 318, 1903-1907.	12.6	168
5	A key role for green rust in the Precambrian oceans and the genesis of iron formations. Nature Geoscience, 2017, 10, 135-139.	12.9	163
6	Episodic warming of early Mars by punctuatedÂvolcanism. Nature Geoscience, 2014, 7, 865-868.	12.9	147
7	Sulfate Burial Constraints on the Phanerozoic Sulfur Cycle. Science, 2012, 337, 331-334.	12.6	130
8	Explaining the Structure of the Archean Mass-Independent Sulfur Isotope Record. Science, 2010, 329, 204-207.	12.6	128
9	Frontiers of stable isotope geoscience. Chemical Geology, 2014, 372, 119-143.	3.3	99
10	Seasonal melting and the formation of sedimentary rocks on Mars, with predictions for the Gale Crater mound. Icarus, 2013, 223, 181-210.	2.5	95
11	Carbonates in the Martian meteorite Allan Hills 84001 formed at 18ÂÂ±Â4ÂÂ°C in a near-surface aqueous environment. Proceedings of the National Academy of Sciences of the United States of America, 2011, 108, 16895-16899.	7.1	94
12	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
13	The geologic history of seawater oxygen isotopes from marine iron oxides. Science, 2019, 365, 469-473.	12.6	81
14	Dynamics of pyrite formation and organic matter sulfurization in organic-rich carbonate sediments. Geochimica Et Cosmochimica Acta, 2018, 241, 219-239.	3.9	75
15	Production, preservation, and biological processing of mass-independent sulfur isotope fractionation in the Archean surface environment. Proceedings of the National Academy of Sciences of the United States of America, 2013, 110, 17644-17649.	7.1	74
16	Greenhouse warming by nitrous oxide and methane in the Proterozoic Eon. Geobiology, 2011, 9, 313-320.	2.4	64
17	Radiative transfer in CO₂â€rich paleoatmospheres. Journal of Geophysical Research, 2009, 114, .	3.3	55
18	Strong local, not global, controls on marine pyrite sulfur isotopes. Science Advances, 2021, 7, .	10.3	43

#	Article	IF	Citations
19	Dust Aerosol Important for Snowball Earth Deglaciation. Journal of Climate, 2010, 23, 4121-4132.	3.2	38
20	Nutrient ratios in marine particulate organic matter are predicted by the population structure of well-adapted phytoplankton. Science Advances, 2020, 6, eaaw9371.	10.3	38
21	Electron carriers in microbial sulfate reduction inferred from experimental and environmental sulfur isotope fractionations. ISME Journal, 2018, 12, 495-507.	9.8	36
22	Sedimentary pyrite sulfur isotopes track the local dynamics of the Peruvian oxygen minimum zone. Nature Communications, 2021, 12, 4403.	12.8	34
23	New constraints on kinetic isotope effects during CO2(aq) hydration and hydroxylation: Revisiting theoretical and experimental data. Geochimica Et Cosmochimica Acta, 2017, 214, 246-265.	3.9	31
24	Sulfur isotope fractionation between aqueous and carbonate-associated sulfate in abiotic calcite and aragonite. Geochimica Et Cosmochimica Acta, 2020, 280, 317-339.	3.9	28
25	Sulfur dioxide inhibits calcium carbonate precipitation: Implications for early Mars and Earth. Geophysical Research Letters, 2009, 36, .	4.0	27
26	Reconstructing Neoproterozoic seawater chemistry from early diagenetic dolomite. Geology, 2021, 49, 442-446.	4.4	26
27	The fate of fluvially-deposited organic carbon during transient floodplain storage. Earth and Planetary Science Letters, 2021, 561, 116822.	4.4	23
28	Formation of green rust and elemental sulfur in an analogue for oxygenated ferro-euxinic transition zones of Precambrian oceans. Geology, 2019, 47, 211-214.	4.4	22
29	Deciphering the atmospheric signal in marine sulfate oxygen isotope composition. Earth and Planetary Science Letters, 2019, 522, 12-19.	4.4	18
30	Oxygen isotope effects during microbial sulfate reduction: applications to sediment cell abundances. ISME Journal, 2020, 14, 1508-1519.	9.8	17
31	Theoretical estimates of equilibrium carbon and hydrogen isotope effects in microbial methane production and anaerobic oxidation of methane. Geochimica Et Cosmochimica Acta, 2021, 295, 237-264.	3.9	17
32	Is Enceladus' plume tidally controlled?. Geophysical Research Letters, 2008, 35, .	4.0	16
33	Kinetics of Decomposition of Thiocyanate in Natural Aquatic Systems. Environmental Science & Technology, 2018, 52, 1234-1243.	10.0	16
34	Sulfate-dependent reversibility of intracellular reactions explains the opposing isotope effects in the anaerobic oxidation of methane. Science Advances, 2021, 7, .	10.3	16
35	Controls on the isotopic composition of microbial methane. Science Advances, 2022, 8, eabm5713.	10.3	16
36	Strong evidence for a weakly oxygenated oceanâ€"atmosphere system during the Proterozoic. Proceedings of the National Academy of Sciences of the United States of America, 2022, 119, .	7.1	15

#	Article	IF	Citations
37	The thermodynamic effect of atmospheric mass on early Earth's temperature. Geophysical Research Letters, 2016, 43, 11,414.	4.0	14
38	Sulfur Isotope Fractionation by Sulfate-Reducing Microbes Can Reflect Past Physiology. Environmental Science & Technology, 2018, 52, 4013-4022.	10.0	11
39	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
40	Geologic controls on phytoplankton elemental composition. Proceedings of the National Academy of Sciences of the United States of America, 2022, 119, .	7.1	11
41	Kinetic isotope effect in siderite growth: Implications for the origin of banded iron formation siderite. Geochimica Et Cosmochimica Acta, 2022, 322, 260-273.	3.9	10
42	The Effect of Ocean Salinity on Climate and Its Implications for Earth's Habitability. Geophysical Research Letters, 2022, 49, .	4.0	9
43	The effects of drip rate and geometry on the isotopic composition of speleothems: Evaluation with an advection-diffusion-reaction model. Geochimica Et Cosmochimica Acta, 2022, 317, 409-432.	3.9	8
44	Radiative transfer in CO₂â€‐rich atmospheres: 1. Collisional line mixing implies a colder early Mars. Journal of Geophysical Research E: Planets, 2016, 121, 965-985.	3.6	7
45	Kinetic fractionation of carbon and oxygen isotopes during BaCO3 precipitation. Geochimica Et Cosmochimica Acta, 2020, 280, 395-422.	3.9	7
46	Statistical Uncertainty in Paleoclimate Proxy Reconstructions. Geophysical Research Letters, 2021, 48, e2021GL092773.	4.0	7
47	A case study for late Archean and Proterozoic biogeochemical ironâ€•and sulphur cycling in a modern habitatâ€"the Arvadi Spring. Geobiology, 2018, 16, 353-368.	2.4	5
48	The Isotopic Imprint of Life on an Evolving Planet. Space Science Reviews, 2020, 216, 1.	8.1	3
49	An improved pyrite pretreatment protocol for kinetic and isotopic studies. Geochemical Transactions, 2014, 15, 10.	0.7	2
50	Reply to Comment on â€œRadiative Transfer in CO₂â€Rich Atmospheres: 1. Collisional Line Mixing Implies a Colder Early Marsâ€• Journal of Geophysical Research E: Planets, 2017, 122, 2366-2367.	3.6	2
51	Geologic controls on phytoplankton elemental composition. Proceedings of the National Academy of Sciences of the United States of America, 2022, 119, e2113263119.	7.1	2
52	Equilibration Times of Dissolved Inorganic Carbon During pH Transitions. Frontiers in Earth Science, 2022, 9, .	1.8	0