

Joel A Hurowitz

List of Publications by Year in descending order

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Version: 2024-02-01

50
papers

6,701
citations

117625

34
h-index

197818

49
g-index

51
all docs

51
docs citations

51
times ranked

4086
citing authors

#	ARTICLE	IF	CITATIONS
1	Mineralogy of a Mudstone at Yellowknife Bay, Gale Crater, Mars. Science, 2014, 343, 1243480.	12.6	508
2	Marsâ€™ Surface Radiation Environment Measured with the Mars Science Laboratoryâ€™s Curiosity Rover. Science, 2014, 343, 1244797.	12.6	475
3	Deposition, exhumation, and paleoclimate of an ancient lake deposit, Gale crater, Mars. Science, 2015, 350, aac7575.	12.6	471
4	Organic matter preserved in 3-billion-year-old mudstones at Gale crater, Mars. Science, 2018, 360, 1096-1101.	12.6	369
5	Volatile, Isotope, and Organic Analysis of Martian Finest with the Mars Curiosity Rover. Science, 2013, 341, 1238937.	12.6	367
6	An integrated view of the chemistry and mineralogy of martian soils. Nature, 2005, 436, 49-54.	27.8	348
7	Martian Fluvial Conglomerates at Gale Crater. Science, 2013, 340, 1068-1072.	12.6	326
8	Volatile and Organic Compositions of Sedimentary Rocks in Yellowknife Bay, Gale Crater, Mars. Science, 2014, 343, 1245267.	12.6	323
9	Elemental Geochemistry of Sedimentary Rocks at Yellowknife Bay, Gale Crater, Mars. Science, 2014, 343, 1244734.	12.6	246
10	Water alteration of rocks and soils on Mars at the Spirit rover site in Gusev crater. Nature, 2005, 436, 66-69.	27.8	240
11	Mars 2020 Mission Overview. Space Science Reviews, 2020, 216, 1.	8.1	239
12	Overview of the Spirit Mars Exploration Rover Mission to Gusev Crater: Landing site to Backstay Rock in the Columbia Hills. Journal of Geophysical Research, 2006, 111, n/a-n/a.	3.3	238
13	In Situ Radiometric and Exposure Age Dating of the Martian Surface. Science, 2014, 343, 1247166.	12.6	224
14	Redox stratification of an ancient lake in Gale crater, Mars. Science, 2017, 356, .	12.6	209
15	In situ and experimental evidence for acidic weathering of rocks and soils on Mars. Journal of Geophysical Research, 2006, 111, n/a-n/a.	3.3	169
16	Rocks of the Columbia Hills. Journal of Geophysical Research, 2006, 111, n/a-n/a.	3.3	146
17	A ^{43}Ar record of water-limited, acidic weathering conditions on Mars. Earth and Planetary Science Letters, 2007, 260, 432-443.	4.4	140
18	The Petrochemistry of Jake_M: A Martian Mugearite. Science, 2013, 341, 1239463.	12.6	134

#	ARTICLE	IF	CITATIONS
19	Reassessing evidence of life in 3,700-million-year-old rocks of Greenland. <i>Nature</i> , 2018, 563, 241-244.	27.8	114
20	Oxidation of manganese in an ancient aquifer, Kimberley formation, Gale crater, Mars. <i>Geophysical Research Letters</i> , 2016, 43, 7398-7407.	4.0	110
21	Spirit Mars Rover Mission to the Columbia Hills, Gusev Crater: Mission overview and selected results from the Cumberland Ridge to Home Plate. <i>Journal of Geophysical Research</i> , 2008, 113, .	3.3	99
22	The NASA Mars 2020 Rover Mission and the Search for Extraterrestrial Life. , 2018, , 275-308.		95
23	Mars Sedimentary Geology: Key Concepts and Outstanding Questions. <i>Astrobiology</i> , 2011, 11, 77-87.	3.0	93
24	Diagenetic silica enrichment and late-stage groundwater activity in Gale crater, Mars. <i>Geophysical Research Letters</i> , 2017, 44, 4716-4724.	4.0	87
25	Evidence for plunging river plume deposits in the Pahrump Hills member of the Murray formation, Gale crater, Mars. <i>Sedimentology</i> , 2019, 66, 1768-1802.	3.1	80
26	Production of hydrogen peroxide in Martian and lunar soils. <i>Earth and Planetary Science Letters</i> , 2007, 255, 41-52.	4.4	73
27	Photogeologic Map of the Perseverance Rover Field Site in Jezero Crater Constructed by the Mars 2020 Science Team. <i>Space Science Reviews</i> , 2020, 216, 1.	8.1	67
28	Magnetite authigenesis and the warming of early Mars. <i>Nature Geoscience</i> , 2018, 11, 635-639.	12.9	66
29	Sorting out compositional trends in sedimentary rocks of the Bradbury group (Aeolis Palus), Gale crater, Mars. <i>Journal of Geophysical Research E: Planets</i> , 2017, 122, 295-328.	3.6	64
30	A coupled model of episodic warming, oxidation and geochemical transitions on early Mars. <i>Nature Geoscience</i> , 2021, 14, 127-132.	12.9	64
31	The Sedimentary Cycle on Early Mars. <i>Annual Review of Earth and Planetary Sciences</i> , 2019, 47, 91-118.	11.0	59
32	PIXL: Planetary Instrument for X-Ray Lithochemistry. <i>Space Science Reviews</i> , 2020, 216, 1.	8.1	58
33	Large sulfur isotope fractionations in Martian sediments at Gale crater. <i>Nature Geoscience</i> , 2017, 10, 658-662.	12.9	53
34	Experimental epithermal alteration of synthetic Los Angeles meteorite: Implications for the origin of Martian soils and identification of hydrothermal sites on Mars. <i>Journal of Geophysical Research</i> , 2005, 110, .	3.3	52
35	Rock spectral classes observed by the Spirit Rover's Pancam on the Gusev Crater Plains and in the Columbia Hills. <i>Journal of Geophysical Research</i> , 2008, 113, .	3.3	37
36	Sediment geochemistry and mineralogy from a glacial terrain river system in southwest Iceland. <i>Geochimica Et Cosmochimica Acta</i> , 2019, 263, 140-166.	3.9	36

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37	Contrasting styles of water-rock interaction at the Mars Exploration Rover landing sites. <i>Geochimica Et Cosmochimica Acta</i> , 2014, 127, 25-38.	3.9	31
38	Mixing relationships and the effects of secondary alteration in the Wishstone and Watchtower Classes of Husband Hill, Gusev Crater, Mars. <i>Journal of Geophysical Research</i> , 2006, 111, n/a-n/a.	3.3	27
39	Estimating rock compressive strength from Rock Abrasion Tool (RAT) grinds. <i>Journal of Geophysical Research E: Planets</i> , 2013, 118, 1233-1244.	3.6	27
40	Assessing Toxicity and Nuclear and Mitochondrial DNA Damage Caused by Exposure of Mammalian Cells to Lunar Regolith Simulants. <i>GeoHealth</i> , 2018, 2, 139-148.	4.0	23
41	A look back: The drilling campaign of the Curiosity rover during the Mars Science Laboratory's Prime Mission. <i>Icarus</i> , 2019, 319, 1-13.	2.5	19
42	Silicon isotope systematics of acidic weathering of fresh basalts, Kilauea Volcano, Hawaii. <i>Geochimica Et Cosmochimica Acta</i> , 2015, 169, 63-81.	3.9	16
43	Measurement of OH* Generation by Pulverized Minerals Using Electron Spin Resonance Spectroscopy and Implications for the Reactivity of Planetary Regolith. <i>GeoHealth</i> , 2019, 3, 28-42.	4.0	15
44	Source-to-Sink Terrestrial Analogs for the Paleoenvironment of Gale Crater, Mars. <i>Journal of Geophysical Research E: Planets</i> , 2021, 126, e2020JE006530.	3.6	15
45	Scale and timing of Rare Earth Element redistribution in the Taconian foreland of New England. <i>Sedimentology</i> , 2004, 51, 885-897.	3.1	14
46	Unraveling sedimentary processes in fluvial sediments from two basalt dominated watersheds in northern Idaho, USA. <i>Chemical Geology</i> , 2020, 550, 119673.	3.3	12
47	The power of paired proximity science observations: Co-located data from SHERLOC and PIXL on Mars. <i>Icarus</i> , 2022, 387, 115179.	2.5	11
48	Lunar soil simulants alter macrophage survival and function. <i>Journal of Applied Toxicology</i> , 2019, 39, 1413-1423.	2.8	4
49	Overview of Spirit Microscopic Imager Results. <i>Journal of Geophysical Research E: Planets</i> , 2019, 124, 528-584.	3.6	4
50	Olivine Dissolution in Simulated Lung and Gastric Fluid as an Analog to the Behavior of Lunar Particulate Matter Inside the Human Respiratory and Gastrointestinal Systems. <i>GeoHealth</i> , 2021, 5, e2021GH000491.	4.0	4