

William Rapin

List of Publications by Year in descending order

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42
papers

2,588
citations

172457

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42
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42
docs citations

42
times ranked

1881
citing authors

#	ARTICLE	IF	CITATIONS
1	Deposition and erosion of a Light-Toned Yardang-forming unit of Mt Sharp, Gale crater, Mars. <i>Earth and Planetary Science Letters</i> , 2021, 554, 116681.	4.4	13
2	The SuperCam Instrument Suite on the Mars 2020 Rover: Science Objectives and Mast-Unit Description. <i>Space Science Reviews</i> , 2021, 217, 1.	8.1	131
3	Detection and Degradation of Adenosine Monophosphate in Perchlorate-Spiked Martian Regolith Analog, by Deep-Ultraviolet Spectroscopy. <i>Astrobiology</i> , 2021, 21, 511-525.	3.0	10
4	Laser-Induced Breakdown Spectroscopy (LIBS) characterization of granular soils: Implications for ChemCam analyses at Gale crater, Mars. <i>Icarus</i> , 2021, 365, 114481.	2.5	11
5	The SuperCam Instrument Suite on the NASA Mars 2020 Rover: Body Unit and Combined System Tests. <i>Space Science Reviews</i> , 2021, 217, 4.	8.1	160
6	Long-Distance 3D Reconstructions Using Photogrammetry with Curiosity's ChemCam Remote Micro-Imager in Gale Crater (Mars). <i>Remote Sensing</i> , 2021, 13, 4068.	4.0	5
7	Analyses of High-Iron Sedimentary Bedrock and Diagenetic Features Observed With ChemCam at Vera Rubin Ridge, Gale Crater, Mars: Calibration and Characterization. <i>Journal of Geophysical Research E: Planets</i> , 2020, 125, e2019JE006314.	3.6	30
8	Iron Mobility During Diagenesis at Vera Rubin Ridge, Gale Crater, Mars. <i>Journal of Geophysical Research E: Planets</i> , 2020, 125, e2019JE006299.	3.6	30
9	Identification and Description of a Silicic Volcaniclastic Layer in Gale Crater, Mars, Using Active Neutron Interrogation. <i>Journal of Geophysical Research E: Planets</i> , 2020, 125, e2019JE006180.	3.6	16
10	Hydrogen Variability in the Murray Formation, Gale Crater, Mars. <i>Journal of Geophysical Research E: Planets</i> , 2020, 125, e2019JE006289.	3.6	12
11	Mars Science Laboratory Observations of Chloride Salts in Gale Crater, Mars. <i>Geophysical Research Letters</i> , 2019, 46, 10754-10763.	4.0	52
12	An interval of high salinity in ancient Gale crater lake on Mars. <i>Nature Geoscience</i> , 2019, 12, 889-895.	12.9	105
13	Copper enrichments in the Kimberley formation in Gale crater, Mars: Evidence for a Cu deposit at the source. <i>Icarus</i> , 2019, 321, 736-751.	2.5	23
14	Chemical alteration of fine-grained sedimentary rocks at Gale crater. <i>Icarus</i> , 2019, 321, 619-631.	2.5	52
15	Chemical variability in mineralized veins observed by ChemCam on the lower slopes of Mount Sharp in Gale crater, Mars. <i>Icarus</i> , 2018, 311, 69-86.	2.5	34
16	Gypsum, bassanite, and anhydrite at Gale crater, Mars. <i>American Mineralogist</i> , 2018, 103, 1011-1020.	1.9	96
17	Martian Eolian Dust Probed by ChemCam. <i>Geophysical Research Letters</i> , 2018, 45, 10,968.	4.0	40
18	Water Abundance of Dunes in Gale Crater, Mars From Active Neutron Experiments and Implications for Amorphous Phases. <i>Geophysical Research Letters</i> , 2018, 45, 12,766.	4.0	22

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19	In Situ Analysis of Opal in Gale Crater, Mars. Journal of Geophysical Research E: Planets, 2018, 123, 1955-1972.	3.6	36
20	Characterization of Hydrogen in Basaltic Materials With Laser-Induced Breakdown Spectroscopy (<sc>LIBS</sc>) for Application to <sc>MSL</sc> ChemCam Data. Journal of Geophysical Research E: Planets, 2018, 123, 1996-2021.	3.6	32
21	Quantification of water content by laser induced breakdown spectroscopy on Mars. Spectrochimica Acta, Part B: Atomic Spectroscopy, 2017, 130, 82-100.	2.9	65
22	Classification of igneous rocks analyzed by ChemCam at Gale crater, Mars. Icarus, 2017, 288, 265-283.	2.5	96
23	Analysis of carbon and nitrogen signatures with laser-induced breakdown spectroscopy; the quest for organics under Mars-like conditions. Spectrochimica Acta, Part B: Atomic Spectroscopy, 2017, 131, 8-17.	2.9	25
24	Diagenetic silica enrichment and late-stage groundwater activity in Gale crater, Mars. Geophysical Research Letters, 2017, 44, 4716-4724.	4.0	87
25	Centimeter to decimeter hollow concretions and voids in Gale Crater sediments, Mars. Icarus, 2017, 289, 144-156.	2.5	12
26	Alkali trace elements in Gale crater, Mars, with ChemCam: Calibration update and geological implications. Journal of Geophysical Research E: Planets, 2017, 122, 650-679.	3.6	48
27	Roughness effects on the hydrogen signal in laser-induced breakdown spectroscopy. Spectrochimica Acta, Part B: Atomic Spectroscopy, 2017, 137, 13-22.	2.9	34
28	In situ detection of boron by ChemCam on Mars. Geophysical Research Letters, 2017, 44, 8739-8748.	4.0	56
29	Geochemistry of the Bagnold dune field as observed by ChemCam and comparison with other aeolian deposits at Gale Crater. Journal of Geophysical Research E: Planets, 2017, 122, 2144-2162.	3.6	46
30	Evaluating the Wind-Induced Mechanical Noise on the InSight Seismometers. Space Science Reviews, 2017, 211, 429-455.	8.1	65
31	Fluidized-sediment pipes in Gale crater, Mars, and possible Earth analogs. Geology, 2017, 45, 7-10.	4.4	18
32	Chemistry of diagenetic features analyzed by ChemCam at Pahrump Hills, Gale crater, Mars. Icarus, 2017, 281, 121-136.	2.5	90
33	Observation of >5wt % zinc at the Kimberley outcrop, Gale crater, Mars. Journal of Geophysical Research E: Planets, 2016, 121, 338-352.	3.6	32
34	Composition of conglomerates analyzed by the Curiosity rover: Implications for Gale Crater crust and sediment sources. Journal of Geophysical Research E: Planets, 2016, 121, 353-387.	3.6	53
35	Hydration state of calcium sulfates in Gale crater, Mars: Identification of bassanite veins. Earth and Planetary Science Letters, 2016, 452, 197-205.	4.4	103
36	Fluids during diagenesis and sulfate vein formation in sediments at Gale crater, Mars. Meteoritics and Planetary Science, 2016, 51, 2175-2202.	1.6	50

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37	ChemCam activities and discoveries during the nominal mission of the Mars Science Laboratory in Gale crater, Mars. <i>Journal of Analytical Atomic Spectrometry</i> , 2016, 31, 863-889.	3.0	134
38	Hydrogen detection with ChemCam at Gale crater. <i>Icarus</i> , 2015, 249, 43-61.	2.5	58
39	In situ evidence for continental crust on early Mars. <i>Nature Geoscience</i> , 2015, 8, 605-609.	12.9	233
40	Compositions of coarse and fine particles in martian soils at gale: A window into the production of soils. <i>Icarus</i> , 2015, 249, 22-42.	2.5	64
41	The ChemCam Remote Micro-Imager at Gale crater: Review of the first year of operations on Mars. <i>Icarus</i> , 2015, 249, 93-107.	2.5	95
42	Calcium sulfate veins characterized by ChemCam/Curiosity at Gale crater, Mars. <i>Journal of Geophysical Research E: Planets</i> , 2014, 119, 1991-2016.	3.6	214