Deposition, exhumation, and paleoclimate of an ancient

Science

350, aac7575

DOI: 10.1126/science.aac7575

Citation Report

#	Article	IF	Citations
1	The martian lake chronicles. Science, 2015, 350, 167-167.	6.0	2
2	MAHLI on Mars: lessons learned operating a geoscience camera on a landed payload robotic arm. Geoscientific Instrumentation, Methods and Data Systems, 2016, 5, 205-217.	0.6	26
3	Constraints on iron sulfate and iron oxide mineralogy from ChemCam visible/near-infrared reflectance spectroscopy of Mt. Sharp basal units, Gale Crater, Mars. American Mineralogist, 2016, 101, 1501-1514.	0.9	31
4	Oxidation of manganese in an ancient aquifer, Kimberley formation, Gale crater, Mars. Geophysical Research Letters, 2016, 43, 7398-7407.	1.5	110
5	Mars surface context cameras past, present, and future. Earth and Space Science, 2016, 3, 144-162.	1.1	15
6	The Climate of Early Mars. Annual Review of Earth and Planetary Sciences, 2016, 44, 381-408.	4.6	267
7	Carving intracrater layered deposits with wind on Mars. Geophysical Research Letters, 2016, 43, 2473-2479.	1.5	51
8	Observation of >â€‰5â€‰wt % zinc at the Kimberley outcrop, Gale crater, Mars. Journal of Geophysical Research E: Planets, 2016, 121, 338-352.	1.5	32
9	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.	1.5	53
10	High concentrations of manganese and sulfur in deposits on Murray Ridge, Endeavour Crater, Mars. American Mineralogist, 2016, 101, 1389-1405.	0.9	55
11	Evolution of major sedimentary mounds on Mars: Buildup via anticompensational stacking modulated by climate change. Journal of Geophysical Research E: Planets, 2016, 121, 2282-2324.	1.5	28
12	Potassiumâ€rich sandstones within the Gale impact crater, Mars: The APXS perspective. Journal of Geophysical Research E: Planets, 2016, 121, 1981-2003.	1.5	51
13	Orbital evidence for clay and acidic sulfate assemblages on Mars based on mineralogical analogs from Rio Tinto, Spain. Icarus, 2016, 275, 45-64.	1.1	16
14	Origin and significance of decameter-scale polygons in the lower Peace Vallis fan of Gale crater, Mars. Icarus, 2016, 277, 56-72.	1.1	15
15	Mineralogy, provenance, and diagenesis of a potassic basaltic sandstone on Mars: CheMin Xâ€ray diffraction of the Windjana sample (Kimberley area, Gale Crater). Journal of Geophysical Research E: Planets, 2016, 121, 75-106.	1.5	159
16	Evolution of Oxygenic Photosynthesis. Annual Review of Earth and Planetary Sciences, 2016, 44, 647-683.	4.6	334
17	Active neutron sensing of the Martian surface with the DAN experiment onboard the NASA â€œCuriosityâ€• Mars rover: Two types of soil with different water content in the gale crater. Astronomy Letters, 2016, 42, 251-259.	0.1	18
18	Aqueous history of Mars as inferred from landed mission measurements of rocks, soils, and water ice. Journal of Geophysical Research E: Planets, 2016, 121, 1602-1626.	1.5	18

#	Article	IF	Citations
19	Amazonian-aged fluvial system and associated ice-related features in Terra Cimmeria, Mars. Icarus, 2016, 277, 286-299.	1.1	25
20	Planetary Time Scale. , 2016, , 9-18.		0
21	Synthesis of akaganeite in the presence of sulfate: Implications for akaganeite formation in Yellowknife Bay, Gale Crater, Mars. Geochimica Et Cosmochimica Acta, 2016, 188, 284-296.	1.6	17
22	Hydrogen and chlorine abundances in the Kimberley formation of Gale crater measured by the DAN instrument on board the Mars Science Laboratory Curiosity rover. Journal of Geophysical Research E: Planets, 2016, 121, 836-845.	1.5	23
23	The stratigraphy and evolution of lower Mount Sharp from spectral, morphological, and thermophysical orbital data sets. Journal of Geophysical Research E: Planets, 2016, 121, 1713-1736.	1.5	123
24	Sequence and relative timing of large lakes in Gale crater (Mars) after the formation of Mount Sharp. Journal of Geophysical Research E: Planets, 2016, 121, 472-496.	1.5	72
25	Geochemistry and Mineralogy of Western Australian Salt Lake Sediments: Implications for Meridiani Planum on Mars. Astrobiology, 2016, 16, 525-538.	1.5	14
26	Mars: a small terrestrial planet. Astronomy and Astrophysics Review, 2016, 24, 1.	9.1	22
27	Styles of aqueous alteration on Mars. American Mineralogist, 2016, 101, 1925-1926.	0.9	0
28	The sustainability of habitability on terrestrial planets: Insights, questions, and needed measurements from Mars for understanding the evolution of Earthâ€like worlds. Journal of Geophysical Research E: Planets, 2016, 121, 1927-1961.	1.5	72
29	Advancing the search for extra-terrestrial genomes. , 2016, , .		12
30	MOMA: the challenge to search for organics and biosignatures on Mars. International Journal of Astrobiology, 2016, 15, 239-250.	0.9	52
31	Discordant Kâ€Ar and young exposure dates for the Windjana sandstone, Kimberley, Gale Crater, Mars. Journal of Geophysical Research E: Planets, 2016, 121, 2176-2192.	1.5	19
32	The potassic sedimentary rocks in Gale Crater, Mars, as seen by ChemCam on board Curiosity. Journal of Geophysical Research E: Planets, 2016, 121, 784-804.	1.5	67
33	Clay Minerals. Encyclopedia of Earth Sciences Series, 2016, , 1-11.	0.1	2
34	Orbital evidence for more widespread carbonateâ€bearing rocks on Mars. Journal of Geophysical Research E: Planets, 2016, 121, 652-677.	1.5	109
35	Characteristics of pebble and cobble-sized clasts along the Curiosity rover traverse from sol 100 to 750: Terrain types, potential sources, and transport mechanisms. Icarus, 2016, 280, 72-92.	1.1	19
36	Observations of an aeolian landscape: From surface to orbit in Gale Crater. Icarus, 2016, 280, 37-71.	1.1	85

#	Article	IF	Citations
37	Comparing orbiter and rover image-based mapping of an ancient sedimentary environment, Aeolis Palus, Gale crater, Mars. Icarus, 2016, 280, 3-21.	1.1	57
38	Silicic volcanism on Mars evidenced by tridymite in high-SiO ₂ sedimentary rock at Gale crater. Proceedings of the National Academy of Sciences of the United States of America, 2016, 113, 7071-7076.	3.3	158
39	Strongly seasonal Proterozoic glacial climate in low palaeolatitudes: Radically different climate system on the pre-Ediacaran Earth. Geoscience Frontiers, 2016, 7, 555-571.	4.3	34
40	Light and variable 37 Cl/ 35 Cl ratios in rocks from Gale Crater, Mars: Possible signature of perchlorate. Earth and Planetary Science Letters, 2016, 438, 14-24.	1.8	39
41	Transient reducing greenhouse warming on early Mars. Geophysical Research Letters, 2017, 44, 665-671.	1.5	178
42	Sorting out compositional trends in sedimentary rocks of the Bradbury group (Aeolis Palus), Gale crater, Mars. Journal of Geophysical Research E: Planets, 2017, 122, 295-328.	1.5	64
43	Communicating geomorphology through International English. Earth Surface Processes and Landforms, 2017, 42, 157-165.	1.2	4
44	Stability and fate of ferrihydrite during episodes of water/rock interactions on early Mars: An experimental approach. Journal of Geophysical Research E: Planets, 2017, 122, 358-382.	1.5	33
45	Low Hesperian P _{CO2} constrained from in situ mineralogical analysis at Gale Crater, Mars. Proceedings of the National Academy of Sciences of the United States of America, 2017, 114, 2166-2170.	3.3	59
46	Classification of igneous rocks analyzed by ChemCam at Gale crater, Mars. Icarus, 2017, 288, 265-283.	1.1	96
47	The nitrate/(per)chlorate relationship on Mars. Geophysical Research Letters, 2017, 44, 2643-2651.	1.5	49
48	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.	1.5	25
49	A 40,000 yr record of clay mineralogy at Lake Towuti, Indonesia: Paleoclimate reconstruction from reflectance spectroscopy and perspectives on paleolakes on Mars. Bulletin of the Geological Society of America, 2017, 129, 806-819.	1.6	16
50	Our changing view of Mars. Physics Today, 2017, 70, 34-41.	0.3	6
51	Biosignature Preservation and Detection in Mars Analog Environments. Astrobiology, 2017, 17, 363-400.	1.5	159
52	Relating geologic units and mobility system kinematics contributing to Curiosity wheel damage at Gale Crater, Mars. Journal of Terramechanics, 2017, 73, 73-93.	1.4	47
53	Evidence for hydraulic fracturing at Gale crater, Mars: Implications for burial depth of the Yellowknife Bay formation. Earth and Planetary Science Letters, 2017, 468, 72-84.	1.8	36
54	A rover's geologic field campaign: Exploration of the Kimberley by Curiosity. Journal of Geophysical Research E: Planets, 2017, 122, 680-684.	1.5	3

#	Article	IF	Citations
55	Mineralogy of an active eolian sediment from the Namib dune, Gale crater, Mars. Journal of Geophysical Research E: Planets, 2017, 122, 2344-2361.	1.5	98
56	APXSâ€derived chemistry of the Bagnold dune sands: Comparisons with Gale Crater soils and the global Martian average. Journal of Geophysical Research E: Planets, 2017, 122, 2623-2643.	1.5	62
58	Visible to near-infrared MSL/Mastcam multispectral imaging: Initial results from select high-interest science targets within Gale Crater, Mars. American Mineralogist, 2017, 102, 1202-1217.	0.9	43
59	Mineralogy and stratigraphy of the Gale crater rim, wall, and floor units. Journal of Geophysical Research E: Planets, 2017, 122, 1090-1118.	1.5	26
60	Mineralogy of an ancient lacustrine mudstone succession from the Murray formation, Gale crater, Mars. Earth and Planetary Science Letters, 2017, 471, 172-185.	1.8	247
61	The PanCam Instrument for the ExoMars Rover. Astrobiology, 2017, 17, 511-541.	1.5	55
62	Diagenetic silica enrichment and lateâ€stage groundwater activity in Gale crater, Mars. Geophysical Research Letters, 2017, 44, 4716-4724.	1.5	87
63	Redox stratification of an ancient lake in Gale crater, Mars. Science, 2017, 356, .	6.0	209
64	A terrestrial weathering and wind abrasion analog for mound and moat morphology of Gale crater, Mars. Geophysical Research Letters, 2017, 44, 4000-4007.	1.5	7
65	Chemistry, mineralogy, and grain properties at Namib and High dunes, Bagnold dune field, Gale crater, Mars: A synthesis of Curiosity rover observations. Journal of Geophysical Research E: Planets, 2017, 122, 2510-2543.	1.5	95
66	Alkali trace elements in Gale crater, Mars, with ChemCam: Calibration update and geological implications. Journal of Geophysical Research E: Planets, 2017, 122, 650-679.	1.5	48
67	Geologic overview of the Mars Science Laboratory rover mission at the Kimberley, Gale crater, Mars. Journal of Geophysical Research E: Planets, 2017, 122, 2-20.	1.5	60
68	Icy Mars lakes warmed by methane. Nature Geoscience, 2017, 10, 717-718.	5.4	12
69	Turbulent flow over craters on Mars: Vorticity dynamics reveal aeolian excavation mechanism. Physical Review E, 2017, 96, 043110.	0.8	11
70	Mineral paragenesis on Mars: The roles of reactive surface area and diffusion. Journal of Geophysical Research E: Planets, 2017, 122, 1855-1879.	1.5	5
71	In situ detection of boron by ChemCam on Mars. Geophysical Research Letters, 2017, 44, 8739-8748.	1.5	56
72	Spatial and spectral resolution of carbonaceous material from hematite (Î±-Fe₂O₃) using multivariate curve resolution-alternating least squares (MCR-ALS) with Raman microspectroscopic mapping: implications for the search for life on Mars. Analyst, The, 2017, 142, 3140-3156.	1.7	20
73	Habitability on Early Mars and the Search for Biosignatures with the ExoMars Rover. Astrobiology, 2017, 17, 471-510.	1.5	371

#	Article	IF	Citations
74	Zinc and germanium in the sedimentary rocks of Gale Crater on Mars indicate hydrothermal enrichment followed by diagenetic fractionation. Journal of Geophysical Research E: Planets, 2017, 122, 1747-1772.	1.5	42
75	Sedimentary processes of the Bagnold Dunes: Implications for the eolian rock record of Mars. Journal of Geophysical Research E: Planets, 2017, 122, 2544-2573.	1.5	83
76	Indexing of exoplanets in search for potential habitability: application to Mars-like worlds. Astrophysics and Space Science, 2017, 362, 1.	0.5	7
77	Sand Dune Encroachment and Desertification Processes of the Rigboland Sand Sea, Central Iran. Scientific Reports, 2017, 7, 1523.	1.6	26
78	Paleohydrology on Mars constrained by mass balance and mineralogy of preâ€Amazonian sodium chloride lakes. Journal of Geophysical Research E: Planets, 2017, 122, 1802-1823.	1.5	8
79	The Early Mars Climate System. , 2017, , 526-568.		9
80	The ADRON-RM Instrument Onboard the ExoMars Rover. Astrobiology, 2017, 17, 585-594.	1.5	17
81	Large sulfur isotope fractionations in Martian sediments at Gale crater. Nature Geoscience, 2017, 10, 658-662.	5.4	53
82	Interiors and Surfaces of Terrestrial Planets and Major Satellites. , 2017, , 1-25.		0
83	A warmer and wetter solution for early Mars and the challenges with transient warming. Icarus, 2017, 297, 71-82.	1.1	63
84	Multiple stages of aqueous alteration along fractures in mudstone and sandstone strata in Gale Crater, Mars. Earth and Planetary Science Letters, 2017, 471, 186-198.	1.8	137
85	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.	1.5	46
86	The WISDOM Radar: Unveiling the Subsurface Beneath the ExoMars Rover and Identifying the Best Locations for Drilling. Astrobiology, 2017, 17, 565-584.	1.5	50
87	Classification scheme for sedimentary and igneous rocks in Gale crater, Mars. Icarus, 2017, 284, 1-17.	1.1	46
88	Iron and oxygen isotope fractionation during iron UV photo-oxidation: Implications for early Earth and Mars. Earth and Planetary Science Letters, 2017, 458, 179-191.	1.8	50
89	Sedimentological evidence for a deltaic origin of the western fan deposit in Jezero crater, Mars and implications for future exploration. Earth and Planetary Science Letters, 2017, 458, 357-365.	1.8	128
90	An integrated model for dune morphology and sand fluxes on Mars. Earth and Planetary Science Letters, 2017, 457, 204-212.	1.8	42
91	Fluidized-sediment pipes in Gale crater, Mars, and possible Earth analogs. Geology, 2017, 45, 7-10.	2.0	18

#	Article	IF	Citations
92	Encounters with an unearthly mudstone: Understanding the first mudstone found on Mars. Sedimentology, 2017, 64, 311-358.	1.6	48
93	Regularization of Mars Reconnaissance Orbiter CRISM alongâ€track oversampled hyperspectral imaging observations of Mars. Icarus, 2017, 282, 136-151.	1.1	27
94	Evolved gas analyses of sedimentary rocks and eolian sediment in Gale Crater, Mars: Results of the Curiosity rover's sample analysis at Mars instrument from Yellowknife Bay to the Namib Dune. Journal of Geophysical Research E: Planets, 2017, 122, 2574-2609.	1.5	168
95	Curiosity Rover Mars Hand Lens Imager (MAHLI) Views of the Sediments and Sedimentary Rocks of Gale Crater, Mars. Microscopy and Microanalysis, 2017, 23, 2142-2143.	0.2	1
96	Remote Detection of Clay Minerals. Developments in Clay Science, 2017, 8, 482-514.	0.3	11
97	Quantitative Relief Models of Rock Surfaces on Mars at Sub-millimeter Scales from Mars Curiosity Rover Mars Hand Lens Imager (MAHLI) Observations: Geologic Implications. Microscopy and Microanalysis, 2017, 23, 2146-2147.	0.2	4
98	A Twoâ€Step Kâ€Ar Experiment on Mars: Dating the Diagenetic Formation of Jarosite from Amazonian Groundwaters. Journal of Geophysical Research E: Planets, 2017, 122, 2803-2818.	1.5	72
99	Determination of Geochemical Bio-Signatures in Mars-Like Basaltic Environments. Frontiers in Microbiology, 2017, 8, 1668.	1.5	15
100	Ancient Martian aeolian processes and palaeomorphology reconstructed from the Stimson formation on the lower slope of Aeolis Mons, Gale crater, Mars. Sedimentology, 2018, 65, 993-1042.	1.6	143
101	Early plants and the rise of mud. Science, 2018, 359, 994-995.	6.0	10
102	Assessment of Aeolis Palus stratigraphic relationships based on bench-forming strata in the Kylie and the Kimberley regions of Gale crater, Mars. Icarus, 2018, 309, 84-104.	1.1	15
103	Rapid sea level rise in the aftermath of a Neoproterozoic snowball Earth. Science, 2018, 360, 649-651.	6.0	37
104	Yâ€Mars: An Astrobiological Analogue of Martian Mudstone. Earth and Space Science, 2018, 5, 163-174.	1.1	14
105	The light-toned stratified sedimentary rock exposures in western Juventae Chasma, Mars, in context. Icarus, 2018, 312, 7-35.	1.1	4
106	The geological and climatological case for a warmer and wetter early Mars. Nature Geoscience, 2018, 11, 230-237.	5.4	116
107	The Coevolution of Life and Environment on Mars: An Ecosystem Perspective on the Robotic Exploration of Biosignatures. Astrobiology, 2018, 18, 1-27.	1.5	64
108	Compaction and sedimentary basin analysis on Mars. Planetary and Space Science, 2018, 152, 86-106.	0.9	11
109	A Field Guide to Finding Fossils on Mars. Journal of Geophysical Research E: Planets, 2018, 123, 1012-1040.	1.5	86

#	Article	IF	Citations
110	Mineralogic evidence for subglacial volcanism in the Sisyphi Montes region of Mars. Icarus, 2018, 311, 357-370.	1.1	21
111	Meteoric water alteration of soil and landscapes at Meridiani Planum, Mars. Earth and Planetary Science Letters, 2018, 488, 155-167.	1.8	12
112	Reactive transport and mass balance modeling of the Stimson sedimentary formation and altered fracture zones constrain diagenetic conditions at Gale crater, Mars. Earth and Planetary Science Letters, 2018, 491, 1-10.	1.8	27
113	Chemical variability in mineralized veins observed by ChemCam on the lower slopes of Mount Sharp in Gale crater, Mars. Icarus, 2018, 311, 69-86.	1.1	34
114	Shaler: inÂsitu analysis of a fluvial sedimentary deposit on Mars. Sedimentology, 2018, 65, 96-122.	1.6	59
115	Prior indigenous technological species. International Journal of Astrobiology, 2018, 17, 96-100.	0.9	17
116	Stepped fans and facies-equivalent phyllosilicates in Coprates Catena, Mars. Icarus, 2018, 307, 260-280.	1.1	9
117	The Mars Science Laboratory (MSL) Bagnold Dunes Campaign, Phase I: Overview and introduction to the special issue. Journal of Geophysical Research E: Planets, 2018, 123, 3-19.	1.5	62
118	Demonstrating deep biosphere activity in the geological record of lake sediments, on Earth and Mars. International Journal of Astrobiology, 2018, 17, 380-385.	0.9	2
119	Fluvial stratigraphy of valley fills at Aeolis Dorsa, Mars: Evidence for base-level fluctuations controlled by a downstream water body. Bulletin of the Geological Society of America, 2018, 130, 484-498.	1.6	44
120	Gypsum, bassanite, and anhydrite at Gale crater, Mars. American Mineralogist, 2018, 103, 1011-1020.	0.9	96
121	Desiccation cracks provide evidence of lake drying on Mars, Sutton Island member, Murray formation, Gale Crater. Geology, 2018, 46, 515-518.	2.0	71
122	An Orbital Window into the Ancient Sunâ€™s Mass. Astrophysical Journal Letters, 2018, 869, L19.	3.0	12
123	Autonomous Regolith Extraction Using Real-Time Diagnostics and Dynamic Plan Execution for 1 Meter Class Interplanetary Rotary-Percussive Drills. , 2018, , .		4
124	Methane on Mars and Habitability: Challenges and Responses. Astrobiology, 2018, 18, 1221-1242.	1.5	50
125	Syndepositional precipitation of calcium sulfate in Gale Crater, Mars. Terra Nova, 2018, 30, 431-439.	0.9	35
126	Mars-Relevant Field Experiences in Morocco: The Importance of Spatial Scales and Subsurface Exploration. Astrobiology, 2018, 18, 1329-1350.	1.5	5
127	Dust Production by Abrasion of Eolian Basalt Sands: Analogue for Martian Dust. Journal of Geophysical Research E: Planets, 2018, 123, 2713-2731.	1.5	9

#	Article	IF	Citations
128	Chlorate/Feâ€Bearing Phase Mixtures as a Possible Source of Oxygen and Chlorine Detected by the Sample Analysis at Mars Instrument in Gale Crater, Mars. Journal of Geophysical Research E: Planets, 2018, 123, 2920-2938.	1.5	26
129	Interiors and Surfaces of Terrestrial Planets and Major Satellites. , 2018, , 141-166.		0
130	Survivability of 1â€Chloronapthalene During Simulated Early Diagenesis: Implications for Chlorinated Hydrocarbon Detection on Mars. Journal of Geophysical Research E: Planets, 2018, 123, 2790-2802.	1.5	6
131	Chemical Diversity of Sands Within the Linear and Barchan Dunes of the Bagnold Dunes, Gale Crater, as Revealed by APXS Onboard Curiosity. Geophysical Research Letters, 2018, 45, 9460-9470.	1.5	21
132	Major Volatiles Evolved From Eolian Materials in Gale Crater. Geophysical Research Letters, 2018, 45, 10,240.	1.5	19
133	Microterracettes in Sabkha Oum Dba (Western Sahara, Morocco): Physical and Biological Interactions in the Formation of a Surface Micromorphology. Astrobiology, 2018, 18, 1351-1367.	1.5	7
134	Dusty Rocks in Gale Crater: Assessing Areal Coverage and Separating Dust and Rock Contributions in APXS Analyses. Journal of Geophysical Research E: Planets, 2018, 123, 1649-1673.	1.5	25
135	Episodic and Declining Fluvial Processes in Southwest Melas Chasma, Valles Marineris, Mars. Journal of Geophysical Research E: Planets, 2018, 123, 2527-2549.	1.5	18
136	Geological Analysis of Martian Roverâ€Derived Digital Outcrop Models Using the 3â€D Visualization Tool, Planetary Robotics 3â€D Viewerâ€"PRo3D. Earth and Space Science, 2018, 5, 285-307.	1.1	28
137	The Density of the Medusae Fossae Formation: Implications for its Composition, Origin, and Importance in Martian History. Journal of Geophysical Research E: Planets, 2018, 123, 1368-1379.	1.5	31
138	Observed diurnal variations in Mars Science Laboratory Dynamic Albedo of Neutrons passive mode data. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 2018, 892, 70-83.	0.7	0
139	Clinoforms and clinoform systems: Review and dynamic classification scheme for shorelines, subaqueous deltas, shelf edges and continental margins. Earth-Science Reviews, 2018, 185, 202-233.	4.0	155
140	In Situ Analysis of Opal in Gale Crater, Mars. Journal of Geophysical Research E: Planets, 2018, 123, 1955-1972.	1.5	36
141	Branching geometry of valley networks on Mars and Earth and its implications for early Martian climate. Science Advances, 2018, 4, eaar6692.	4.7	28
142	Coarse Sediment Transport in the Modern Martian Environment. Journal of Geophysical Research E: Planets, 2018, 123, 1380-1394.	1.5	44
143	Complex bedding geometry in the upper portion of Aeolis Mons, Gale crater, Mars. Icarus, 2018, 314, 246-264.	1.1	20
144	The Microbial Community of a Terrestrial Anoxic Inter-Tidal Zone: A Model for Laboratory-Based Studies of Potentially Habitable Ancient Lacustrine Systems on Mars. Microorganisms, 2018, 6, 61.	1.6	7
145	Magnetite authigenesis and the warming of early Mars. Nature Geoscience, 2018, 11, 635-639.	5.4	66

#	Article	IF	Citations
146	Sand Grain Sizes and Shapes in Eolian Bedforms at Gale Crater, Mars. Geophysical Research Letters, 2018, 45, 9471-9479.	1.5	71
147	Nitrate-Dependent Iron Oxidation: A Potential Mars Metabolism. Frontiers in Microbiology, 2018, 9, 513.	1.5	46
148	Remote Detection of Phyllosilicates on Mars and Implications for Climate and Habitability. , 2018, , 37-75.		15
149	Martian Habitability as Inferred From Landed Mission Observations. , 2018, , 77-126.		5
150	The NASA Mars 2020 Rover Mission and the Search for Extraterrestrial Life. , 2018, , 275-308.		95
151	Concluding Remarks: Bridging Strategic Knowledge Gaps in the Search for Biosignatures on Marsâ€”A Blueprint â˜†. , 2018, , 349-360.		0
152	Dark Dunes of Mars. , 2018, , 317-360.		2
153	The Hypanis Valles delta: The last highstand of a sea on early Mars?. Earth and Planetary Science Letters, 2018, 500, 225-241.	1.8	41
154	Clay mineral diversity and abundance in sedimentary rocks of Gale crater, Mars. Science Advances, 2018, 4, eaar3330.	4.7	150
155	Organic matter preserved in 3-billion-year-old mudstones at Gale crater, Mars. Science, 2018, 360, 1096-1101.	6.0	369
156	In a PICL: The sedimentary deposits and facies of perennially iceâ€covered lakes. Sedimentology, 2019, 66, 917-939.	1.6	7
157	How to Search for Life in Martian Chemical Sediments and Their Fluid and Solid Inclusions Using Petrographic and Spectroscopic Methods. Frontiers in Environmental Science, 2019, 7, .	1.5	23
158	Do Deltas Along the Crustal Dichotomy Boundary of Mars in the Gale Crater Region Record a Northern Ocean?. Geophysical Research Letters, 2019, 46, 8689-8699.	1.5	29
159	Follow the Oxygen: Comparative Histories of Planetary Oxygenation and Opportunities for Aerobic Life. Astrobiology, 2019, 19, 811-824.	1.5	17
160	Detectability of biosignatures in a low-biomass simulation of martian sediments. Scientific Reports, 2019, 9, 9706.	1.6	19
161	In Situ Geochronology on Mars and the Development of Future Instrumentation. Astrobiology, 2019, 19, 1303-1314.	1.5	15
162	Paleo-Rock-Hosted Life on Earth and the Search on Mars: A Review and Strategy for Exploration. Astrobiology, 2019, 19, 1230-1262.	1.5	62
163	Field and laboratory validation of remote rover operations Science Team findings: The CanMars Mars Sample Return analogue mission. Planetary and Space Science, 2019, 176, 104682.	0.9	7

#	Article	IF	Citations
164	Evidence for Late Alluvial Activity in Gale Crater, Mars. Geophysical Research Letters, 2019, 46, 7287-7294.	1.5	24
165	A Diverse Array of Fluvial Depositional Systems in Arabia Terra: Evidence for midâ€Noachian to Early Hesperian Rivers on Mars. Journal of Geophysical Research E: Planets, 2019, 124, 1913-1934.	1.5	48
166	Extensive Polygonal Fracture Network in Siccar Point group Strata: Fracture Mechanisms and Implications for Fluid Circulation in Gale Crater, Mars. Journal of Geophysical Research E: Planets, 2019, 124, 2613-2634.	1.5	16
167	Chlorate as a Potential Oxidant on Mars: Rates and Products of Dissolved Fe(II) Oxidation. Journal of Geophysical Research E: Planets, 2019, 124, 2893-2916.	1.5	33
168	The Climates of Other Worlds: A Review of the Emerging Field of Exoplanet Climatology^{âˆ—}. Astrophysical Journal, Supplement Series, 2019, 243, 30.	3.0	27
169	Semiarid climate and hyposaline lake on early Mars inferred from reconstructed water chemistry at Gale. Nature Communications, 2019, 10, 4896.	5.8	49
170	Model for the Formation of Singleâ€Thread Rivers in Barren Landscapes and Implications for Preâ€Silurian and Martian Fluvial Deposits. Journal of Geophysical Research F: Earth Surface, 2019, 124, 2757-2777.	1.0	35
171	Mars Science Laboratory Observations of Chloride Salts in Gale Crater, Mars. Geophysical Research Letters, 2019, 46, 10754-10763.	1.5	52
172	An interval of high salinity in ancient Gale crater lake on Mars. Nature Geoscience, 2019, 12, 889-895.	5.4	105
173	Mineralâ€Filled Fractures as Indicators of Multigenerational Fluid Flow in the Pahrump Hills Member of the Murray Formation, Gale Crater, Mars. Earth and Space Science, 2019, 6, 238-265.	1.1	66
174	A surface gravity traverse on Mars indicates low bedrock density at Gale crater. Science, 2019, 363, 535-537.	6.0	49
175	Quantitative Highâ€Resolution Reexamination of a Hypothesized Ocean Shoreline in Cydonia Mensae on Mars. Journal of Geophysical Research E: Planets, 2019, 124, 316-336.	1.5	18
176	Geologic Constraints on Early Mars Climate. Space Science Reviews, 2019, 215, 1.	3.7	85
177	Tectonic evolution of Juventae Chasma, Mars, and the deformational and depositional structural attributes of the four major light-toned rock exposures therein. Icarus, 2019, 333, 199-233.	1.1	12
178	Morphodynamics of meandering streams devoid of plant life: Amargosa River, Death Valley, California. Bulletin of the Geological Society of America, 2019, 131, 782-802.	1.6	25
179	New Constraints on Early Mars Weathering Conditions From an Experimental Approach on Crust Simulants. Journal of Geophysical Research E: Planets, 2019, 124, 1783-1801.	1.5	9
180	Mars Science Laboratory Dynamic Albedo of Neutrons passive mode data and results from sols 753 to 1292: Pahrump Hills to Naukluft Plateau. Icarus, 2019, 330, 75-90.	1.1	4
181	The effect of solution chemistries and freezing temperatures on the morphology of cryogenic opal-A (COA): Implications for past climates on Mars. Chemical Geology, 2019, 519, 56-67.	1.4	5

#	Article	IF	Citations
182	Morphological Biosignatures in Volcanic Rocks â€“ Applications for Life Detection on Mars. Frontiers in Earth Science, 2019, 7, .	0.8	7
183	How Much of the Sediment in Gale Crater's Central Mound Was Fluvially Transported?. Geophysical Research Letters, 2019, 46, 5092-5099.	1.5	6
184	Distribution of primary and secondary features in the Pahrump Hills outcrop (Gale crater, Mars) as seen in a Mars Descent Imager (MARDI) â€œsidewalkâ€•mosaic. Icarus, 2019, 328, 194-209.	1.1	19
185	The potential science and engineering value of samples delivered to Earth by Mars sample return. Meteoritics and Planetary Science, 2019, 54, S3.	0.7	73
186	Persistence of intense, climate-driven runoff late in Mars history. Science Advances, 2019, 5, eaav7710.	4.7	49
187	The Deposition and Alteration History of the Northeast Syrtis Major Layered Sulfates. Journal of Geophysical Research E: Planets, 2019, 124, 1743-1782.	1.5	12
188	Testing the impact heating hypothesis for early Mars with a 3-D global climate model. Icarus, 2019, 330, 169-188.	1.1	23
189	Bacillus subtilis Spore Resistance to Simulated Mars Surface Conditions. Frontiers in Microbiology, 2019, 10, 333.	1.5	44
190	Elemental Analyses of Mars from Rovers Using the Alpha-Particle X-Ray Spectrometer. , 2019, , 555-572.		5
191	Elemental Analyses of Mars from Rovers with Laser-Induced Breakdown Spectroscopy by ChemCam and SuperCam. , 2019, , 573-587.		0
192	Ancient Stratigraphy Preserving a Wetâ€toâ€Dry, Fluvioâ€Lacustrine to Aeolian Transition Near Barth Crater, Arabia Terra, Mars. Journal of Geophysical Research E: Planets, 2019, 124, 3402-3421.	1.5	17
193	The Hydrology of Mars Including a Potential Cryosphere. , 2019, , 185-246.		7
194	Conclusions and Implications for Habitability of the Martian Crust. , 2019, , 393-399.		0
195	Late-stage diagenetic concretions in the Murray formation, Gale crater, Mars. Icarus, 2019, 321, 866-890.	1.1	50
196	Abiotic Input of Fixed Nitrogen by Bolide Impacts to Gale Crater During the Hesperian: Insights From the Mars Science Laboratory. Journal of Geophysical Research E: Planets, 2019, 124, 94-113.	1.5	23
197	Copper enrichments in the Kimberley formation in Gale crater, Mars: Evidence for a Cu deposit at the source. Icarus, 2019, 321, 736-751.	1.1	23
198	Sulfur cycle in the Valles Caldera volcanic complex, New Mexico â€“ Letter 1: Sulfate sources in aqueous system, and implications for S isotope record in Gale Crater on Mars. Earth and Planetary Science Letters, 2019, 506, 540-551.	1.8	6
199	Chemical alteration of fine-grained sedimentary rocks at Gale crater. Icarus, 2019, 321, 619-631.	1.1	52

#	Article	IF	Citations
200	Evidence for plunging river plume deposits in the Pahrump Hills member of the Murray formation, Gale crater, Mars. Sedimentology, 2019, 66, 1768-1802.	1.6	80
201	Alteration trends and geochemical source region characteristics preserved in the fluviolacustrine sedimentary record of Gale crater, Mars. Geochimica Et Cosmochimica Acta, 2019, 246, 234-266.	1.6	39
202	Using ChemCam LIBS data to constrain grain size in rocks on Mars: Proof of concept and application to rocks at Yellowknife Bay and Pahrump Hills, Gale crater. Icarus, 2019, 321, 82-98.	1.1	37
203	The Sedimentary Cycle on Early Mars. Annual Review of Earth and Planetary Sciences, 2019, 47, 91-118.	4.6	59
204	Ries impact crater sedimentary conglomerates: Sedimentary particle 'impact pre-processing', transport distances and provenance, and implications for Gale crater conglomerates, Mars. Icarus, 2019, 321, 531-549.	1.1	6
205	The environmental effects of very large bolide impacts on early Mars explored with a hierarchy of numerical models. Icarus, 2020, 335, 113419.	1.1	30
206	The Silurian red beds of Tarim Basin: Signals of palaeoenvironment, palaeoclimate, and seaâ€level change. Geological Journal, 2020, 55, 3837-3856.	0.6	4
207	Potential aeolian deposition of intra-crater layering: A case study of Henry crater, Mars. Bulletin of the Geological Society of America, 2020, 132, 608-616.	1.6	19
208	Scarp orientation in regions of active aeolian erosion on Mars. Icarus, 2020, 335, 113384.	1.1	7
209	Geological appraisals of core samples using the ExoMars 2020 rover instrumentation. Planetary and Space Science, 2020, 180, 104743.	0.9	4
210	Crust stratigraphy and heterogeneities of the first kilometers at the dichotomy boundary in western Elysium Planitia and implications for InSight lander. Icarus, 2020, 338, 113511.	1.1	40
211	Subsistence of ice-covered lakes during the Hesperian at Gale crater, Mars. Icarus, 2020, 338, 113495.	1.1	12
212	Characterizing the Mineral Assemblages of Hot Spring Environments and Applications to Mars Orbital Data. Astrobiology, 2020, 20, 453-474.	1.5	8
213	Lava filling of Gale crater from Tyrrhenus Mons on Mars. Journal of Volcanology and Geothermal Research, 2020, 389, 106743.	0.8	10
214	3D digital outcrop model reconstruction of the Kimberley outcrop (Gale crater, Mars) and its integration into Virtual Reality for simulated geological analysis. Planetary and Space Science, 2020, 182, 104808.	0.9	27
215	Extraformational sediment recycling on Mars. , 2020, 16, 1508-1537.		20
216	Digital Elevation Models for topographic characterisation and flood flow modelling along low-gradient, terminal dryland rivers: A comparison of spaceborne datasets for the RÃo Colorado, Bolivia. Journal of Hydrology, 2020, 591, 125617.	2.3	14
217	Oceans, Lakes, and Stromatolites on Mars. Advances in Astronomy, 2020, 2020, 1-15.	0.5	6

#	Article	IF	Citations
218	Constraining Ancient Magmatic Evolution on Mars Using Crystal Chemistry of Detrital Igneous Minerals in the Sedimentary Bradbury Group, Gale Crater, Mars. Journal of Geophysical Research E: Planets, 2020, 125, e2020JE006467.	1.5	20
219	Engraved on the rocksâ€"Aeolian abrasion of Martian mudstone exposures and their relationship to modern wind patterns in Gale Crater, Mars. Depositional Record, 2020, 6, 625-647.	0.8	9
220	Deposits from giant floods in Gale crater and their implications for the climate of early Mars. Scientific Reports, 2020, 10, 19099.	1.6	6
221	Diverse Polygonal Patterned Grounds in the Northern Eridania Basin, Mars: Possible Origins and Implications. Journal of Geophysical Research E: Planets, 2020, 125, e2020JE006647.	1.5	5
222	PIXL: Planetary Instrument for X-Ray Lithochemistry. Space Science Reviews, 2020, 216, 1.	3.7	58
224	Analyses of Highâ€Iron Sedimentary Bedrock and Diagenetic Features Observed With ChemCam at Vera Rubin Ridge, Gale Crater, Mars: Calibration and Characterization. Journal of Geophysical Research E: Planets, 2020, 125, e2019JE006314.	1.5	30
225	Groundwater Flow to Gale Crater in an Episodically Warm Climate. Journal of Geophysical Research E: Planets, 2020, 125, e2020JE006397.	1.5	6
226	Evidence for a Diagenetic Origin of Vera Rubin Ridge, Gale Crater, Mars: Summary and Synthesis of Curiosity's Exploration Campaign. Journal of Geophysical Research E: Planets, 2020, 125, e2020JE006527.	1.5	69
227	Synergistic Ground and Orbital Observations of Iron Oxides on Mt. Sharp and Vera Rubin Ridge. Journal of Geophysical Research E: Planets, 2020, 125, e2019JE006294.	1.5	27
228	Elemental Composition and Chemical Evolution of Geologic Materials in Gale Crater, Mars: APXS Results From Bradbury Landing to the Vera Rubin Ridge. Journal of Geophysical Research E: Planets, 2020, 125, e2020JE006536.	1.5	33
229	Cometary Glycolaldehyde as a Source of pre-RNA Molecules. Astrobiology, 2020, 20, 1377-1388.	1.5	16
230	Coupling Mars Ground and Orbital Views: Generate Viewsheds of Mastcam Images From the Curiosity Rover, Using ArcGISÂ® and Public Datasets. Earth and Space Science, 2020, 7, e2020EA001247.	1.1	5
231	APXSâ€Derived Compositional Characteristics of Vera Rubin Ridge and Murray Formation, Gale Crater, Mars: Geochemical Implications for the Origin of the Ridge. Journal of Geophysical Research E: Planets, 2020, 125, e2019JE006319.	1.5	31
232	Diagenesis of Vera Rubin Ridge, Gale Crater, Mars, From Mastcam Multispectral Images. Journal of Geophysical Research E: Planets, 2020, 125, e2019JE006322.	1.5	33
233	Spectral, Compositional, and Physical Properties of the Upper Murray Formation and Vera Rubin Ridge, Gale Crater, Mars. Journal of Geophysical Research E: Planets, 2020, 125, e2019JE006290.	1.5	20
234	Iron Mobility During Diagenesis at Vera Rubin Ridge, Gale Crater, Mars. Journal of Geophysical Research E: Planets, 2020, 125, e2019JE006299.	1.5	30
235	Boron and Lithium in Calcium Sulfate Veins: Tracking Precipitation of Diagenetic Materials in Vera Rubin Ridge, Gale Crater. Journal of Geophysical Research E: Planets, 2020, 125, e2019JE006301.	1.5	8
236	Predicting the Mechanical and Fracture Properties of Mars Analog Sedimentary Lithologies. Earth and Space Science, 2020, 7, e2019EA000926.	1.1	2

#	Article	IF	Citations
237	Chance played a role in determining whether Earth stayed habitable. Communications Earth & Environment, 2020, 1, .	2.6	7
238	Radiometric Calibration Targets for the Mastcam-Z Camera on the Mars 2020 Rover Mission. Space Science Reviews, 2020, 216, 1.	3.7	27
239	A look back, part II: The drilling campaign of the Curiosity rover during the Mars Science Laboratory's second and third martian years. Icarus, 2020, 350, 113885.	1.1	4
240	Structural analysis of sulfate vein networks in Gale crater (Mars). Journal of Structural Geology, 2020, 137, 104083.	1.0	10
241	Hydrous olivine alteration on Mars and Earth. Meteoritics and Planetary Science, 2020, 55, 1011-1030.	0.7	7
242	Mineralogy of Vera Rubin Ridge From the Mars Science Laboratory CheMin Instrument. Journal of Geophysical Research E: Planets, 2020, 125, e2019JE006306.	1.5	86
243	Origin and composition of three heterolithic boulder- and cobble-bearing deposits overlying the Murray and Stimson formations, Gale Crater, Mars. Icarus, 2020, 350, 113897.	1.1	11
244	Hydrothermal Precipitation of Sanidine (Adularia) Having Full Al,Si Structural Disorder and Specular Hematite at Maunakea Volcano (Hawai'i) and at Gale Crater (Mars). Journal of Geophysical Research E: Planets, 2020, 125, e2019JE006324.	1.5	14
245	A Lacustrine Paleoenvironment Recorded at Vera RubinRidge, Gale Crater: Overview of the Sedimentology and Stratigraphy Observed by the Mars ScienceLaboratory Curiosity Rover. Journal of Geophysical Research E: Planets, 2020, 125, e2019JE006307.	1.5	69
246	Is a Linear or a Walkabout Protocol More Efficient When Using a Rover to Choose Biologically Relevant Samples in a Small Region of Interest?. Astrobiology, 2020, 20, 327-348.	1.5	5
247	Why should geological criteria used on Earth not be valid also for Mars? Evidence of possible microbialites and algae in extinct Martian lakes. International Journal of Astrobiology, 2020, 19, 283-294.	0.9	9
248	Coupling early Mars with climate cycling: The effect of<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline" id="d1e688" altimg="si136.svg"><mml:mrow><mml:mi>C</mml:mi><mml:msub><mml:mrow><mml:mi>O</mml:mi></mml:mrow><mml:mrow><m xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline" id="d1e701" altimg="si135.svg"><mml:msub><mml:mrow><mml:mi>H</mml:mi></mml:mrow><mml:mrow><mml:mn>2</mml:mn></mml:mrow> Icarus, 2020, 345, 113770.	1.1	18
249	Climate Simulations of Early Mars With Estimated Precipitation, Runoff, and Erosion Rates. Journal of Geophysical Research E: Planets, 2020, 125, e2019JE006160.	1.5	36
250	Paleolakes in the Northwest Hellas Region, Mars: Implications for the Regional Geologic History and Paleoclimate. Journal of Geophysical Research E: Planets, 2020, 125, e2019JE006196.	1.5	13
251	Quantitative assessment of water content and mineral abundances at Gale crater on Mars with orbital observations. Astronomy and Astrophysics, 2020, 637, A79.	2.1	1
252	Evidence for Multiple Diagenetic Episodes in Ancient Fluvialâ€Lacustrine Sedimentary Rocks in Gale Crater, Mars. Journal of Geophysical Research E: Planets, 2020, 125, e2019JE006295.	1.5	45
253	The Chemostratigraphy of the Murray Formation and Role of Diagenesis at Vera Rubin Ridge in Gale Crater, Mars, as Observed by the ChemCam Instrument. Journal of Geophysical Research E: Planets, 2020, 125, e2019JE006320.	1.5	41
254	Assessment of water content in martian subsurface along the traverse of the Curiosity rover based on passive measurements of the DAN instrument. Icarus, 2020, 346, 113818.	1.1	7

#	Article	IF	Citations
255	The origin of life as a planetary phenomenon. Science Advances, 2020, 6, eaax3419.	4.7	111
256	What Is Lifeâ€”and When Do We Search for It on Other Worlds. Astrobiology, 2020, 20, 163-166.	1.5	12
257	Thiophenes on Mars: Biotic or Abiotic Origin?. Astrobiology, 2020, 20, 552-561.	1.5	20
258	Grain Size Variations in the Murray Formation: Stratigraphic Evidence for Changing Depositional Environments in Gale Crater, Mars. Journal of Geophysical Research E: Planets, 2020, 125, e2019JE006230.	1.5	29
259	Geochemical variation in the Stimson formation of Gale crater: Provenance, mineral sorting, and a comparison with modern Martian dunes. Icarus, 2020, 341, 113622.	1.1	31
260	Mineralogy and geochemistry of sedimentary rocks and eolian sediments in Gale crater, Mars: A review after six Earth years of exploration with Curiosity. Chemie Der Erde, 2020, 80, 125605.	0.8	137
261	Ichnofossils, Cracks or Crystals? A Test for Biogenicity of Stick-Like Structures from Vera Rubin Ridge, Mars. Geosciences (Switzerland), 2020, 10, 39.	1.0	7
262	Identification and Description of a Silicic Volcaniclastic Layer in Gale Crater, Mars, Using Active Neutron Interrogation. Journal of Geophysical Research E: Planets, 2020, 125, e2019JE006180.	1.5	16
263	Reevaluation of Perchlorate in Gale Crater Rocks Suggests Geologically Recent Perchlorate Addition. Journal of Geophysical Research E: Planets, 2020, 125, e2019JE006156.	1.5	10
264	Evidence for Adsorption of Chlorine Species on Iron (III) (Hydr)oxides in the Sheepbed Mudstone, Gale Crater, Mars. Journal of Geophysical Research E: Planets, 2020, 125, e2019JE006220.	1.5	6
265	Hydrogen Variability in the Murray Formation, Gale Crater, Mars. Journal of Geophysical Research E: Planets, 2020, 125, e2019JE006289.	1.5	12
266	Regional Structural Orientation of the Mount Sharp Group Revealed by In Situ Dip Measurements and Stratigraphic Correlations on the Vera Rubin Ridge. Journal of Geophysical Research E: Planets, 2020, 125, e2019JE006298.	1.5	26
267	Clinoforms and clinothems: Fundamental elements of basin infill. Basin Research, 2020, 32, 187-205.	1.3	45
268	The Pace of Fluvial Meanders on Mars and Implications for the Western Delta Deposits of Jezero Crater. AGU Advances, 2020, 1, e2019AV000141.	2.3	31
269	The Absence of an Ocean and the Fate of Water all Over the Martian History. Earth and Space Science, 2020, 7, e2019EA001031.	1.1	11
270	Aram Dorsum: An Extensive Midâ€Noachian Age Fluvial Depositional System in Arabia Terra, Mars. Journal of Geophysical Research E: Planets, 2020, 125, e2019JE006244.	1.5	19
271	Deposition and erosion of a Light-Toned Yardang-forming unit of Mt Sharp, Gale crater, Mars. Earth and Planetary Science Letters, 2021, 554, 116681.	1.8	13
272	Contemporary Liquid Water on Mars?. Annual Review of Earth and Planetary Sciences, 2021, 49, 141-171.	4.6	10

#	Article	IF	Citations
273	Billion-year exposure ages in Gale crater (Mars) indicate Mount Sharp formed before the Amazonian period. Earth and Planetary Science Letters, 2021, 554, 116667.	1.8	4
274	Formation of Tridymite and Evidence for a Hydrothermal History at Gale Crater, Mars. Journal of Geophysical Research E: Planets, 2021, 126, e2020JE006569.	1.5	21
275	Approaches to Paleoclimate Reconstruction. , 2021, , 299-308.		0
276	Life analog sites for Mars from early Earth: diverse habitats from the Pilbara Craton and Mount Bruce Supergroup, Western Australia. , 2021, , 357-403.		3
277	Outflow channels on Mars. , 2021, , 13-40.		1
278	Resolving Martian enigmas, discovering new ones: the case ofÂCuriosity and Gale crater. , 2021, , 1-10.		0
279	Beta-FeOOH nanoparticles: a promising nano-based material for water treatment and remediation. Journal of Nanoparticle Research, 2021, 23, 1.	0.8	16
280	InCorr: Interactive Data-Driven Correlation Panels for Digital Outcrop Analysis. IEEE Transactions on Visualization and Computer Graphics, 2021, 27, 755-764.	2.9	1
281	Artificial Maturation of Iron- and Sulfur-Rich Mars Analogues: Implications for the Diagenetic Stability of Biopolymers and Their Detection with Pyrolysisâ€“Gas Chromatographyâ€“Mass Spectrometry. Astrobiology, 2021, 21, 199-218.	1.5	5
282	Sourceâ€toâ€Sink Terrestrial Analogs for the Paleoenvironment of Gale Crater, Mars. Journal of Geophysical Research E: Planets, 2021, 126, e2020JE006530.	1.5	15
283	Updated Perspectives and Hypotheses on the Mineralogy of Lower Mt. Sharp, Mars, as Seen From Orbit. Journal of Geophysical Research E: Planets, 2021, 126, e2020JE006372.	1.5	21
284	The Mars 2020 Perseverance Rover Mast Camera Zoom (Mastcam-Z) Multispectral, Stereoscopic Imaging Investigation. Space Science Reviews, 2021, 217, 24.	3.7	76
285	In search of the RNA world on Mars. Geobiology, 2021, 19, 307-321.	1.1	9
286	Origin of the degassing pipes at the Ries impact structure and implications for impactâ€induced alteration on Mars and other planetary bodies. Meteoritics and Planetary Science, 2021, 56, 404-422.	0.7	4
287	Thermodynamic Constraints on Smectite and Iron Oxide Formation at Gale Crater, Mars: Insights into Potential Free Energy from Aerobic Fe Oxidation in Lake Waterâ€“Groundwater Mixing Zone. Minerals (Basel, Switzerland), 2021, 11, 341.	0.8	4
288	Analyzing Low Frequency Seismic Events at Cerberus Fossae as Long Period Volcanic Quakes. Journal of Geophysical Research E: Planets, 2021, 126, e2020JE006518.	1.5	19
289	Xâ€Ray Amorphous Components in Sedimentary Rocks of Gale Crater, Mars: Evidence for Ancient Formation and Longâ€Lived Aqueous Activity. Journal of Geophysical Research E: Planets, 2021, 126, e2020JE006782.	1.5	22
290	Was Gale Crater (Mars) Connected to a Regionally Extensive Groundwater System?. Geophysical Research Letters, 2021, 48, e2020GL092107.	1.5	3

#	Article	IF	Citations
292	The Mars Orbiter for Resources, Ices, and Environments (MORIE) Science Goals and Instrument Trades in Radar, Imaging, and Spectroscopy. Planetary Science Journal, 2021, 2, 76.	1.5	2
293	A Rock Record of Complex Aeolian Bedforms in a Hesperian Desert Landscape: The Stimson Formation as Exposed in the Murray Buttes, Gale Crater, Mars. Journal of Geophysical Research E: Planets, 2021, 126, e2020JE006554.	1.5	34
294	Long-term drying of Mars by sequestration of ocean-scale volumes of water in the crust. Science, 2021, 372, 56-62.	6.0	73
295	Spectroscopic detection of microbial colonization in Antarctic sandstone. Antarctic Science, 0, , 1-8.	0.5	0
296	An experimental study of photo-oxidation of Fe(II): Implications for the formation of Fe(III) (hydro)oxides on early Mars and Earth. Geochimica Et Cosmochimica Acta, 2021, 299, 35-51.	1.6	16
297	Voluminous Silica Precipitated from Martian Waters during Late-stage Aqueous Alteration. Planetary Science Journal, 2021, 2, 65.	1.5	13
298	A Volcanic Ash Layer in the NÃ¶rdlinger Ries Impact Structure (Miocene, Germany): Indication of Crater Fill Geometry and Origins of Longâ€Term Crater Floor Sagging. Journal of Geophysical Research E: Planets, 2021, 126, e2020JE006764.	1.5	10
299	DISSOLUTION RATES OF ALLOPHANE WITH VARIABLE Fe CONTENTS: IMPLICATIONS FOR AQUEOUS ALTERATION AND THE PRESERVATION OF X-RAY AMORPHOUS MATERIALS ON MARS. Clays and Clay Minerals, 2021, 69, 263-288.	0.6	9
300	Alternating wet and dry depositional environments recorded in the stratigraphy of Mount Sharp at Gale crater, Mars. Geology, 2021, 49, 842-846.	2.0	33
301	The Hydrogeomorphic History of Garu Crater: Implications and Constraints on the Timing of Large Lateâ€Stage Lakes in the Gale Crater Region. Journal of Geophysical Research E: Planets, 2021, 126, e2020JE006688.	1.5	3
302	Diagenesis Revealed by Fineâ€Scale Features at Vera Rubin Ridge, Gale Crater, Mars. Journal of Geophysical Research E: Planets, 2021, 126, e2019JE006311.	1.5	7
303	Quantifying Preservation Potential: Lipid Degradation in a Mars-Analog Circumneutral Iron Deposit. Astrobiology, 2021, 21, 638-654.	1.5	4
304	Thermophysical Properties and Surface Heterogeneity of Landing Sites on Mars From Overlapping Thermal Emission Imaging System (THEMIS) Observations. Journal of Geophysical Research E: Planets, 2021, 126, e2020JE006713.	1.5	13
305	Long-lasting habitable periods in Gale crater constrained by glauconitic clays. Nature Astronomy, 2021, 5, 936-942.	4.2	11
306	Flow Past Mound-Bearing Impact Craters: An Experimental Study. Fluids, 2021, 6, 216.	0.8	3
307	Consequences of Proposed Shoreline Deformation Scenarios for Jezero Crater, Mars. Planetary Science Journal, 2021, 2, 128.	1.5	2
308	Microbially Induced Sedimentary Structures in Clastic Deposits: Implication for the Prospection for Fossil Life on Mars. Astrobiology, 2021, 21, 866-892.	1.5	11
309	Quantification of manganese for ChemCam Mars and laboratory spectra using a multivariate model. Spectrochimica Acta, Part B: Atomic Spectroscopy, 2021, 181, 106223.	1.5	16

#	Article	IF	Citations
310	Stratigraphic Relationships in Jezero Crater, Mars: Constraints on the Timing of Fluvialâ€Lacustrine Activity From Orbital Observations. Journal of Geophysical Research E: Planets, 2021, 126, e2021JE006840.	1.5	20
311	Brine-driven destruction of clay minerals in Gale crater, Mars. Science, 2021, 373, 198-204.	6.0	52
312	Exploring the environments of Martian impactâ€generated hydrothermal systems and their potential to support life. Meteoritics and Planetary Science, 2021, 56, 1350-1368.	0.7	9
313	Improving ChemCam LIBS long-distance elemental compositions using empirical abundance trends. Spectrochimica Acta, Part B: Atomic Spectroscopy, 2021, 182, 106247.	1.5	16
315	The hydrology and climate of Mars during the sedimentary infilling of Gale crater. Earth and Planetary Science Letters, 2021, 568, 117032.	1.8	12
316	Constraining the Timespan of Fluvial Activity From the Intermittency of Sediment Transport on Earth and Mars. Geophysical Research Letters, 2021, 48, e2021GL092598.	1.5	13
317	Nitrogen Fixation at Early Mars. Astrobiology, 2021, 21, 968-980.	1.5	10
318	Transformation of Cyanobacterial Biomolecules by Iron Oxides During Flash Pyrolysis: Implications for Mars Life-Detection Missions. Astrobiology, 2021, 21, 1363-1386.	1.5	2
319	Intense subaerial weathering of eolian sediments in Gale crater, Mars. Science Advances, 2021, 7, .	4.7	13
320	A Review of the Phyllosilicates in Gale Crater as Detected by the CheMin Instrument on the Mars Science Laboratory, Curiosity Rover. Minerals (Basel, Switzerland), 2021, 11, 847.	0.8	23
321	Manganese oxides in Martian meteorites Northwest Africa (NWA) 7034 and 7533. Icarus, 2021, 364, 114471.	1.1	8
322	In Situ Geochronology for the Next Decade: Mission Designs for the Moon, Mars, and Vesta. Planetary Science Journal, 2021, 2, 145.	1.5	6
323	Limits on Runoff Episode Duration for Early Mars: Integrating Lake Hydrology and Climate Models. Geophysical Research Letters, 2021, 48, e2021GL093523.	1.5	5
324	Merging Perspectives on Secondary Minerals on Mars: A Review of Ancient Water-Rock Interactions in Gale Crater Inferred from Orbital and In-Situ Observations. Minerals (Basel, Switzerland), 2021, 11, 986.	0.8	12
325	Impact generated porosity in Gale crater and implications for the density of sedimentary rocks in lower Aeolis Mons. Icarus, 2021, 366, 114539.	1.1	6
326	Early diagenesis at and below Vera Rubin ridge, Gale crater, Mars. Meteoritics and Planetary Science, 2021, 56, 1905-1932.	0.7	7
328	Detection of aqueous alteration minerals in Martian open and closed paleolake basins. Planetary and Space Science, 2021, 208, 105342.	0.9	3
329	Spatial Variability of Microbial Communities and Salt Distributions Across a Latitudinal Aridity Gradient in the Atacama Desert. Microbial Ecology, 2021, 82, 442-458.	1.4	17

#	Article	IF	Citations
330	Gypsum veins in Triassic Moenkopi mudrocks of southern Utah: Analogs to calcium sulfate veins on Mars. Journal of Geophysical Research E: Planets, 2017, 122, 150-171.	1.5	13
331	Reconstructing the past climate at Gale crater, Mars, from hydrological modeling of lateâ€stage lakes. Geophysical Research Letters, 2017, 44, 8196-8204.	1.5	25
332	Oxidative Alteration of Ferrous Smectites and Implications for the Redox Evolution of Early Mars. Journal of Geophysical Research E: Planets, 2017, 122, 2469-2488.	1.5	28
333	Great Salt Lake as an Astrobiology Analogue for Ancient Martian Hypersaline Aqueous Systems. , 2020, , 487-514.		10
334	Atmospheric Constraints on the Surface UV Environment of Mars at 3.9â€‰Ga Relevant to Prebiotic Chemistry. Astrobiology, 2017, 17, 687-708.	1.5	11
335	History of Scientific Studies and Current Views of Mars. , 2021, , 1-17.		0
336	A comparative study of clay mineral authigenesis in terrestrial and martian lakes; an Australian example. Numerische Mathematik, 2021, 321, 1080-1110.	0.7	2
337	Perseverance rover reveals an ancient delta-lake system and flood deposits at Jezero crater, Mars. Science, 2021, 374, 711-717.	6.0	86
338	Prebiotic photoredox synthesis from carbon dioxide and sulfite. Nature Chemistry, 2021, 13, 1126-1132.	6.6	34
339	Clustering Supported Classification of ChemCam Data From Gale Crater, Mars. Earth and Space Science, 2021, 8, .	1.1	7
340	Long-Distance 3D Reconstructions Using Photogrammetry with Curiosityâ€™s ChemCam Remote Micro-Imager in Gale Crater (Mars). Remote Sensing, 2021, 13, 4068.	1.8	5
341	Clay Minerals. Encyclopedia of Earth Sciences Series, 2018, , 265-275.	0.1	1
343	Extraterrestrial Fluvial Environments. , 2020, , 994-994.		0
345	Recognition of Sedimentary Rock Occurrences in Satellite and Aerial Images of Other Worldsâ€”Insights from Mars. Remote Sensing, 2021, 13, 4296.	1.8	9
346	From machine learning to transfer learning in laser-induced breakdown spectroscopy analysis of rocks for Mars exploration. Scientific Reports, 2021, 11, 21379.	1.6	27
347	The Coastal Geomorphology of Mars. , 2021, , .		0
350	Modeling the Hydrodynamics, Sediment Transport, and Valley Incision of Outletâ€Forming Floods From Martian Crater Lakes. Journal of Geophysical Research E: Planets, 2021, 126, e2021JE006979.	1.5	6
351	Mars Methane Sources in Northwestern Gale Crater Inferred From Back Trajectory Modeling. Earth and Space Science, 2021, 8, e2021EA001915.	1.1	8

#	Article	IF	Citations
352	How Good is â€œGood Enough?â€•Major Element Chemical Analyses of Planetary Basalts by Spacecraft Instruments. Planetary Science Journal, 2020, 1, 65.	1.5	0
353	Mars: new insights and unresolved questions. International Journal of Astrobiology, 2021, 20, 394-426.	0.9	19
354	Mars Science Laboratory. , 2022, , 1-5.		0
355	The Mars system revealed by the Martian Moons eXploration mission. Earth, Planets and Space, 2022, 74, .	0.9	11
356	Seeding the Solar System with Life: Mars, Venus, Earth, Moon, Protoplanets. Open Astronomy, 2020, 29, 124-157.	0.2	2
357	Mars: Life, Subglacial Oceans, Abiogenic Photosynthesis, Seasonal Increases and Replenishment of Atmospheric Oxygen. Open Astronomy, 2020, 29, 189-209.	0.2	2
358	The Magnetic and Color Reflectance Properties of Hematite: From Earth to Mars. Reviews of Geophysics, 2022, 60, .	9.0	37
359	Microbial Survival in an Extreme Martian Analog Ecosystem: PoÃ¡s Volcano, Costa Rica. Frontiers in Astronomy and Space Sciences, 2022, 9, .	1.1	3
360	The Large Dendritic Morphologies in the Antoniadi Crater (Mars) and Their Potential Astrobiological Significance. Geosciences (Switzerland), 2022, 12, 53.	1.0	2
361	Layered sediments on Mars deposited by impacts instead of by liquid water. , 2022, , 347-354.		1
362	Canyon Wall and Floor Debris Deposits in Aeolis Mons, Mars. Journal of Geophysical Research E: Planets, 2022, 127, .	1.5	2
363	The Evolution of Ancient Fluvial Systems in Memnonia Sulci, Mars: Impact Crater Damming, Aggradation, and a Large Water Body on the Dichotomy?. Journal of Geophysical Research E: Planets, 2022, 127, .	1.5	2
364	Post-landing major element quantification using SuperCam laser induced breakdown spectroscopy. Spectrochimica Acta, Part B: Atomic Spectroscopy, 2022, 188, 106347.	1.5	40
365	A nitrogen-rich atmosphere on ancient Mars consistent with isotopic evolution models. Nature Geoscience, 2022, 15, 106-111.	5.4	10
366	Clays and the Origin of Life: The Experiments. Life, 2022, 12, 259.	1.1	25
367	Nitrogenous Altered Volcanic Glasses as Targets for Mars Sample Return: Examples From Antarctica and Iceland. Journal of Geophysical Research E: Planets, 2022, 127, .	1.5	2
368	Reconstruction of pH, redox condition, and concentrations of major components in ancient liquid water from the Karasburg member, Murray formation, Gale Crater, Mars. Geochimica Et Cosmochimica Acta, 2022, 325, 129-151.	1.6	4
369	Carbonate dissolution and replacement by odinite and saponite in the lafayette nakhlite: part of the CO2-CH4 cycle on mars?. Geochimica Et Cosmochimica Acta, 2022, , .	1.6	3

#	Article	IF	Citations
371	Astrobiological Potential of Fe/Mg Smectites with Special Emphasis on Jezero Crater, Mars 2020 Landing Site. Astrobiology, 2022, , .	1.5	1
372	Mineral Matrix Effects on Pyrolysis Products of Kerogens Infer Difficulties in Determining Biological Provenance of Macromolecular Organic Matter at Mars. Astrobiology, 2022, 22, 520-540.	1.5	6
373	Bedrock Geochemistry and Alteration History of the Clayâ€Bearing Glen Torridon Region of Gale Crater, Mars. Journal of Geophysical Research E: Planets, 2022, 127, .	1.5	17
374	Orbital Observations of a Marker Horizon at Gale Crater. Journal of Geophysical Research E: Planets, 2022, 127, .	1.5	5
375	Lack of evidence for paleolakes in the Aeolis Dorsa region, Mars; a mapping investigation. Planetary and Space Science, 2022, 216, 105445.	0.9	2
376	An Insight Into Ancient Aeolian Processes and Postâ€Noachian Aqueous Alteration in Gale Crater, Mars, Using ChemCam Geochemical Data From the Greenheugh Capping Unit. Journal of Geophysical Research E: Planets, 2022, 127, .	1.5	11
377	Ancient Winds, Waves, and Atmosphere in Gale Crater, Mars, Inferred From Sedimentary Structures and Wave Modeling. Journal of Geophysical Research E: Planets, 2022, 127, .	1.5	7
378	Testing Correspondence between Areas with Hydrated Minerals, as Observed by CRISM/MRO, and Spots of Enhanced Subsurface Water Content, as Found by DAN along the Traverse of Curiosity. Advances in Astronomy, 2022, 2022, 1-10.	0.5	3
379	Sulfur Cycling as a Viable Metabolism under Simulated Noachian/Hesperian Chemistries. Life, 2022, 12, 523.	1.1	3
380	Mission Overview and Scientific Contributions from the Mars Science Laboratory Curiosity Rover After Eight Years of Surface Operations. Space Science Reviews, 2022, 218, 14.	3.7	25
381	Raman spectroscopic peculiarities of Icelandic poorly crystalline minerals and their implications for Mars exploration. Scientific Reports, 2022, 12, 5640.	1.6	4
382	Microbes from Brine Systems with Fluctuating Salinity Can Thrive under Simulated Martian Chemical Conditions. Life, 2022, 12, 12.	1.1	1
383	Mars as a time machine to Precambrian Earth. Journal of the Geological Society, 2022, 179, .	0.9	1
384	Numerical Analysis of Putative Rock Glaciers on Mount Sharp, Gale Crater, Mars. Remote Sensing, 2022, 14, 1887.	1.8	6
385	Overview of the Morphology and Chemistry of Diagenetic Features in the Clayâ€Rich Glen Torridon Unit of Gale Crater, Mars. Journal of Geophysical Research E: Planets, 2022, 127, .	1.5	17
388	Resolving the History of Life on Earth by Seeking Life As We Know It on Mars. Astrobiology, 2022, , .	1.5	7
389	Remote and in-Situ Characterization of Mars Analogs: Coupling Scales to Improve the Search for Microbial Signatures on Mars. Frontiers in Astronomy and Space Sciences, 2022, 9, .	1.1	0
390	Ultraviolet Photooxidation of Smectiteâ€Bound Fe(II) and Implications for the Origin of Martian Nontronites. Journal of Geophysical Research E: Planets, 2022, 127, .	1.5	3

#	Article	IF	Citations
391	Fluvial Depositional Systems of the African Humid Period: An Analog for an Early, Wet Mars in the Eastern Sahara. Journal of Geophysical Research E: Planets, 2022, 127, .	1.5	2
392	Xâ€Ray Amorphous Sulfurâ€Bearing Phases in Sedimentary Rocks of Gale Crater, Mars. Journal of Geophysical Research E: Planets, 2022, 127, .	1.5	10
393	Orbital and Inâ€Situ Investigation of Periodic Bedrock Ridges in Glen Torridon, Gale Crater, Mars. Journal of Geophysical Research E: Planets, 2022, 127, .	1.5	18
394	â€œFalse peakâ€•creation in the Flynn Creek marine target impact crater. Meteoritics and Planetary Science, 2022, 57, 1365-1386.	0.7	2
395	Burial and Exhumation of Sedimentary Rocks Revealed by the Base Stimson Erosional Unconformity, Gale Crater, Mars. Journal of Geophysical Research E: Planets, 2022, 127, .	1.5	3
396	Statistical Analysis of APXSâ€Derived Chemistry of the Clayâ€Bearing Glen Torridon Region and Mount Sharp Group, Gale Crater, Mars. Journal of Geophysical Research E: Planets, 2022, 127, .	1.5	15
397	Machine learning and transfer learning for correction of the chemical and physical matrix effects in the determination of alkali and alkaline earth metals with LIBS in rocks. Spectrochimica Acta, Part B: Atomic Spectroscopy, 2022, 194, 106478.	1.5	9
398	From Lake to River: Documenting an Environmental Transition Across the Jura/Knockfarril Hill Members Boundary in the Glen Torridon Region of Gale Crater (Mars). Journal of Geophysical Research E: Planets, 2022, 127, .	1.5	19
399	The Curiosity Rover's Exploration of Glen Torridon, Gale Crater, Mars: An Overview of the Campaign and Scientific Results. Journal of Geophysical Research E: Planets, 2023, 128, .	1.5	27
400	The Aeolian Environment in Glen Torridon, Gale Crater, Mars. Journal of Geophysical Research E: Planets, 2022, 127, .	1.5	14
402	Evidence for Fluctuating Wind in Shaping an Ancient Martian Dune Field: The Stimson Formation at the Greenheugh Pediment, Gale Crater. Journal of Geophysical Research E: Planets, 2022, 127, .	1.5	17
403	Mars is a mirror â€“ Understanding the Pahrump Hills mudstones from a perspective of Earth analogues. Sedimentology, 2022, 69, 2371-2435.	1.6	7
404	Characterization of groundwater chemistry beneath Gale Crater on early Mars by hydrothermal experiments. Icarus, 2022, 386, 115149.	1.1	0
405	Episodic and declining fluvial processes in Noctis Fossae, Syria Planum Province, Mars. Advances in Space Research, 2022, , .	1.2	0
406	Tridymite in a lacustrine mudstone in Gale Crater, Mars: Evidence for an explosive silicic eruption during the Hesperian. Earth and Planetary Science Letters, 2022, 594, 117694.	1.8	3
408	In Situ Identification of Paleoarchean Biosignatures Using Colocated Perseverance Rover Analyses: Perspectives for In Situ Mars Science and Sample Return. Astrobiology, 2022, 22, 1143-1163.	1.5	7
409	Alteration at the Base of the Siccar Point Unconformity and Further Evidence for an Alkaline Provenance at Gale Crater: Exploration of the Mount Sharp Group, Greenheugh Pediment Cap Rock Contact With APXS. Journal of Geophysical Research E: Planets, 2022, 127, .	1.5	9
410	The Distribution of Clay Minerals and Their Impact on Diagenesis in Glen Torridon, Gale Crater, Mars. Journal of Geophysical Research E: Planets, 2022, 127, .	1.5	10

#	Article	IF	Citations
412	Probabilistic multivariable calibration for major elements analysis of MarSCoDe Martian laser-induced breakdown spectroscopy instrument on Zhurong rover. Spectrochimica Acta, Part B: Atomic Spectroscopy, 2022, 197, 106529.	1.5	3
413	Mars Science Laboratory CheMin Data From the Glen Torridon Region and the Significance of Lakeâ€Groundwater Interactions in Interpreting Mineralogy and Sedimentary History. Journal of Geophysical Research E: Planets, 2022, 127, .	1.5	31
414	Geological diversity and microbiological potential of lakes on Mars. Nature Astronomy, 2022, 6, 1133-1141.	4.2	11
415	Sedimentary Organics in Glen Torridon, Gale Crater, Mars: Results From the SAM Instrument Suite and Supporting Laboratory Analyses. Journal of Geophysical Research E: Planets, 2022, 127, .	1.5	11
416	Manganese Mobility in Gale Crater, Mars: Leached Bedrock and Localized Enrichments. Journal of Geophysical Research E: Planets, 2022, 127, .	1.5	5
417	Mineralogy of a Possible Ancient Lakeshore in the Sutton Island Member of Mt. Sharp, Gale Crater, Mars, From Mastcam Multispectral Images. Journal of Geophysical Research E: Planets, 2022, 127, .	1.5	6
418	Paleogeographic Reconstructions of an Ocean Margin on Mars Based on Deltaic Sedimentology at Aeolis Dorsa. Journal of Geophysical Research E: Planets, 2022, 127, .	1.5	7
419	Martian landscapes of fluvial ridges carved from ancient sedimentary basin fill. Nature Geoscience, 2022, 15, 871-877.	5.4	7
420	Hydration of a Clayâ€Rich Unit on Mars, Comparison of Orbital Data to Rover Data. Journal of Geophysical Research E: Planets, 2023, 128, .	1.5	4
421	Crustal Structure Constraints From the Detection of the SsPp Phase on Mars. Earth and Space Science, 2023, 10, .	1.1	5
422	Characterization of Clasts in the Glen Torridon Region of Gale Crater Observed by the Mars Science Laboratory Curiosity Rover. Journal of Geophysical Research E: Planets, 2022, 127, .	1.5	3
423	The Origin of the Fracture Networks in the Mudstones of Gale Crater Mars; Their Implications Regarding the State of Stress and Fluid Pressure During Their Formation and the Depth to Which They Were Buried. Journal of Geophysical Research E: Planets, 2022, 127, .	1.5	1
424	Orbital and In Situ Investigation of the Bagnold Dunes and Sands of Forvie, Gale Crater, Mars. Journal of Geophysical Research E: Planets, 2022, 127, .	1.5	2
425	Self-weight consolidation process of water-saturated deltas on Mars and Earth. Icarus, 2023, 390, 115304.	1.1	0
426	Water and Chlorine in the Martian Subsurface Along the Traverse of NASA's Curiosity Rover: 1. DAN Measurement Profiles Along the Traverse. Journal of Geophysical Research E: Planets, 2022, 127, .	1.5	3
427	Chemical weathering over hundreds of millions of years of greenhouse conditions on Mars. Communications Earth & Environment, 2022, 3, .	2.6	3
428	Constraining Alteration Processes Along the Siccar Point Group Unconformity, Gale Crater, Mars: Results From the Sample Analysis at Mars Instrument. Journal of Geophysical Research E: Planets, 2022, 127, .	1.5	3
429	Geochemical bio-signatures in Martian analogue basaltic environments using laboratory experiments and thermochemical modelling. Frontiers in Astronomy and Space Sciences, 0, 9, .	1.1	1

#	Article	IF	Citations
430	Elemental composition of manganese- and phosphorus-rich nodules in the Knockfarril Hill member, Gale crater, Mars. Icarus, 2023, 392, 115372.	1.1	2
431	On an Extensive Late Hydrologic Event in Gale Crater as Indicated by Waterâ€Rich Fracture Halos. Journal of Geophysical Research E: Planets, 2022, 127, .	1.5	1
432	Impact induced H2-rich climates on early Mars explored with a global climate model. Icarus, 2023, 394, 115401.	1.1	1
433	Crustal Anisotropy in the Martian Lowlands From Surface Waves. Geophysical Research Letters, 2022, 49, .	1.5	18
434	High and Dry: Billionâ€Year Trends in the Aridity of Riverâ€Forming Climates on Mars. Geophysical Research Letters, 2022, 49, .	1.5	3
435	Different Martian Crustal Seismic Velocities Across the Dichotomy Boundary From Multiâ€Orbiting Surface Waves. Geophysical Research Letters, 2023, 50, .	1.5	12
436	Detection of Copper by the ChemCam Instrument Along Curiosity's Traverse in Gale Crater, Mars: Elevated Abundances in Glen Torridon. Journal of Geophysical Research E: Planets, 2023, 128, .	1.5	4
437	Surface environment evolution for Venus, Earth, and Marsâ€"the planets which began with the same inventory of elements. , 2023, , 359-398.		0
438	Ancient Siliciclasticâ€"Evaporites as Seen by Remote Sensing Instrumentation with Implications for the Rover-Scale Exploration of Sedimentary Environments on Mars. Astrobiology, 2023, 23, 477-495.	1.5	0
439	Exploring the transition between water- and wind-dominated landscapes in Deep Springs, California, as an analog for transitioning landscapes on Mars. Earth Surface Dynamics, 2023, 11, 149-165.	1.0	0
440	Detection of organic matter on Mars, results from various Mars missions, challenges, and future strategy: A review. Frontiers in Astronomy and Space Sciences, 0, 10, .	1.1	5
441	Mars climate change research: Perspective of sulfur replacing carbon in martian sedimentary rocks. Icarus, 2023, 399, 115558.	1.1	0
442	Depositional and Diagenetic Processes of Martian Lacustrine Sediments as Revealed at Pahrump Hills by the Mars Hand Lens Imager, Gale Crater, Mars. Journal of Geophysical Research E: Planets, 2023, 128, .	1.5	1
443	Seasonal Variation of Martian Surface Temperature over Gale Crater and Surroundings. Solar System Research, 2023, 57, 14-24.	0.3	0
449	Mars Science Laboratory. , 2023, , 1802-1806.		0
455	Renaissance for magnetotactic bacteria in astrobiology. ISME Journal, 2023, 17, 1526-1534.	4.4	0
471	Interiors and Surfaces of Terrestrial Planets and Major Satellites. , 2024, , 1-26.		0