

Clay mineral diversity and abundance in sedimentary rocks

Science Advances

4, eaar3330

DOI: [10.1126/sciadv.aar3330](https://doi.org/10.1126/sciadv.aar3330)

Citation Report

#	ARTICLE	IF	CITATIONS
1	Catalytic/Protective Properties of Martian Minerals and Implications for Possible Origin of Life on Mars. <i>Life</i> , 2018, 8, 56.	1.1	38
2	Curiosity's Investigation of the Bagnold Dunes, Gale Crater: Overview of the Two-Phase Scientific Campaign and Introduction to the Special Collection. <i>Geophysical Research Letters</i> , 2018, 45, 10,200.	1.5	43
3	Chemical Diversity of Sands Within the Linear and Barchan Dunes of the Bagnold Dunes, Gale Crater, as Revealed by APXS Onboard Curiosity. <i>Geophysical Research Letters</i> , 2018, 45, 9460-9470.	1.5	21
4	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.	1.5	22
5	Sand Mineralogy Within the Bagnold Dunes, Gale Crater, as Observed In Situ and From Orbit. <i>Geophysical Research Letters</i> , 2018, 45, 9488-9497.	1.5	52
6	Sand Grain Sizes and Shapes in Eolian Bedforms at Gale Crater, Mars. <i>Geophysical Research Letters</i> , 2018, 45, 9471-9479.	1.5	71
7	Spectroscopic study of olivine-bearing rocks and its relevance to the ExoMars rover mission. <i>Spectrochimica Acta - Part A: Molecular and Biomolecular Spectroscopy</i> , 2019, 223, 117360.	2.0	14
8	Design and Experimental Validation of a Martian Water Extraction System. , 2019, , .		0
9	A nanoscale study of the formation of Fe-(hydr)oxides in a volcanic regolith: Implications for the understanding of soil forming processes on Earth and Mars. <i>Geochimica Et Cosmochimica Acta</i> , 2019, 264, 43-66.	1.6	15
10	Sample Collection and Return from Mars: Optimising Sample Collection Based on the Microbial Ecology of Terrestrial Volcanic Environments. <i>Space Science Reviews</i> , 2019, 215, 1.	3.7	6
11	Semiarid climate and hyposaline lake on early Mars inferred from reconstructed water chemistry at Gale. <i>Nature Communications</i> , 2019, 10, 4896.	5.8	49
12	Model for the Formation of Single-Thread Rivers in Barren Landscapes and Implications for Pre-Silurian and Martian Fluvial Deposits. <i>Journal of Geophysical Research F: Earth Surface</i> , 2019, 124, 2757-2777.	1.0	35
13	Mars Science Laboratory Observations of Chloride Salts in Gale Crater, Mars. <i>Geophysical Research Letters</i> , 2019, 46, 10754-10763.	1.5	52
14	New simulants for martian regolith: Controlling iron variability. <i>Planetary and Space Science</i> , 2019, 179, 104722.	0.9	28
15	An interval of high salinity in ancient Gale crater lake on Mars. <i>Nature Geoscience</i> , 2019, 12, 889-895.	5.4	105
16	A surface gravity traverse on Mars indicates low bedrock density at Gale crater. <i>Science</i> , 2019, 363, 535-537.	6.0	49
17	Geologic Constraints on Early Mars Climate. <i>Space Science Reviews</i> , 2019, 215, 1.	3.7	85
18	Aqueous alteration of pyroxene in sulfate, chloride, and perchlorate brines: Implications for post-Noachian aqueous alteration on Mars. <i>Geochimica Et Cosmochimica Acta</i> , 2019, 257, 336-353.	1.6	9

#	ARTICLE	IF	CITATIONS
19	New Constraints on Early Mars Weathering Conditions From an Experimental Approach on Crust Simulants. <i>Journal of Geophysical Research E: Planets</i> , 2019, 124, 1783-1801.	1.5	9
20	Hydrothermal alteration of the Ediacaran Volyn-Brest volcanics on the western margin of the East European Craton. <i>Precambrian Research</i> , 2019, 325, 217-235.	1.2	28
21	Abiotic Input of Fixed Nitrogen by Bolide Impacts to Gale Crater During the Hesperian: Insights From the Mars Science Laboratory. <i>Journal of Geophysical Research E: Planets</i> , 2019, 124, 94-113.	1.5	23
22	The mineral diversity of Jezero crater: Evidence for possible lacustrine carbonates on Mars. <i>Icarus</i> , 2020, 339, 113526.	1.1	166
23	3D digital outcrop model reconstruction of the Kimberley outcrop (Gale crater, Mars) and its integration into Virtual Reality for simulated geological analysis. <i>Planetary and Space Science</i> , 2020, 182, 104808.	0.9	27
24	High-temperature HCl Evolutions From Mixtures of Perchlorates and Chlorides With Water-Bearing Phases: Implications for the SAM Instrument in Gale Crater, Mars. <i>Journal of Geophysical Research E: Planets</i> , 2020, 125, e2019JE006173.	1.5	6
25	Organic Matter Preservation in Ancient Soils of Earth and Mars. <i>Life</i> , 2020, 10, 113.	1.1	23
26	Evidence for a Diagenetic Origin of Vera Rubin Ridge, Gale Crater, Mars: Summary and Synthesis of Curiosity's Exploration Campaign. <i>Journal of Geophysical Research E: Planets</i> , 2020, 125, e2020JE006527.	1.5	69
27	Sintering of ceramics for clay in situ resource utilization on Mars. <i>Open Ceramics</i> , 2020, 3, 100008.	1.0	8
28	Synergistic Ground and Orbital Observations of Iron Oxides on Mt. Sharp and Vera Rubin Ridge. <i>Journal of Geophysical Research E: Planets</i> , 2020, 125, e2019JE006294.	1.5	27
29	Elemental Composition and Chemical Evolution of Geologic Materials in Gale Crater, Mars: APXS Results From Bradbury Landing to the Vera Rubin Ridge. <i>Journal of Geophysical Research E: Planets</i> , 2020, 125, e2020JE006536.	1.5	33
30	APXS-Derived Compositional Characteristics of Vera Rubin Ridge and Murray Formation, Gale Crater, Mars: Geochemical Implications for the Origin of the Ridge. <i>Journal of Geophysical Research E: Planets</i> , 2020, 125, e2019JE006319.	1.5	31
31	Diagenesis of Vera Rubin Ridge, Gale Crater, Mars, From Mastcam Multispectral Images. <i>Journal of Geophysical Research E: Planets</i> , 2020, 125, e2019JE006322.	1.5	33
32	Spectral, Compositional, and Physical Properties of the Upper Murray Formation and Vera Rubin Ridge, Gale Crater, Mars. <i>Journal of Geophysical Research E: Planets</i> , 2020, 125, e2019JE006290.	1.5	20
33	Boron and Lithium in Calcium Sulfate Veins: Tracking Precipitation of Diagenetic Materials in Vera Rubin Ridge, Gale Crater. <i>Journal of Geophysical Research E: Planets</i> , 2020, 125, e2019JE006301.	1.5	8
34	Constraining the preservation of organic compounds in Mars analog nontronites after exposure to acid and alkaline fluids. <i>Scientific Reports</i> , 2020, 10, 15097.	1.6	15
35	Characterizing low-temperature aqueous alteration of Mars-analog basalts from Mauna Kea at multiple scales. <i>American Mineralogist</i> , 2020, 105, 1306-1316.	0.9	2
36	Volcanic Holocrystalline Bedrock and Hydrothermal Alteration: A Terrestrial Analogue for Mars. <i>Minerals (Basel, Switzerland)</i> , 2020, 10, 1082.	0.8	5

#	ARTICLE	IF	CITATIONS
37	A look back, part II: The drilling campaign of the Curiosity rover during the Mars Science Laboratory's second and third martian years. <i>Icarus</i> , 2020, 350, 113885.	1.1	4
38	Constraints on the Mineralogy and Geochemistry of Vera Rubin Ridge, Gale Crater, Mars, From Mars Science Laboratory Sample Analysis at Mars Evolved Gas Analyses. <i>Journal of Geophysical Research E: Planets</i> , 2020, 125, e2019JE006309.	1.5	32
39	Mineralogy of Vera Rubin Ridge From the Mars Science Laboratory CheMin Instrument. <i>Journal of Geophysical Research E: Planets</i> , 2020, 125, e2019JE006306.	1.5	86
40	Hydrothermal Precipitation of Sanidine (Adularia) Having Full Al,Si Structural Disorder and Specular Hematite at Maunakea Volcano (Hawai'i) and at Gale Crater (Mars). <i>Journal of Geophysical Research E: Planets</i> , 2020, 125, e2019JE006324.	1.5	14
41	Data fusion of laser-induced breakdown and Raman spectroscopies: Enhancing clay mineral identification. <i>Spectrochimica Acta, Part B: Atomic Spectroscopy</i> , 2020, 170, 105905.	1.5	31
42	Quantitative assessment of water content and mineral abundances at Gale crater on Mars with orbital observations. <i>Astronomy and Astrophysics</i> , 2020, 637, A79.	2.1	1
43	Evidence for Multiple Diagenetic Episodes in Ancient Fluvial-Lacustrine Sedimentary Rocks in Gale Crater, Mars. <i>Journal of Geophysical Research E: Planets</i> , 2020, 125, e2019JE006295.	1.5	45
44	The Chemostratigraphy of the Murray Formation and Role of Diagenesis at Vera Rubin Ridge in Gale Crater, Mars, as Observed by the ChemCam Instrument. <i>Journal of Geophysical Research E: Planets</i> , 2020, 125, e2019JE006320.	1.5	41
45	Particle Induced X-ray Emission spectrometry (PIXE) of Hawaiian volcanics: An analogue study to evaluate the APXS field analysis of geologic materials on Mars. <i>Icarus</i> , 2020, 345, 113708.	1.1	9
46	Grain Size Variations in the Murray Formation: Stratigraphic Evidence for Changing Depositional Environments in Gale Crater, Mars. <i>Journal of Geophysical Research E: Planets</i> , 2020, 125, e2019JE006230.	1.5	29
47	Geochemical variation in the Stimson formation of Gale crater: Provenance, mineral sorting, and a comparison with modern Martian dunes. <i>Icarus</i> , 2020, 341, 113622.	1.1	31
48	Mineralogy and geochemistry of sedimentary rocks and eolian sediments in Gale crater, Mars: A review after six Earth years of exploration with Curiosity. <i>Chemie Der Erde</i> , 2020, 80, 125605.	0.8	137
49	Multiple mineral horizons in layered outcrops at Mawrth Vallis, Mars, signify changing geochemical environments on early Mars. <i>Icarus</i> , 2020, 341, 113634.	1.1	24
50	Reevaluation of Perchlorate in Gale Crater Rocks Suggests Geologically Recent Perchlorate Addition. <i>Journal of Geophysical Research E: Planets</i> , 2020, 125, e2019JE006156.	1.5	10
51	Hydrogen Variability in the Murray Formation, Gale Crater, Mars. <i>Journal of Geophysical Research E: Planets</i> , 2020, 125, e2019JE006289.	1.5	12
52	Billion-year exposure ages in Gale crater (Mars) indicate Mount Sharp formed before the Amazonian period. <i>Earth and Planetary Science Letters</i> , 2021, 554, 116667.	1.8	4
53	Formation of Tridymite and Evidence for a Hydrothermal History at Gale Crater, Mars. <i>Journal of Geophysical Research E: Planets</i> , 2021, 126, e2020JE006569.	1.5	21
54	Outflow channels on Mars. , 2021, , 13-40.		1

#	ARTICLE	IF	CITATIONS
55	Resolving Martian enigmas, discovering new ones: the case of Curiosity and Gale crater. , 2021, , 1-10.		0
56	Source-to-Sink Terrestrial Analogs for the Paleoenvironment of Gale Crater, Mars. Journal of Geophysical Research E: Planets, 2021, 126, e2020JE006530.	1.5	15
57	Martian subsurface cryosalt expansion and collapse as trigger for landslides. Science Advances, 2021, 7, .	4.7	23
58	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
59	Reactive Transport Modeling of Aqueous Alteration in the Murray Formation, Gale Crater, Mars. ACS Earth and Space Chemistry, 2021, 5, 424-435.	1.2	2
60	Origin of the degassing pipes at the Ries impact structure and implications for impact-induced alteration on Mars and other planetary bodies. Meteoritics and Planetary Science, 2021, 56, 404-422.	0.7	4
61	Lithologic Controls on Silicate Weathering Regimes of Temperate Planets. Planetary Science Journal, 2021, 2, 49.	1.5	10
62	X-Ray Amorphous Components in Sedimentary Rocks of Gale Crater, Mars: Evidence for Ancient Formation and Long-Lived Aqueous Activity. Journal of Geophysical Research E: Planets, 2021, 126, e2020JE006782.	1.5	22
63	Spectroscopic analysis of allophane and imogolite samples with variable Fe abundance for characterizing the poorly crystalline components on Mars. American Mineralogist, 2021, 106, 527-540.	0.9	6
64	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
65	Pyrolysis of Oxalate, Acetate, and Perchlorate Mixtures and the Implications for Organic Salts on Mars. Journal of Geophysical Research E: Planets, 2021, 126, e2020JE006803.	1.5	20
66	Analytical Chemistry in Astrobiology. Analytical Chemistry, 2021, 93, 5981-5997.	3.2	7
67	Clay coatings on sands in the western Qaidam Basin, Tibetan Plateau, China: Implications for the Martian clay detection. Applied Clay Science, 2021, 205, 106065.	2.6	1
68	Evidence for fluvial and glacial activities within impact craters that excavated into a Noachian volcanic dome on Mars. Icarus, 2021, 361, 114397.	1.1	3
69	Long-lasting habitable periods in Gale crater constrained by glauconitic clays. Nature Astronomy, 2021, 5, 936-942.	4.2	11
70	Origin of Life on Mars: Suitability and Opportunities. Life, 2021, 11, 539.	1.1	18
71	Synthesis and characterization of Fe(III)-Fe(II)-Mg-Al smectite solid solutions and implications for planetary science. American Mineralogist, 2021, 106, 964-982.	0.9	15
72	Technical development of characterization methods provides insights into clay mineral-water interactions: A comprehensive review. Applied Clay Science, 2021, 206, 106088.	2.6	26

#	ARTICLE	IF	CITATIONS
73	A Solid Interpretation of Bright Radar Reflectors Under the Mars South Polar Ice. <i>Geophysical Research Letters</i> , 2021, 48, e2021GL093618.	1.5	29
74	Brine-driven destruction of clay minerals in Gale crater, Mars. <i>Science</i> , 2021, 373, 198-204.	6.0	52
75	Targeting mixtures of jarosite and clay minerals for Mars exploration. <i>American Mineralogist</i> , 2021, 106, 1237-1254.	0.9	3
76	The hydrology and climate of Mars during the sedimentary infilling of Gale crater. <i>Earth and Planetary Science Letters</i> , 2021, 568, 117032.	1.8	12
77	Intense subaerial weathering of eolian sediments in Gale crater, Mars. <i>Science Advances</i> , 2021, 7, .	4.7	13
78	A Review of the Phyllosilicates in Gale Crater as Detected by the CheMin Instrument on the Mars Science Laboratory, Curiosity Rover. <i>Minerals (Basel, Switzerland)</i> , 2021, 11, 847.	0.8	23
79	Merging Perspectives on Secondary Minerals on Mars: A Review of Ancient Water-Rock Interactions in Gale Crater Inferred from Orbital and In-Situ Observations. <i>Minerals (Basel, Switzerland)</i> , 2021, 11, 986.	0.8	12
80	Early diagenesis at and below Vera Rubin ridge, Gale crater, Mars. <i>Meteoritics and Planetary Science</i> , 2021, 56, 1905-1932.	0.7	7
81	Albite dissolution rates in brines: Implications for late-stage weathering on Mars. <i>Icarus</i> , 2021, 365, 114478.	1.1	1
82	Heterogeneous Physical Chemistry in the Atmospheres of Earth, Mars, and Venus: Perspectives for Rocky Exoplanets. <i>ACS Earth and Space Chemistry</i> , 2021, 5, 149-162.	1.2	3
84	Potential mineral resources in the planets and preliminary discussion on planetary resource geology. <i>Acta Petrologica Sinica</i> , 2021, 37, 2276-2286.	0.3	0
85	A comparative study of clay mineral authigenesis in terrestrial and martian lakes; an Australian example. <i>Numerische Mathematik</i> , 2021, 321, 1080-1110.	0.7	2
86	Clustering Supported Classification of ChemCam Data From Gale Crater, Mars. <i>Earth and Space Science</i> , 2021, 8, .	1.1	7
88	Synthesis of Ferrian and Ferro-Saponites: Implications for the structure of (Fe,Mg)-smectites synthesized in reduced conditions. <i>American Mineralogist</i> , 2021, , .	0.9	3
89	How Good is "Good Enough"? Major Element Chemical Analyses of Planetary Basalts by Spacecraft Instruments. <i>Planetary Science Journal</i> , 2020, 1, 65.	1.5	0
90	A low-temperature, meteoric water-dominated origin for smectitic clay minerals in the Chicxulub impact crater upper peak ring, as inferred from their oxygen and hydrogen isotope compositions. <i>Chemical Geology</i> , 2022, 588, 120639.	1.4	5
91	The M3 project: 3 " Global abundance distribution of hydrated silicates at Mars. <i>Icarus</i> , 2022, 374, 114809.	1.1	7
92	The upper-thermal stability of an iron-rich smectite: Implications for smectite formation on Mars. <i>Icarus</i> , 2022, 374, 114816.	1.1	2

#	ARTICLE	IF	CITATIONS
93	Anaerobic Microscopic Analysis of Ferrous Saponite and Its Sensitivity to Oxidation by Earth's Air: Lessons Learned for Analysis of Returned Samples from Mars and Carbonaceous Asteroids. Minerals (Basel, Switzerland), 2021, 11, 1244.	0.8	4
94	Planetary Minerals Catalyze Conversion of a Polycyclic Aromatic Hydrocarbon to a Prebiotic Quinone: Implications for Origins of Life. Astrobiology, 2022, 22, 197-209.	1.5	1
95	Assessing the role of clay and salts on the origin of MARSIS basal bright reflections. Earth and Planetary Science Letters, 2022, 579, 117370.	1.8	15
96	Review of space resources processing for Mars missions: Martian simulants, regolith bonding concepts and additive manufacturing. Open Ceramics, 2022, 9, 100216.	1.0	18
97	Clays and the Origin of Life: The Experiments. Life, 2022, 12, 259.	1.1	25
98	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
99	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
100	Astrobiological Potential of Fe/Mg Smectites with Special Emphasis on Jezero Crater, Mars 2020 Landing Site. Astrobiology, 2022, , .	1.5	1
101	Bedrock Geochemistry and Alteration History of the Clay-Bearing Glen Torridon Region of Gale Crater, Mars. Journal of Geophysical Research E: Planets, 2022, 127, .	1.5	17
102	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
103	Crystallinity effects on the vibrational spectral features of saponite: Implications for characterizing variable crystalline phyllosilicates on Mars. Icarus, 2022, 379, 114951.	1.1	5
104	Mineralogy and diagenesis of Mars-analog paleosols from eastern Oregon, USA. Icarus, 2022, 380, 114965.	1.1	4
105	Constraints on the formation of carbonates and low-grade metamorphic phases in the Martian crust as a function of H ₂ O-CO ₂ fluids. Meteoritics and Planetary Science, 2022, 57, 77-104.	0.7	2
106	Planning Implications Related to Sterilization-Sensitive Science Investigations Associated with Mars Sample Return (MSR). Astrobiology, 2022, 22, S-112-S-164.	1.5	7
107	Overview of the Morphology and Chemistry of Diagenetic Features in the Clay-Rich Glen Torridon Unit of Gale Crater, Mars. Journal of Geophysical Research E: Planets, 2022, 127, .	1.5	17
108	Ultraviolet Photooxidation of Smectite-Bound Fe(II) and Implications for the Origin of Martian Nontronites. Journal of Geophysical Research E: Planets, 2022, 127, .	1.5	3
109	X-Ray Amorphous Sulfur-Bearing Phases in Sedimentary Rocks of Gale Crater, Mars. Journal of Geophysical Research E: Planets, 2022, 127, .	1.5	10
110	Presence of clay minerals can obscure spectral evidence of Mg sulfates: implications for orbital observations of Mars. Icarus, 2022, 383, 115083.	1.1	5

#	ARTICLE	IF	CITATIONS
111	Oxidized and Reduced Sulfur Observed by the Sample Analysis at Mars (SAM) Instrument Suite on the Curiosity Rover Within the Glen Torridon Region at Gale Crater, Mars. <i>Journal of Geophysical Research E: Planets</i> , 2022, 127, .	1.5	6
112	Evolved Gas Analyses of Sedimentary Rocks From the Glen Torridon Clay-Bearing Unit, Gale Crater, Mars: Results From the Mars Science Laboratory Sample Analysis at Mars Instrument Suite. <i>Journal of Geophysical Research E: Planets</i> , 2022, 127, .	1.5	12
113	Statistical Analysis of APXS-Derived Chemistry of the Clay-Bearing Glen Torridon Region and Mount Sharp Group, Gale Crater, Mars. <i>Journal of Geophysical Research E: Planets</i> , 2022, 127, .	1.5	15
114	From Lake to River: Documenting an Environmental Transition Across the Jura/Knockfarril Hill Members Boundary in the Glen Torridon Region of Gale Crater (Mars). <i>Journal of Geophysical Research E: Planets</i> , 2022, 127, .	1.5	19
115	Exploring the Shallow Subsurface of Mars with the Ma_MISS Spectrometer on the ExoMars Rover Rosalind Franklin. <i>Planetary Science Journal</i> , 2022, 3, 142.	1.5	9
116	The Curiosity Rover's Exploration of Glen Torridon, Gale Crater, Mars: An Overview of the Campaign and Scientific Results. <i>Journal of Geophysical Research E: Planets</i> , 2023, 128, .	1.5	27
117	Multiple Growth Mechanisms of 2:1 Type Layered Aluminosilicates during Mineral Transformation. <i>ACS Earth and Space Chemistry</i> , 2022, 6, 1930-1936.	1.2	0
118	The concept of gamma-ray remote sensing of Martian surface composition onboard a Mars Rover. <i>Acta Astronautica</i> , 2022, 199, 134-141.	1.7	1
120	Characterization of groundwater chemistry beneath Gale Crater on early Mars by hydrothermal experiments. <i>Icarus</i> , 2022, 386, 115149.	1.1	0
121	Sedimentological and Geochemical Perspectives on a Marginal Lake Environment Recorded in the Hartmann's Valley and Karasburg Members of the Murray Formation, Gale Crater, Mars. <i>Journal of Geophysical Research E: Planets</i> , 2022, 127, .	1.5	9
122	Enigmatic Issues and Widening Implications of Research on Martian Clay Minerals. <i>ACS Earth and Space Chemistry</i> , 0, , .	1.2	3
123	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. <i>Journal of Geophysical Research E: Planets</i> , 2022, 127, .	1.5	9
124	The Distribution of Clay Minerals and Their Impact on Diagenesis in Glen Torridon, Gale Crater, Mars. <i>Journal of Geophysical Research E: Planets</i> , 2022, 127, .	1.5	10
125	Ma'adim Vallis, Mars: Insights into episodic and late-stage water activity from an impact crater. <i>Icarus</i> , 2022, 387, 115214.	1.1	0
126	Mars Science Laboratory CheMin Data From the Glen Torridon Region and the Significance of Lake-Groundwater Interactions in Interpreting Mineralogy and Sedimentary History. <i>Journal of Geophysical Research E: Planets</i> , 2022, 127, .	1.5	31
127	Nitrogen Incorporation in Potassic and Micro- and Meso-Porous Minerals: Potential Biogeochemical Records and Targets for Mars Sampling. <i>Astrobiology</i> , 2022, 22, 1293-1309.	1.5	1
128	Mineralogy of a Possible Ancient Lakeshore in the Sutton Island Member of Mt. Sharp, Gale Crater, Mars, From Mastcam Multispectral Images. <i>Journal of Geophysical Research E: Planets</i> , 2022, 127, .	1.5	6
129	Hydration of a Clay-Rich Unit on Mars, Comparison of Orbital Data to Rover Data. <i>Journal of Geophysical Research E: Planets</i> , 2023, 128, .	1.5	4

#	ARTICLE	IF	CITATIONS
130	A free and open-source solution for Rietveld refinement of XRD data from the CheMin instrument onboard the Mars rover Curiosity. <i>Planetary and Space Science</i> , 2022, 224, 105596.	0.9	1
131	Quantification of amorphous Si, Al, and Fe in palagonitic Mars analogs by chemical extraction and X-ray spectroscopy. <i>Icarus</i> , 2023, 392, 115362.	1.1	2
132	On an Extensive Late Hydrologic Event in Gale Crater as Indicated by Water-Rich Fracture Halos. <i>Journal of Geophysical Research E: Planets</i> , 2022, 127, .	1.5	1
133	Two Forms of Ice Identified in Mars-like Clay Using Neutron Spectroscopy. <i>Journal of Physical Chemistry C</i> , 2022, 126, 21061-21070.	1.5	0
134	Detection of Copper by the ChemCam Instrument Along Curiosity's Traverse in Gale Crater, Mars: Elevated Abundances in Glen Torridon. <i>Journal of Geophysical Research E: Planets</i> , 2023, 128, .	1.5	4
135	Planetary Construction 3D Printing Using Lunar and Martian In Situ Materials. , 2023, , .		1
136	Can Clay Mimic the High Reflectivity of Briny Water Below the Martian SPLD?. <i>Journal of Geophysical Research E: Planets</i> , 2023, 128, .	1.5	4
137	Compositional Variations in Sedimentary Deposits in Gale Crater as Observed by ChemCam Passive and Active Spectra. <i>Journal of Geophysical Research E: Planets</i> , 2023, 128, .	1.5	0
138	Impact Induced Oxidation and Its Implications for Early Mars Climate. <i>Geophysical Research Letters</i> , 2023, 50, .	1.5	1
139	Mars climate change research: Perspective of sulfur replacing carbon in martian sedimentary rocks. <i>Icarus</i> , 2023, 399, 115558.	1.1	0
140	SOPHIA: A mineralogical simulant for phyllosilicate terrains at the Rosalind Franklin landing site, Oxia Planum, Mars. <i>Icarus</i> , 2023, 400, 115568.	1.1	0
141	Depositional and Diagenetic Processes of Martian Lacustrine Sediments as Revealed at Pahrump Hills by the Mars Hand Lens Imager, Gale Crater, Mars. <i>Journal of Geophysical Research E: Planets</i> , 2023, 128, .	1.5	1
142	Comparison of Quantitative X-ray Diffraction Mineral Analysis Methods. <i>Minerals (Basel)</i> , Tj ETQq0 0 0 rgBT /Overlock 10 Tf 50 262 Td (0.8	4