

# B L Ehlmann

## List of Publications by Year in descending order

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157  
papers

15,792  
citations

16411

64  
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16127

124  
g-index

159  
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159  
docs citations

159  
times ranked

6170  
citing authors

#	ARTICLE	IF	CITATIONS
1	A Habitable Fluvio-Lacustrine Environment at Yellowknife Bay, Gale Crater, Mars. <i>Science</i> , 2014, 343, 1242777.	6.0	687
2	Subsurface water and clay mineral formation during the early history of Mars. <i>Nature</i> , 2011, 479, 53-60.	13.7	651
3	Hydrated silicate minerals on Mars observed by the Mars Reconnaissance Orbiter CRISM instrument. <i>Nature</i> , 2008, 454, 305-309.	13.7	630
4	Orbital Identification of Carbonate-Bearing Rocks on Mars. <i>Science</i> , 2008, 322, 1828-1832.	6.0	560
5	Mineralogy of a Mudstone at Yellowknife Bay, Gale Crater, Mars. <i>Science</i> , 2014, 343, 1243480.	6.0	508
6	Identification of hydrated silicate minerals on Mars using MRO's CRISM: Geologic context near Nili Fossae and implications for aqueous alteration. <i>Journal of Geophysical Research</i> , 2009, 114, .	3.3	483
7	Mineralogy of the Martian Surface. <i>Annual Review of Earth and Planetary Sciences</i> , 2014, 42, 291-315.	4.6	472
8	A synthesis of Martian aqueous mineralogy after 1 Mars year of observations from the Mars Reconnaissance Orbiter. <i>Journal of Geophysical Research</i> , 2009, 114, .	3.3	445
9	Volatile, Isotope, and Organic Analysis of Martian Fines with the Mars Curiosity Rover. <i>Science</i> , 2013, 341, 1238937.	6.0	367
10	Phyllosilicate Diversity and Past Aqueous Activity Revealed at Mawrth Vallis, Mars. <i>Science</i> , 2008, 321, 830-833.	6.0	328
11	X-ray Diffraction Results from Mars Science Laboratory: Mineralogy of Rocknest at Gale Crater. <i>Science</i> , 2013, 341, 1238932.	6.0	327
12	Abundance and Isotopic Composition of Gases in the Martian Atmosphere from the Curiosity Rover. <i>Science</i> , 2013, 341, 263-266.	6.0	327
13	Martian Fluvial Conglomerates at Gale Crater. <i>Science</i> , 2013, 340, 1068-1072.	6.0	326
14	Volatile and Organic Compositions of Sedimentary Rocks in Yellowknife Bay, Gale Crater, Mars. <i>Science</i> , 2014, 343, 1245267.	6.0	323
15	Geologic setting of serpentine deposits on Mars. <i>Geophysical Research Letters</i> , 2010, 37, .	1.5	299
16	Clay minerals in delta deposits and organic preservation potential on Mars. <i>Nature Geoscience</i> , 2008, 1, 355-358.	5.4	293
17	Curiosity at Gale Crater, Mars: Characterization and Analysis of the Rocknest Sand Shadow. <i>Science</i> , 2013, 341, 1239505.	6.0	280
18	Revised CRISM spectral parameters and summary products based on the currently detected mineral diversity on Mars. <i>Journal of Geophysical Research E: Planets</i> , 2014, 119, 1403-1431.	1.5	280

#	ARTICLE	IF	CITATIONS
19	Elemental Geochemistry of Sedimentary Rocks at Yellowknife Bay, Gale Crater, Mars. <i>Science</i> , 2014, 343, 1244734.	6.0	246
20	Isotope Ratios of H, C, and O in CO <sub>2</sub> and H <sub>2</sub> O of the Martian Atmosphere. <i>Science</i> , 2013, 341, 260-263.	6.0	241
21	Bright carbonate deposits as evidence of aqueous alteration on (1) Ceres. <i>Nature</i> , 2016, 536, 54-57.	13.7	240
22	Soil Diversity and Hydration as Observed by ChemCam at Gale Crater, Mars. <i>Science</i> , 2013, 341, 1238670.	6.0	215
23	Calcium sulfate veins characterized by ChemCam/Curiosity at Gale crater, Mars. <i>Journal of Geophysical Research E: Planets</i> , 2014, 119, 1991-2016.	1.5	214
24	Transient reducing greenhouse warming on early Mars. <i>Geophysical Research Letters</i> , 2017, 44, 665-671.	1.5	178
25	Silica deposits in the Nili Patera caldera on the Syrtis Major volcanic complex on Mars. <i>Nature Geoscience</i> , 2010, 3, 838-841.	5.4	173
26	Evidence for indigenous nitrogen in sedimentary and aeolian deposits from the <i>Curiosity</i> rover investigations at Gale crater, Mars. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2015, 112, 4245-4250.	3.3	172
27	Extensive water ice within Ceres's aqueously altered regolith: Evidence from nuclear spectroscopy. <i>Science</i> , 2017, 355, 55-59.	6.0	169
28	Localization and Physical Properties Experiments Conducted by Spirit at Gusev Crater. <i>Science</i> , 2004, 305, 821-824.	6.0	166
29	Compositional stratigraphy of clay-bearing layered deposits at Mawrth Vallis, Mars. <i>Geophysical Research Letters</i> , 2008, 35, .	1.5	165
30	Distribution of phyllosilicates on the surface of Ceres. <i>Science</i> , 2016, 353, .	6.0	159
31	Soils of Eagle Crater and Meridiani Planum at the Opportunity Rover Landing Site. <i>Science</i> , 2004, 306, 1723-1726.	6.0	153
32	Columbus crater and other possible groundwater-fed paleolakes of Terra Sirenum, Mars. <i>Journal of Geophysical Research</i> , 2011, 116, .	3.3	148
33	Nature and origin of the hematite-bearing plains of Terra Meridiani based on analyses of orbital and Mars Exploration rover data sets. <i>Journal of Geophysical Research</i> , 2006, 111, n/a-n/a.	3.3	144
34	Composition, Morphology, and Stratigraphy of Noachian Crust around the Isidis basin. <i>Journal of Geophysical Research</i> , 2009, 114, .	3.3	144
35	Recalibration of the Mars Science Laboratory ChemCam instrument with an expanded geochemical database. <i>Spectrochimica Acta, Part B: Atomic Spectroscopy</i> , 2017, 129, 64-85.	1.5	137
36	The Petrochemistry of Jake_M: A Martian Mugearite. <i>Science</i> , 2013, 341, 1239463.	6.0	134

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37	ChemCam activities and discoveries during the nominal mission of the Mars Science Laboratory in Gale crater, Mars. <i>Journal of Analytical Atomic Spectrometry</i> , 2016, 31, 863-889.	1.6	134
38	Localization and Physical Property Experiments Conducted by Opportunity at Meridiani Planum. <i>Science</i> , 2004, 306, 1730-1733.	6.0	130
39	Geochemistry of Carbonates on Mars: Implications for Climate History and Nature of Aqueous Environments. <i>Space Science Reviews</i> , 2013, 174, 301-328.	3.7	126
40	The stratigraphy and evolution of lower Mount Sharp from spectral, morphological, and thermophysical orbital data sets. <i>Journal of Geophysical Research E: Planets</i> , 2016, 121, 1713-1736.	1.5	123
41	The origin and implications of clay minerals from Yellowknife Bay, Gale crater, Mars. <i>American Mineralogist</i> , 2015, 100, 824-836.	0.9	122
42	Characterization of phyllosilicates observed in the central Mawrth Vallis region, Mars, their potential formational processes, and implications for past climate. <i>Journal of Geophysical Research</i> , 2009, 114, .	3.3	117
43	Igneous mineralogy at Bradbury Rise: The first ChemCam campaign at Gale crater. <i>Journal of Geophysical Research E: Planets</i> , 2014, 119, 30-46.	1.5	114
44	Geochemical diversity in first rocks examined by the Curiosity Rover in Gale Crater: Evidence for and significance of an alkali and volatile-rich igneous source. <i>Journal of Geophysical Research E: Planets</i> , 2014, 119, 64-81.	1.5	113
45	Orbital evidence for more widespread carbonate-bearing rocks on Mars. <i>Journal of Geophysical Research E: Planets</i> , 2016, 121, 652-677.	1.5	109
46	Geochemical Consequences of Widespread Clay Mineral Formation in Mars's Ancient Crust. <i>Space Science Reviews</i> , 2013, 174, 329-364.	3.7	108
47	Evidence for low-grade metamorphism, hydrothermal alteration, and diagenesis on Mars from phyllosilicate mineral assemblages. <i>Clays and Clay Minerals</i> , 2011, 59, 359-377.	0.6	107
48	Imaging spectroscopy of geological samples and outcrops: Novel insights from microns to meters. <i>GSA Today</i> , 2015, 25, 4-10.	1.1	106
49	An interval of high salinity in ancient Gale crater lake on Mars. <i>Nature Geoscience</i> , 2019, 12, 889-895.	5.4	105
50	Carbon sequestration on Mars. <i>Geology</i> , 2015, 43, 863-866.	2.0	101
51	Mineralogy of an active eolian sediment from the Namib dune, Gale crater, Mars. <i>Journal of Geophysical Research E: Planets</i> , 2017, 122, 2344-2361.	1.5	98
52	Chemistry, mineralogy, and grain properties at Namib and High dunes, Bagnold dune field, Gale crater, Mars: A synthesis of Curiosity rover observations. <i>Journal of Geophysical Research E: Planets</i> , 2017, 122, 2510-2543.	1.5	95
53	An in-situ record of major environmental transitions on early Mars at Northeast Syrtis Major. <i>Geophysical Research Letters</i> , 2012, 39, .	1.5	94
54	Perseverance's Scanning Habitable Environments with Raman and Luminescence for Organics and Chemicals (SHERLOC) Investigation. <i>Space Science Reviews</i> , 2021, 217, 1.	3.7	94

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55	THEORETICAL SPECTRA OF TERRESTRIAL EXOPLANET SURFACES. <i>Astrophysical Journal</i> , 2012, 752, 7.	1.6	90
56	Tracing the fate of carbon and the atmospheric evolution of Mars. <i>Nature Communications</i> , 2015, 6, 10003.	5.8	90
57	Perseverance rover reveals an ancient delta-lake system and flood deposits at Jezero crater, Mars. <i>Science</i> , 2021, 374, 711-717.	6.0	86
58	Nature, formation, and distribution of carbonates on Ceres. <i>Science Advances</i> , 2018, 4, e1701645.	4.7	83
59	The Mars 2020 Perseverance Rover Mast Camera Zoom (Mastcam-Z) Multispectral, Stereoscopic Imaging Investigation. <i>Space Science Reviews</i> , 2021, 217, 24.	3.7	76
60	The potential science and engineering value of samples delivered to Earth by Mars sample return. <i>Meteoritics and Planetary Science</i> , 2019, 54, S3.	0.7	73
61	Long-term drying of Mars by sequestration of ocean-scale volumes of water in the crust. <i>Science</i> , 2021, 372, 56-62.	6.0	73
62	The sustainability of habitability on terrestrial planets: Insights, questions, and needed measurements from Mars for understanding the evolution of Earth-like worlds. <i>Journal of Geophysical Research E: Planets</i> , 2016, 121, 1927-1961.	1.5	72
63	Improved accuracy in quantitative laser-induced breakdown spectroscopy using sub-models. <i>Spectrochimica Acta, Part B: Atomic Spectroscopy</i> , 2017, 129, 49-57.	1.5	71
64	ChemCam passive reflectance spectroscopy of surface materials at the Curiosity landing site, Mars. <i>Icarus</i> , 2015, 249, 74-92.	1.1	70
65	Low temperature production and exhalation of methane from serpentinized rocks on Earth: A potential analog for methane production on Mars. <i>Icarus</i> , 2013, 224, 276-285.	1.1	68
66	Overview of the Microscopic Imager Investigation during Spirit's first 450 sols in Gusev crater. <i>Journal of Geophysical Research</i> , 2006, 111, n/a-n/a.	3.3	64
67	Compositional variations in sands of the Bagnold Dunes, Gale crater, Mars, from visible-shortwave infrared spectroscopy and comparison with ground truth from the Curiosity rover. <i>Journal of Geophysical Research E: Planets</i> , 2017, 122, 2489-2509.	1.5	64
68	A coupled model of episodic warming, oxidation and geochemical transitions on early Mars. <i>Nature Geoscience</i> , 2021, 14, 127-132.	5.4	64
69	Mineralogy and chemistry of altered Icelandic basalts: Application to clay mineral detection and understanding aqueous environments on Mars. <i>Journal of Geophysical Research</i> , 2012, 117, .	3.3	62
70	The Mars Science Laboratory (MSL) Bagnold Dunes Campaign, Phase I: Overview and introduction to the special issue. <i>Journal of Geophysical Research E: Planets</i> , 2018, 123, 3-19.	1.5	62
71	Paleo-Rock-Hosted Life on Earth and the Search on Mars: A Review and Strategy for Exploration. <i>Astrobiology</i> , 2019, 19, 1230-1262.	1.5	62
72	Mineralogy of the MSL Curiosity landing site in Gale crater as observed by MRO/CRISM. <i>Geophysical Research Letters</i> , 2014, 41, 4880-4887.	1.5	59

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73	Morphologic Diversity of Martian Ripples: Implications for Large-Ripple Formation. <i>Geophysical Research Letters</i> , 2018, 45, 10,229.	1.5	59
74	Magmatic precipitation as a possible origin of Noachian clays on Mars. <i>Nature Geoscience</i> , 2012, 5, 739-743.	5.4	58
75	Characterization of LIBS emission lines for the identification of chlorides, carbonates, and sulfates in salt/basalt mixtures for the application to MSL ChemCam data. <i>Journal of Geophysical Research E: Planets</i> , 2017, 122, 744-770.	1.5	57
76	Mineralogy and fluvial history of the watersheds of Gale, Knobel, and Sharp craters: A regional context for the Mars Science Laboratory Curiosity's exploration. <i>Geophysical Research Letters</i> , 2015, 42, 264-273.	1.5	55
77	Mars Science Laboratory Observations of Chloride Salts in Gale Crater, Mars. <i>Geophysical Research Letters</i> , 2019, 46, 10754-10763.	1.5	52
78	Chemical variations in Yellowknife Bay formation sedimentary rocks analyzed by ChemCam on board the Curiosity rover on Mars. <i>Journal of Geophysical Research E: Planets</i> , 2015, 120, 452-482.	1.5	51
79	Discovery of alunite in Cross crater, Terra Sirenum, Mars: Evidence for acidic, sulfurous waters. <i>American Mineralogist</i> , 2016, 101, 1527-1542.	0.9	51
80	Methane on Mars and Habitability: Challenges and Responses. <i>Astrobiology</i> , 2018, 18, 1221-1242.	1.5	50
81	The stratigraphy and history of Mars' northern lowlands through mineralogy of impact craters: A comprehensive survey. <i>Journal of Geophysical Research E: Planets</i> , 2017, 122, 1824-1854.	1.5	49
82	Modeling the thermal and physical evolution of Mount Sharp's sedimentary rocks, Gale Crater, Mars: Implications for diagenesis on the MSL Curiosity rover traverse. <i>Journal of Geophysical Research E: Planets</i> , 2015, 120, 1396-1414.	1.5	48
83	Geochemistry of the Bagnold dune field as observed by ChemCam and comparison with other aeolian deposits at Gale Crater. <i>Journal of Geophysical Research E: Planets</i> , 2017, 122, 2144-2162.	1.5	46
84	Visible to near-infrared MSL/Mastcam multispectral imaging: Initial results from select high-interest science targets within Gale Crater, Mars. <i>American Mineralogist</i> , 2017, 102, 1202-1217.	0.9	43
85	MRO/CRISM Retrieval of Surface Lambert Albedos for Multispectral Mapping of Mars With DISORT-Based Radiative Transfer Modeling: Phase 1 Using Historical Climatology for Temperatures, Aerosol Optical Depths, and Atmospheric Pressures. <i>IEEE Transactions on Geoscience and Remote Sensing</i> , 2008, 46, 4020-4040.	2.7	41
86	Visible/near-infrared spectral diversity from in situ observations of the Bagnold Dune Field sands in Gale Crater, Mars. <i>Journal of Geophysical Research E: Planets</i> , 2017, 122, 2655-2684.	1.5	40
87	Challenges in the Search for Perchlorate and Other Hydrated Minerals With 2.1-µm Absorptions on Mars. <i>Geophysical Research Letters</i> , 2018, 45, 12180-12189.	1.5	40
88	Post-landing major element quantification using SuperCam laser induced breakdown spectroscopy. <i>Spectrochimica Acta, Part B: Atomic Spectroscopy</i> , 2022, 188, 106347.	1.5	40
89	In Situ Analysis of Opal in Gale Crater, Mars. <i>Journal of Geophysical Research E: Planets</i> , 2018, 123, 1955-1972.	1.5	36
90	A probabilistic approach to remote compositional analysis of planetary surfaces. <i>Journal of Geophysical Research E: Planets</i> , 2017, 122, 983-1009.	1.5	34

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91	Elemental composition and mineralogy of Vesta and Ceres: Distribution and origins of hydrogen-bearing species. <i>Icarus</i> , 2019, 318, 42-55.	1.1	34
92	Compositional differences among Bright Spots on the Ceres surface. <i>Icarus</i> , 2019, 320, 202-212.	1.1	33
93	Detection of iron substitution in natroalunite-natrojarosite solid solutions and potential implications for Mars. <i>American Mineralogist</i> , 2014, 99, 948-964.	0.9	32
94	Long-runout landslides and the long-lasting effects of early water activity on Mars. <i>Geology</i> , 2015, 43, 107-110.	2.0	32
95	Characterization of Hydrogen in Basaltic Materials With Laser-Induced Breakdown Spectroscopy (<sc>LIBS</sc>) for Application to <sc>MSL</sc> ChemCam Data. <i>Journal of Geophysical Research E: Planets</i> , 2018, 123, 1996-2021.	1.5	32
96	Constraints on iron sulfate and iron oxide mineralogy from ChemCam visible/near-infrared reflectance spectroscopy of Mt. Sharp basal units, Gale Crater, Mars. <i>American Mineralogist</i> , 2016, 101, 1501-1514.	0.9	31
97	Pre-Flight Calibration of the Mars 2020 Rover Mastcam Zoom (Mastcam-Z) Multispectral, Stereoscopic Imager. <i>Space Science Reviews</i> , 2021, 217, 29.	3.7	31
98	Ultra-compact imaging spectrometer for remote, <i>in situ</i>, and microscopic planetary mineralogy. <i>Journal of Applied Remote Sensing</i> , 2014, 8, 084988.	0.6	30
99	The Holy Grail: A road map for unlocking the climate record stored within Mars's polar layered deposits. <i>Planetary and Space Science</i> , 2020, 184, 104841.	0.9	30
100	Hydrothermal activity recorded in post Noachian-aged impact craters on Mars. <i>Journal of Geophysical Research E: Planets</i> , 2016, 121, 608-625.	1.5	29
101	Ambient and cold-temperature infrared spectra and XRD patterns of ammoniated phyllosilicates and carbonaceous chondrite meteorites relevant to Ceres and other solar system bodies. <i>Meteoritics and Planetary Science</i> , 2018, 53, 1884-1901.	0.7	27
102	Radiometric Calibration Targets for the Mastcam-Z Camera on the Mars 2020 Rover Mission. <i>Space Science Reviews</i> , 2020, 216, 1.	3.7	27
103	Mineralogy and stratigraphy of the Gale crater rim, wall, and floor units. <i>Journal of Geophysical Research E: Planets</i> , 2017, 122, 1090-1118.	1.5	26
104	Regional Structural Orientation of the Mount Sharp Group Revealed by In Situ Dip Measurements and Stratigraphic Correlations on the Vera Rubin Ridge. <i>Journal of Geophysical Research E: Planets</i> , 2020, 125, e2019JE006298.	1.5	26
105	Spectrally distinct ejecta in Syrtis Major, Mars: Evidence for environmental change at the Hesperian-Amazonian boundary. <i>Journal of Geophysical Research</i> , 2010, 115, .	3.3	23
106	A deep-ultraviolet Raman and Fluorescence spectral library of 62 minerals for the SHERLOC instrument onboard Mars 2020. <i>Planetary and Space Science</i> , 2021, 209, 105356.	0.9	21
107	Geology of possible Martian methane source regions. <i>Planetary and Space Science</i> , 2011, 59, 196-202.	0.9	20
108	Composition, Stratigraphy, and Geological History of the Noachian Basement Surrounding the Isidis Impact Basin. <i>Journal of Geophysical Research E: Planets</i> , 2020, 125, e2019JE006190.	1.5	20

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109	The Potential for Biologically Catalyzed Anaerobic Methane Oxidation on Ancient Mars. <i>Astrobiology</i> , 2014, 14, 292-307.	1.5	19
110	Evidence for Deposition of Chloride on Mars From Small-Volume Surface Water Events Into the Late Hesperian-Early Amazonian. <i>AGU Advances</i> , 2022, 3, .	2.3	19
111	Studies of a Lacustrine-Volcanic Mars Analog Field Site With Mars-Like Instruments. <i>Earth and Space Science</i> , 2020, 7, e2019EA000720.	1.1	18
112	Clay mineral formation under oxidized conditions and implications for paleoenvironments and organic preservation on Mars. <i>Nature Communications</i> , 2017, 8, 1230.	5.8	17
113	Production of Sulfur Allotropes in Electron Irradiated Jupiter Trojans Ice Analogs. <i>Astrophysical Journal</i> , 2017, 846, 148.	1.6	17
114	Bagnold Dunes Campaign Phase 2: Visible/Near-Infrared Reflectance Spectroscopy of Longitudinal Ripple Sands. <i>Geophysical Research Letters</i> , 2018, 45, 9480-9487.	1.5	17
115	Visible Near-infrared Spectral Evolution of Irradiated Mixed Ices and Application to Kuiper Belt Objects and Jupiter Trojans. <i>Astrophysical Journal</i> , 2018, 856, 124.	1.6	15
116	Synthesis and characterization of Fe(III)-Fe(II)-Mg-Al smectite solid solutions and implications for planetary science. <i>American Mineralogist</i> , 2021, 106, 964-982.	0.9	15
117	ELECTRON IRRADIATION AND THERMAL PROCESSING OF MIXED-ICES OF POTENTIAL RELEVANCE TO JUPITER TROJAN ASTEROIDS. <i>Astrophysical Journal</i> , 2016, 820, 141.	1.6	13
118	A PCA-Based Framework for Determining Remotely Sensed Geological Surface Orientations and Their Statistical Quality. <i>Earth and Space Science</i> , 2019, 6, 1378-1408.	1.1	13
119	Hubble Ultraviolet Spectroscopy of Jupiter Trojans. <i>Astronomical Journal</i> , 2019, 157, 161.	1.9	13
120	Phyllosilicate and hydrated silica detections in the knobby terrains of Acidalia Planitia, northern plains, Mars. <i>Geophysical Research Letters</i> , 2014, 41, 1890-1898.	1.5	12
121	Healthy debate on early Mars. <i>Nature Geoscience</i> , 2018, 11, 888-888.	5.4	12
122	The Deposition and Alteration History of the Northeast Syrtis Major Layered Sulfates. <i>Journal of Geophysical Research E: Planets</i> , 2019, 124, 1743-1782.	1.5	12
123	Hydrogen Variability in the Murray Formation, Gale Crater, Mars. <i>Journal of Geophysical Research E: Planets</i> , 2020, 125, e2019JE006289.	1.5	12
124	Formation of Magnesium Carbonates on Earth and Implications for Mars. <i>Journal of Geophysical Research E: Planets</i> , 2021, 126, e2021JE006828.	1.5	12
125	A Probabilistic Approach to Determination of Ceres' Average Surface Composition From Dawn Visible-Infrared Mapping Spectrometer and Gamma Ray and Neutron Detector Data. <i>Journal of Geophysical Research E: Planets</i> , 2020, 125, e2020JE006606.	1.5	11
126	Generalized Unsupervised Clustering of Hyperspectral Images of Geological Targets in the Near Infrared. , 2021, , .		11

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127	Distant Formation and Differentiation of Outer Main Belt Asteroids and Carbonaceous Chondrite Parent Bodies. AGU Advances, 2022, 3, .	2.3	11
128	Exploring the Shallow Subsurface of Mars with the Ma_MISS Spectrometer on the ExoMars Rover Rosalind Franklin. Planetary Science Journal, 2022, 3, 142.	1.5	9
129	Photometric characterization of Lucideon and Avian Technologies color standards including application for calibration of the Mastcam-Z instrument on the Mars 2020 rover. Optical Engineering, 2019, 58, 1.	0.5	8
130	Hydrothermal Alteration of the Ocean Crust and Patterns in Mineralization With Depth as Measured by Microimaging Infrared Spectroscopy. Journal of Geophysical Research: Solid Earth, 2021, 126, e2021JB021976.	1.4	7
131	Mineralogy and chemistry of San Carlos high-alkali basalts: Analyses of alteration with application for Mars exploration. American Mineralogist, 2017, 102, 284-301.	0.9	6
132	Visible to Short-Wave Infrared Spectral Analyses of Mars from Orbit Using CRISM and OMEGA. , 2019, , 453-483.		6
133	Compositional Heterogeneity of Impact Melt Rocks at the Haughton Impact Structure, Canada: Implications for Planetary Processes and Remote Sensing. Journal of Geophysical Research E: Planets, 2020, 125, e2019JE006218.	1.5	6
134	Spatiotemporal evolution, mineralogical composition, and transport mechanisms of long-runout landslides in Valles Marineris, Mars. Icarus, 2020, 350, 113836.	1.1	6
135	In Situ Geochronology for the Next Decade: Mission Designs for the Moon, Mars, and Vesta. Planetary Science Journal, 2021, 2, 145.	1.5	6
136	Identifying and quantifying mineral abundance through VSWIR microimaging spectroscopy: A comparison to XRD and SEM. , 2016, , .		5
137	A machine learning toolkit for CRISM image analysis. Icarus, 2022, 376, 114849.	1.1	5
138	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
139	Rare jarosite detection in crism imagery by non-parametric Bayesian clustering. , 2016, , .		3
140	Aqueous Processes From Diverse Hydrous Minerals in the Vicinity of Amazonian-Aged Lyot Crater. Journal of Geophysical Research E: Planets, 2018, 123, 1618-1648.	1.5	3
141	Electronic Spectra of Minerals in the Visible and Near-Infrared Regions. , 2019, , 3-20.		3
142	Effect of H <sub>2</sub> S on the Near-infrared Spectrum of Irradiation Residue and Applications to the Kuiper Belt Object (486958) Arrokoth. Astrophysical Journal Letters, 2021, 914, L31.	3.0	3
143	THE FORMATION AND EVOLUTION OF BRIGHT SPOTS ON CERES. , 2017, , .		3
144	Tracing Carbonate Formation, Serpentinization, and Biological Materials With Micro-Meso-Scale Infrared Imaging Spectroscopy in a Mars Analog System, Samail Ophiolite, Oman. Earth and Space Science, 2021, 8, e2021EA001637.	1.1	3

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145	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
146	The Mars Orbiter for Resources, Ices, and Environments (MORIE) Science Goals and Instrument Trades in Radar, Imaging, and Spectroscopy. <i>Planetary Science Journal</i> , 2021, 2, 76.	1.5	2
147	Geochemistry of Carbonates on Mars: Implications for Climate History and Nature of Aqueous Environments. <i>Space Sciences Series of ISSI</i> , 2012, , 301-328.	0.0	2
148	Confronting Racism to Advance Our Science. <i>AGU Advances</i> , 2021, 2, e2020AV000296.	2.3	1
149	Controls on the Global Distribution of Martian Landslides. <i>Journal of Geophysical Research E: Planets</i> , 2021, 126, e2020JE006675.	1.5	1
150	Characterizing Hydration of the Ocean Crust Using Shortwave Infrared Microimaging Spectroscopy of ICDP Oman Drilling Project Cores. <i>Journal of Geophysical Research: Solid Earth</i> , 2021, 126, e2021JB022676.	1.4	1
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