B L Ehlmann

List of Publications by Year
in descending order

157 papers	15,792 citations	16437 64 h-index	16164 124 g-index
159 all docs	159 docs citations	159 times ranked	6170 citing authors

#	Article	IF	Citations
1	A machine learning toolkit for CRISM image analysis. Icarus, 2022, 376, 114849.	1.1	5
2	Distant Formation and Differentiation of Outer Main Belt Asteroids and Carbonaceous Chondrite Parent Bodies. AGU Advances, 2022, 3, .	2.3	11
3	Evidence for Deposition of Chloride on Mars From Smallâ€Volume Surface Water Events Into the Late Hesperianâ€Early Amazonian. AGU Advances, 2022, 3, .	2.3	19
4	Post-landing major element quantification using SuperCam laser induced breakdown spectroscopy. Spectrochimica Acta, Part B: Atomic Spectroscopy, 2022, 188, 106347.	1.5	40
5	Ammonia on Ceres. , 2022, , 134-142.		0
6	Thank You to Our 2021 Peer Reviewers. AGU Advances, 2022, 3, .	2.3	0
7	Mid- and long-wave infrared point spectrometer (MLPS): a miniature space-borne science instrument. Optics Express, 2022, 30, 17476.	1.7	0
8	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
9	Pre-Flight Calibration of the Mars 2020 Rover Mastcam Zoom (Mastcam-Z) Multispectral, Stereoscopic Imager. Space Science Reviews, 2021, 217, 29.	3.7	31
10	The Mars 2020 Perseverance Rover Mast Camera Zoom (Mastcam-Z) Multispectral, Stereoscopic Imaging Investigation. Space Science Reviews, 2021, 217, 24.	3.7	76
11	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
12	Confronting Racism to Advance Our Science. AGU Advances, 2021, 2, e2020AV000296.	2.3	1
13	Thank You to Our 2020 Peer Reviewers. AGU Advances, 2021, 2, e2021AV000426.	2.3	0
14	A coupled model of episodic warming, oxidation and geochemical transitions on early Mars. Nature Geoscience, 2021, 14, 127-132.	5.4	64
15	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
16	Long-term drying of Mars by sequestration of ocean-scale volumes of water in the crust. Science, 2021, 372, 56-62.	6.0	73
17	Perseveranceâ€™s Scanning Habitable Environments with Raman and Luminescence for Organics and Chemicals (SHERLOC) Investigation. Space Science Reviews, 2021, 217, 1.	3.7	94
18	Controls on the Global Distribution of Martian Landslides. Journal of Geophysical Research E: Planets, 2021, 126, e2020JE006675.	1.5	1

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19	Effect of H₂S 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
20	Generalized Unsupervised Clustering of Hyperspectral Images of Geological Targets in the Near Infrared. , 2021, , .		11
21	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
22	Formation of Magnesium Carbonates on Earth and Implications for Mars. Journal of Geophysical Research E: Planets, 2021, 126, e2021JE006828.	1.5	12
23	Hydrothermal Alteration of the Ocean Crust and Patterns in Mineralization With Depth as Measured by Microâ€Imaging Infrared Spectroscopy. Journal of Geophysical Research: Solid Earth, 2021, 126, e2021JB021976.	1.4	7
24	In Situ Geochronology for the Next Decade: Mission Designs for the Moon, Mars, and Vesta. Planetary Science Journal, 2021, 2, 145.	1.5	6
25	Tracing Carbonate Formation, Serpentinization, and Biological Materials With Microâ€Mesoâ€Scale Infrared Imaging Spectroscopy in a Mars Analog System, Samail Ophiolite, Oman. Earth and Space Science, 2021, 8, e2021EA001637.	1.1	3
26	Perseverance rover reveals an ancient delta-lake system and flood deposits at Jezero crater, Mars. Science, 2021, 374, 711-717.	6.0	86
27	A deep-ultraviolet Raman and Fluorescence spectral library of 62 minerals for the SHERLOC instrument onboard Mars 2020. Planetary and Space Science, 2021, 209, 105356.	0.9	21
28	Characterizing Hydration of the Ocean Crust Using Shortwave Infrared Microimaging Spectroscopy of ICDP Oman Drilling Project Cores. Journal of Geophysical Research: Solid Earth, 2021, 126, e2021JB022676.	1.4	1
29	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
30	Characterizing low-temperature aqueous alteration of Mars-analog basalts from Mauna Kea at multiple scales. American Mineralogist, 2020, 105, 1306-1316.	0.9	2
31	Radiometric Calibration Targets for the Mastcam-Z Camera on the Mars 2020 Rover Mission. Space Science Reviews, 2020, 216, 1.	3.7	27
32	A Probabilistic Approach to Determination of Ceres' Average Surface Composition From Dawn Visibleâ€Infrared Mapping Spectrometer and Gamma Ray and Neutron Detector Data. Journal of Geophysical Research E: Planets, 2020, 125, e2020JE006606.	1.5	11
33	Thank You to Our 2019 Reviewers. AGU Advances, 2020, 1, e2020AV000181.	2.3	0
34	Spatiotemporal evolution, mineralogical composition, and transport mechanisms of long-runout landslides in Valles Marineris, Mars. Icarus, 2020, 350, 113836.	1.1	6
35	Composition, Stratigraphy, and Geological History of the Noachian Basement Surrounding the Isidis Impact Basin. Journal of Geophysical Research E: Planets, 2020, 125, e2019JE006190.	1.5	20
36	The Holy Grail: A road map for unlocking the climate record stored within Marsâ€™ polar layered deposits. Planetary and Space Science, 2020, 184, 104841.	0.9	30

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37	Studies of a Lacustrineâ€Volcanic Mars Analog Field Site With Marsâ€2020â€Like Instruments. Earth and Space Science, 2020, 7, e2019EA000720.	1.1	18
38	Hydrogen Variability in the Murray Formation, Gale Crater, Mars. Journal of Geophysical Research E: Planets, 2020, 125, e2019JE006289.	1.5	12
39	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
40	AGU Advances Goes Online. AGU Advances, 2020, 1, e2019AV000105.	2.3	0
41	Elemental composition and mineralogy of Vesta and Ceres: Distribution and origins of hydrogen-bearing species. Icarus, 2019, 318, 42-55.	1.1	34
42	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
43	Electronic Spectra of Minerals in the Visible and Near-Infrared Regions. , 2019, , 3-20.		3
44	A PCAâ€Based Framework for Determining Remotely Sensed Geological Surface Orientations and Their Statistical Quality. Earth and Space Science, 2019, 6, 1378-1408.	1.1	13
45	Mars Science Laboratory Observations of Chloride Salts in Gale Crater, Mars. Geophysical Research Letters, 2019, 46, 10754-10763.	1.5	52
46	An interval of high salinity in ancient Gale crater lake on Mars. Nature Geoscience, 2019, 12, 889-895.	5.4	105
47	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
48	Hubble Ultraviolet Spectroscopy of Jupiter Trojans. Astronomical Journal, 2019, 157, 161.	1.9	13
49	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
50	Visible to Short-Wave Infrared Spectral Analyses of Mars from Orbit Using CRISM and OMEGA. , 2019, , 453-483.		6
51	Compositional differences among Bright Spots on the Ceres surface. Icarus, 2019, 320, 202-212.	1.1	33
52	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
53	Visible Near-infrared Spectral Evolution of Irradiated Mixed Ices and Application to Kuiper Belt Objects and Jupiter Trojans. Astrophysical Journal, 2018, 856, 124.	1.6	15
54	Nature, formation, and distribution of carbonates on Ceres. Science Advances, 2018, 4, e1701645.	4.7	83

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55	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
56	Challenges in the Search for Perchlorate and Other Hydrated Minerals With 2.1â€¼m Absorptions on Mars. Geophysical Research Letters, 2018, 45, 12180-12189.	1.5	40
57	Healthy debate on early Mars. Nature Geoscience, 2018, 11, 888-888.	5.4	12
58	Methane on Mars and Habitability: Challenges and Responses. Astrobiology, 2018, 18, 1221-1242.	1.5	50
59	Ambient and coldâ€temperature infrared spectra and XRD patterns of ammoniated phyllosilicates and carbonaceous chondrite meteorites relevant to Ceres and other solar system bodies. Meteoritics and Planetary Science, 2018, 53, 1884-1901.	0.7	27
60	In Situ Analysis of Opal in Gale Crater, Mars. Journal of Geophysical Research E: Planets, 2018, 123, 1955-1972.	1.5	36
61	Morphologic Diversity of Martian Ripples: Implications for Largeâ€Ripple Formation. Geophysical Research Letters, 2018, 45, 10,229.	1.5	59
62	Bagnold Dunes Campaign Phase 2: Visible/Nearâ€Infrared Reflectance Spectroscopy of Longitudinal Ripple Sands. Geophysical Research Letters, 2018, 45, 9480-9487.	1.5	17
63	Characterization of Hydrogen in Basaltic Materials With Laserâ€Induced Breakdown Spectroscopy (<scp>LIBS</scp>) for Application to <scp>MSL</scp> ChemCam Data. Journal of Geophysical Research E: Planets, 2018, 123, 1996-2021.	1.5	32
64	Aqueous Processes From Diverse Hydrous Minerals in the Vicinity of Amazonianâ€Aged Lyot Crater. Journal of Geophysical Research E: Planets, 2018, 123, 1618-1648.	1.5	3
65	Recalibration of the Mars Science Laboratory ChemCam instrument with an expanded geochemical database. Spectrochimica Acta, Part B: Atomic Spectroscopy, 2017, 129, 64-85.	1.5	137
66	Transient reducing greenhouse warming on early Mars. Geophysical Research Letters, 2017, 44, 665-671.	1.5	178
67	Visible/nearâ€infrared spectral diversity from in situ observations of the Bagnold Dune Field sands in Gale Crater, Mars. Journal of Geophysical Research E: Planets, 2017, 122, 2655-2684.	1.5	40
68	Compositional variations in sands of the Bagnold Dunes, Gale crater, Mars, from visibleâ€shortwave infrared spectroscopy and comparison with ground truth from the Curiosity rover. Journal of Geophysical Research E: Planets, 2017, 122, 2489-2509.	1.5	64
69	A probabilistic approach to remote compositional analysis of planetary surfaces. Journal of Geophysical Research E: Planets, 2017, 122, 983-1009.	1.5	34
70	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
71	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
72	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

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73	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
74	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
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. Journal of Geophysical Research E: Planets, 2017, 122, 744-770.	1.5	57
76	Improved accuracy in quantitative laser-induced breakdown spectroscopy using sub-models. Spectrochimica Acta, Part B: Atomic Spectroscopy, 2017, 129, 49-57.	1.5	71
77	Extensive water ice within Ceresâ€™ aqueously altered regolith: Evidence from nuclear spectroscopy. Science, 2017, 355, 55-59.	6.0	169
78	Clay mineral formation under oxidized conditions and implications for paleoenvironments and organic preservation on Mars. Nature Communications, 2017, 8, 1230.	5.8	17
79	Production of Sulfur Allotropes in Electron Irradiated Jupiter Trojans Ice Analogs. Astrophysical Journal, 2017, 846, 148.	1.6	17
80	The stratigraphy and history of Mars' northern lowlands through mineralogy of impact craters: A comprehensive survey. Journal of Geophysical Research E: Planets, 2017, 122, 1824-1854.	1.5	49
81	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
82	THE FORMATION AND EVOLUTION OF BRIGHT SPOTS ON CERES. , 2017, , .		3
83	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
84	Discovery of alunite in Cross crater, Terra Sirenum, Mars: Evidence for acidic, sulfurous waters. American Mineralogist, 2016, 101, 1527-1542.	0.9	51
85	Hydrothermal activity recorded in post Noachianâ€aged impact craters on Mars. Journal of Geophysical Research E: Planets, 2016, 121, 608-625.	1.5	29
86	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
87	Distribution of phyllosilicates on the surface of Ceres. Science, 2016, 353, .	6.0	159
88	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
89	Rare jarosite detection in crism imagery by non-parametric Bayesian clustering. , 2016, , .		3
90	ELECTRON IRRADIATION AND THERMAL PROCESSING OF MIXED-ICES OF POTENTIAL RELEVANCE TO JUPITER TROJAN ASTEROIDS. Astrophysical Journal, 2016, 820, 141.	1.6	13

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91	Identifying and quantifying mineral abundance through VSWIR microimaging spectroscopy: A comparison to XRD and SEM. , 2016, , .		5
92	Orbital evidence for more widespread carbonateâ€bearing rocks on Mars. Journal of Geophysical Research E: Planets, 2016, 121, 652-677.	1.5	109
93	Bright carbonate deposits as evidence of aqueous alteration on (1) Ceres. Nature, 2016, 536, 54-57.	13.7	240
94	ChemCam activities and discoveries during the nominal mission of the Mars Science Laboratory in Gale crater, Mars. Journal of Analytical Atomic Spectrometry, 2016, 31, 863-889.	1.6	134
95	Modeling the thermal and physical evolution of Mount Sharp's sedimentary rocks, Gale Crater, Mars: Implications for diagenesis on the MSL Curiosity rover traverse. Journal of Geophysical Research E: Planets, 2015, 120, 1396-1414.	1.5	48
96	Mineralogy and fluvial history of the watersheds of Gale, Knobel, and Sharp craters: A regional context for the Mars Science Laboratory Curiosity's exploration. Geophysical Research Letters, 2015, 42, 264-273.	1.5	55
97	Chemical variations in Yellowknife Bay formation sedimentary rocks analyzed by ChemCam on board the Curiosity rover on Mars. Journal of Geophysical Research E: Planets, 2015, 120, 452-482.	1.5	51
98	Tracing the fate of carbon and the atmospheric evolution of Mars. Nature Communications, 2015, 6, 10003.	5.8	90
99	The origin and implications of clay minerals from Yellowknife Bay, Gale crater, Mars. American Mineralogist, 2015, 100, 824-836.	0.9	122
100	Long-runout landslides and the long-lasting effects of early water activity on Mars. Geology, 2015, 43, 107-110.	2.0	32
101	Evidence for indigenous nitrogen in sedimentary and aeolian deposits from the Curiosity rover investigations at Gale crater, Mars. Proceedings of the National Academy of Sciences of the United States of America, 2015, 112, 4245-4250.	3.3	172
102	Carbon sequestration on Mars. Geology, 2015, 43, 863-866.	2.0	101
103	ChemCam passive reflectance spectroscopy of surface materials at the Curiosity landing site, Mars. Icarus, 2015, 249, 74-92.	1.1	70
104	Imaging spectroscopy of geological samples and outcrops: Novel insights from microns to meters. GSA Today, 2015, 25, 4-10.	1.1	106
105	Ultra-compact imaging spectrometer for remote,in situ, and microscopic planetary mineralogy. Journal of Applied Remote Sensing, 2014, 8, 084988.	0.6	30
106	Detection of iron substitution in natroalunite-natrojarosite solid solutions and potential implications for Mars. American Mineralogist, 2014, 99, 948-964.	0.9	32
107	The Potential for Biologically Catalyzed Anaerobic Methane Oxidation on Ancient Mars. Astrobiology, 2014, 14, 292-307.	1.5	19
108	Mineralogy of the Martian Surface. Annual Review of Earth and Planetary Sciences, 2014, 42, 291-315.	4.6	472

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109	Volatile and Organic Compositions of Sedimentary Rocks in Yellowknife Bay, Gale Crater, Mars. Science, 2014, 343, 1245267.	6.0	323
110	A Habitable Fluvio-Lacustrine Environment at Yellowknife Bay, Gale Crater, Mars. Science, 2014, 343, 1242777.	6.0	687
111	Mineralogy of a Mudstone at Yellowknife Bay, Gale Crater, Mars. Science, 2014, 343, 1243480.	6.0	508
112	Elemental Geochemistry of Sedimentary Rocks at Yellowknife Bay, Gale Crater, Mars. Science, 2014, 343, 1244734.	6.0	246
113	Calcium sulfate veins characterized by ChemCam/Curiosity at Gale crater, Mars. Journal of Geophysical Research E: Planets, 2014, 119, 1991-2016.	1.5	214
114	Phyllosilicate and hydrated silica detections in the knobby terrains of Acidalia Planitia, northern plains, Mars. Geophysical Research Letters, 2014, 41, 1890-1898.	1.5	12
115	Mineralogy of the MSL Curiosity landing site in Gale crater as observed by MRO/CRISM. Geophysical Research Letters, 2014, 41, 4880-4887.	1.5	59
116	Geochemical diversity in first rocks examined by the Curiosity Rover in Gale Crater: Evidence for and significance of an alkali and volatileâ€rich igneous source. Journal of Geophysical Research E: Planets, 2014, 119, 64-81.	1.5	113
117	Revised CRISM spectral parameters and summary products based on the currently detected mineral diversity on Mars. Journal of Geophysical Research E: Planets, 2014, 119, 1403-1431.	1.5	280
118	Igneous mineralogy at Bradbury Rise: The first ChemCam campaign at Gale crater. Journal of Geophysical Research E: Planets, 2014, 119, 30-46.	1.5	114
119	X-ray Diffraction Results from Mars Science Laboratory: Mineralogy of Rocknest at Gale Crater. Science, 2013, 341, 1238932.	6.0	327
120	Curiosity at Gale Crater, Mars: Characterization and Analysis of the Rocknest Sand Shadow. Science, 2013, 341, 1239505.	6.0	280
121	Abundance and Isotopic Composition of Gases in the Martian Atmosphere from the Curiosity Rover. Science, 2013, 341, 263-266.	6.0	327
122	Volatile, Isotope, and Organic Analysis of Martian Fines with the Mars Curiosity Rover. Science, 2013, 341, 1238937.	6.0	367
123	Isotope Ratios of H, C, and O in CO ₂ and H ₂ O of the Martian Atmosphere. Science, 2013, 341, 260-263.	6.0	241
124	Geochemical Consequences of Widespread Clay Mineral Formation in Marsâ€™ Ancient Crust. Space Science Reviews, 2013, 174, 329-364.	3.7	108
125	Geochemistry of Carbonates on Mars: Implications for Climate History and Nature of Aqueous Environments. Space Science Reviews, 2013, 174, 301-328.	3.7	126
126	Low temperature production and exhalation of methane from serpentinized rocks on Earth: A potential analog for methane production on Mars. Icarus, 2013, 224, 276-285.	1.1	68

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127	Martian Fluvial Conglomerates at Gale Crater. Science, 2013, 340, 1068-1072.	6.0	326
128	The Petrochemistry of Jake_M: A Martian Mugearite. Science, 2013, 341, 1239463.	6.0	134
129	Soil Diversity and Hydration as Observed by ChemCam at Gale Crater, Mars. Science, 2013, 341, 1238670.	6.0	215
130	THEORETICAL SPECTRA OF TERRESTRIAL EXOPLANET SURFACES. Astrophysical Journal, 2012, 752, 7.	1.6	90
131	An inâ€situ record of major environmental transitions on early Mars at Northeast Syrtis Major. Geophysical Research Letters, 2012, 39, .	1.5	94
132	Mineralogy and chemistry of altered Icelandic basalts: Application to clay mineral detection and understanding aqueous environments on Mars. Journal of Geophysical Research, 2012, 117, .	3.3	62
133	Magmatic precipitation as a possible origin of Noachian clays on Mars. Nature Geoscience, 2012, 5, 739-743.	5.4	58
134	Geochemical Consequences of Widespread Clay Mineral Formation in Marsâ€™ Ancient Crust. Space Sciences Series of ISSI, 2012, , 329-364.	0.0	0
135	Geochemistry of Carbonates on Mars: Implications for Climate History and Nature of Aqueous Environments. Space Sciences Series of ISSI, 2012, , 301-328.	0.0	2
136	Columbus crater and other possible groundwater-fed paleolakes of Terra Sirenum, Mars. Journal of Geophysical Research, 2011, 116, .	3.3	148
137	Subsurface water and clay mineral formation during the early history of Mars. Nature, 2011, 479, 53-60.	13.7	651
138	Evidence for low-grade metamorphism, hydrothermal alteration, and diagenesis on Mars from phyllosilicate mineral assemblages. Clays and Clay Minerals, 2011, 59, 359-377.	0.6	107
139	Geology of possible Martian methane source regions. Planetary and Space Science, 2011, 59, 196-202.	0.9	20
140	Silica deposits in the Nili Patera caldera on the Syrtis Major volcanic complex on Mars. Nature Geoscience, 2010, 3, 838-841.	5.4	173
141	Spectrally distinct ejecta in Syrtis Major, Mars: Evidence for environmental change at the Hesperianâ€Amazonian boundary. Journal of Geophysical Research, 2010, 115, .	3.3	23
142	Geologic setting of serpentine deposits on Mars. Geophysical Research Letters, 2010, 37, .	1.5	299
143	Identification of hydrated silicate minerals on Mars using MROâ€CRISM: Geologic context near Nili Fossae and implications for aqueous alteration. Journal of Geophysical Research, 2009, 114, .	3.3	483
144	A synthesis of Martian aqueous mineralogy after 1 Mars year of observations from the Mars Reconnaissance Orbiter. Journal of Geophysical Research, 2009, 114, .	3.3	445

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145	Composition, Morphology, and Stratigraphy of Noachian Crust around the Isidis basin. Journal of Geophysical Research, 2009, 114, .	3.3	144
146	Characterization of phyllosilicates observed in the central Mawrth Vallis region, Mars, their potential formational processes, and implications for past climate. Journal of Geophysical Research, 2009, 114, .	3.3	117
147	Hydrated silicate minerals on Mars observed by the Mars Reconnaissance Orbiter CRISM instrument. Nature, 2008, 454, 305-309.	13.7	630
148	Clay minerals in delta deposits and organic preservation potential on Mars. Nature Geoscience, 2008, 1, 355-358.	5.4	293
149	MRO/CRISM Retrieval of Surface Lambert Albedos for Multispectral Mapping of Mars With DISORT-Based Radiative Transfer Modeling: Phase 1â€"Using Historical Climatology for Temperatures, Aerosol Optical Depths, and Atmospheric Pressures. IEEE Transactions on Geoscience and Remote Sensing, 2008, 46, 4020-4040.	2.7	41
150	Compositional stratigraphy of clayâ€bearing layered deposits at Mawrth Vallis, Mars. Geophysical Research Letters, 2008, 35, .	1.5	165
151	Orbital Identification of Carbonate-Bearing Rocks on Mars. Science, 2008, 322, 1828-1832.	6.0	560
152	Phyllosilicate Diversity and Past Aqueous Activity Revealed at Mawrth Vallis, Mars. Science, 2008, 321, 830-833.	6.0	328
153	Overview of the Microscopic Imager Investigation during Spirit's first 450 sols in Gusev crater. Journal of Geophysical Research, 2006, 111, n/a-n/a.	3.3	64
154	Nature and origin of the hematite-bearing plains of Terra Meridiani based on analyses of orbital and Mars Exploration rover data sets. Journal of Geophysical Research, 2006, 111, n/a-n/a.	3.3	144
155	Soils of Eagle Crater and Meridiani Planum at the Opportunity Rover Landing Site. Science, 2004, 306, 1723-1726.	6.0	153
156	Localization and Physical Property Experiments Conducted by Opportunity at Meridiani Planum. Science, 2004, 306, 1730-1733.	6.0	130
157	Localization and Physical Properties Experiments Conducted by Spirit at Gusev Crater. Science, 2004, 305, 821-824.	6.0	166