

J R Johnson

List of Publications by Citations

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The third column is the impact factor (IF) of the journal, and the fourth column is the number of citations of the article.

180
papers

14,991
citations

64
h-index

120
g-index

190
ext. papers

16,931
ext. citations

13.1
avg, IF

5.22
L-index

#	Paper	IF	Citations
180	Heat flow from the Earth's interior: Analysis of the global data set. <i>Reviews of Geophysics</i> , 1993 , 31, 267	23.1	1010
179	In situ evidence for an ancient aqueous environment at Meridiani Planum, Mars. <i>Science</i> , 2004 , 306, 1709-11	33.3	693
178	A habitable fluvio-lacustrine environment at Yellowknife Bay, Gale crater, Mars. <i>Science</i> , 2014 , 343, 1242-7	33.3	536
177	Provenance and diagenesis of the evaporite-bearing Burns formation, Meridiani Planum, Mars. <i>Earth and Planetary Science Letters</i> , 2005 , 240, 95-121	5.3	425
176	The Opportunity Rover's Athena science investigation at Meridiani Planum, Mars. <i>Science</i> , 2004 , 306, 1698-703	33.3	421
175	The Spirit Rover's Athena Science Investigation at Gusev Crater, Mars. <i>Science</i> , 2004 , 305, 794-799	33.3	358
174	Mineralogy of a mudstone at Yellowknife Bay, Gale crater, Mars. <i>Science</i> , 2014 , 343, 1243-8	33.3	344
173	Mineralogy at Meridiani Planum from the Mini-TES Experiment on the Opportunity Rover. <i>Science</i> , 2004 , 306, 1733-9	33.3	313
172	Volatile, isotope, and organic analysis of martian fines with the Mars Curiosity rover. <i>Science</i> , 2013 , 341, 1238-9	33.3	306
171	An integrated view of the chemistry and mineralogy of martian soils. <i>Nature</i> , 2005 , 436, 49-54	50.4	299
170	Volatile and organic compositions of sedimentary rocks in Yellowknife Bay, Gale crater, Mars. <i>Science</i> , 2014 , 343, 1245-7	33.3	277
169	Martian fluvial conglomerates at Gale crater. <i>Science</i> , 2013 , 340, 1068-72	33.3	269
168	Abundance and isotopic composition of gases in the martian atmosphere from the Curiosity rover. <i>Science</i> , 2013 , 341, 263-6	33.3	265
167	Basaltic Rocks Analyzed by the Spirit Rover in Gusev Crater. <i>Science</i> , 2004 , 305, 842-845	33.3	228
166	Mineralogic and compositional properties of Martian soil and dust: Results from Mars Pathfinder. <i>Journal of Geophysical Research</i> , 2000 , 105, 1721-1755		225
165	Curiosity at Gale crater, Mars: characterization and analysis of the Rocknest sand shadow. <i>Science</i> , 2013 , 341, 1239-5	33.3	222
164	X-ray diffraction results from Mars Science Laboratory: mineralogy of Rocknest at Gale crater. <i>Science</i> , 2013 , 341, 1238-9	33.3	217

163	Results from the Mars Pathfinder camera. <i>Science</i> , 1997 , 278, 1758-65	33.3	216
162	Elemental geochemistry of sedimentary rocks at Yellowknife Bay, Gale crater, Mars. <i>Science</i> , 2014 , 343, 1244734	33.3	205
161	Characterization and petrologic interpretation of olivine-rich basalts at Gusev Crater, Mars. <i>Journal of Geophysical Research</i> , 2006 , 111, n/a-n/a		203
160	Wind-driven particle mobility on Mars: Insights from Mars Exploration Rover observations at El Dorado and surroundings at Gusev Crater. <i>Journal of Geophysical Research</i> , 2008 , 113,		199
159	Overview of the Spirit Mars Exploration Rover Mission to Gusev Crater: Landing site to Backstay Rock in the Columbia Hills. <i>Journal of Geophysical Research</i> , 2006 , 111, n/a-n/a		198
158	Mars Exploration Rover Athena Panoramic Camera (Pancam) investigation. <i>Journal of Geophysical Research</i> , 2003 , 108,		197
157	Chemical, multispectral, and textural constraints on the composition and origin of rocks at the Mars Pathfinder landing site. <i>Journal of Geophysical Research</i> , 1999 , 104, 8679-8715		193
156	Isotope ratios of H, C, and O in CO ₂ and H ₂ O of the martian atmosphere. <i>Science</i> , 2013 , 341, 260-3	33.3	189
155	Soil diversity and hydration as observed by ChemCam at Gale crater, Mars. <i>Science</i> , 2013 , 341, 1238670	33.3	185
154	Calcium sulfate veins characterized by ChemCam/Curiosity at Gale crater, Mars. <i>Journal of Geophysical Research E: Planets</i> , 2014 , 119, 1991-2016	4.1	174
153	Initial results from the Mini-TES experiment in Gusev Crater from the Spirit Rover. <i>Science</i> , 2004 , 305, 837-42	33.3	154
152	Ancient impact and aqueous processes at Endeavour Crater, Mars. <i>Science</i> , 2012 , 336, 570-6	33.3	153
151	Two years at Meridiani Planum: results from the Opportunity Rover. <i>Science</i> , 2006 , 313, 1403-7	33.3	152
150	Localization and physical properties experiments conducted by Spirit at Gusev Crater. <i>Science</i> , 2004 , 305, 821-4	33.3	148
149	Pyroclastic activity at Home Plate in Gusev Crater, Mars. <i>Science</i> , 2007 , 316, 738-42	33.3	142
148	Pancam multispectral imaging results from the Spirit Rover at Gusev Crater. <i>Science</i> , 2004 , 305, 800-6	33.3	141
147	Dust devil vortices seen by the Mars Pathfinder Camera. <i>Geophysical Research Letters</i> , 1999 , 26, 2781-2784	33.3	132
146	Soils of Eagle crater and Meridiani Planum at the Opportunity Rover landing site. <i>Science</i> , 2004 , 306, 1723-6	33.3	130

145	Evidence from Opportunity's Microscopic Imager for water on Meridiani Planum. <i>Science</i> , 2004 , 306, 1723-30	33.3	128
144	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		127
143	Evidence for indigenous nitrogen in sedimentary and aeolian deposits from the Curiosity rover investigations at Gale crater, Mars. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2015 , 112, 4245-50	11.5	123
142	Characteristics, distribution, origin, and significance of opaline silica observed by the Spirit rover in Gusev crater, Mars. <i>Journal of Geophysical Research</i> , 2011 , 116,		123
141	Overview of the Opportunity Mars Exploration Rover Mission to Meridiani Planum: Eagle Crater to Purgatory Ripple. <i>Journal of Geophysical Research</i> , 2006 , 111, n/a-n/a		123
140	Textures of the Soils and Rocks at Gusev Crater from Spirit's Microscopic Imager. <i>Science</i> , 2004 , 305, 824-826	33.3	119
139	The petrochemistry of Jake_M: a martian mugearite. <i>Science</i> , 2013 , 341, 1239463	33.3	114
138	Exploration of Victoria crater by the Mars rover Opportunity. <i>Science</i> , 2009 , 324, 1058-61	33.3	112
137	Pancam multispectral imaging results from the Opportunity Rover at Meridiani Planum. <i>Science</i> , 2004 , 306, 1703-9	33.3	107
136	Hydrothermal processes at Gusev Crater: An evaluation of Paso Robles class soils. <i>Journal of Geophysical Research</i> , 2008 , 113,		105
135	The rocks of Gusev Crater as viewed by the Mini-TES instrument. <i>Journal of Geophysical Research</i> , 2006 , 111, n/a-n/a		104
134	Overview of the Mars Pathfinder Mission: Launch through landing, surface operations, data sets, and science results. <i>Journal of Geophysical Research</i> , 1999 , 104, 8523-8553		104
133	ChemCam activities and discoveries during the nominal mission of the Mars Science Laboratory in Gale crater, Mars. <i>Journal of Analytical Atomic Spectrometry</i> , 2016 , 31, 863-889	3.7	92
132	Wind-related processes detected by the Spirit Rover at Gusev Crater, Mars. <i>Science</i> , 2004 , 305, 810-3	33.3	89
131	Spirit Mars Rover Mission: Overview and selected results from the northern Home Plate Winter Haven to the side of Scamander crater. <i>Journal of Geophysical Research</i> , 2010 , 115,		87
130	Light-toned salty soils and coexisting Si-rich species discovered by the Mars Exploration Rover Spirit in Columbia Hills. <i>Journal of Geophysical Research</i> , 2008 , 113,		83
129	The ChemCam Remote Micro-Imager at Gale crater: Review of the first year of operations on Mars. <i>Icarus</i> , 2015 , 249, 93-107	3.8	80
128	Spirit Mars Rover Mission to the Columbia Hills, Gusev Crater: Mission overview and selected results from the Cumberland Ridge to Home Plate. <i>Journal of Geophysical Research</i> , 2008 , 113,		78

127	Oxidation of manganese in an ancient aquifer, Kimberley formation, Gale crater, Mars. <i>Geophysical Research Letters</i> , 2016 , 43, 7398-7407	4.9	76
126	Silica-rich deposits and hydrated minerals at Gusev Crater, Mars: Vis-NIR spectral characterization and regional mapping. <i>Icarus</i> , 2010 , 205, 375-395	3.8	75
125	Diagenetic silica enrichment and late-stage groundwater activity in Gale crater, Mars. <i>Geophysical Research Letters</i> , 2017 , 44, 4716-4724	4.9	74
124	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	4.1	74
123	Opportunity Mars Rover mission: Overview and selected results from Purgatory ripple to traverses to Endeavour crater. <i>Journal of Geophysical Research</i> , 2011 , 116,		74
122	Soil grain analyses at Meridiani Planum, Mars. <i>Journal of Geophysical Research</i> , 2006 , 111, n/a-n/a		69
121	Mineralogic constraints on sulfur-rich soils from Pancam spectra at Gusev crater, Mars. <i>Geophysical Research Letters</i> , 2007 , 34, n/a-n/a	4.9	68
120	Sedimentary textures formed by aqueous processes, Erebus crater, Meridiani Planum, Mars. <i>Geology</i> , 2006 , 34, 1085	5	67
119	Imager for Mars Pathfinder (IMP) image calibration. <i>Journal of Geophysical Research</i> , 1999 , 104, 8907-8925		66
118	Remote sensing of potential lunar resources: 1. Near-side compositional properties. <i>Journal of Geophysical Research</i> , 1991 , 96, 18861		66
117	The SuperCam Instrument Suite on the NASA Mars 2020 Rover: Body Unit and Combined System Tests. <i>Space Science Reviews</i> , 2021 , 217, 4	7.5	64
116	Hydrothermal origin of halogens at Home Plate, Gusev Crater. <i>Journal of Geophysical Research</i> , 2008 , 113,		62
115	Meteorites on Mars observed with the Mars Exploration Rovers. <i>Journal of Geophysical Research</i> , 2008 , 113,		61
114	Preliminary results on photometric properties of materials at the Sagan Memorial Station, Mars. <i>Journal of Geophysical Research</i> , 1999 , 104, 8809-8830		60
113	ChemCam passive reflectance spectroscopy of surface materials at the Curiosity landing site, Mars. <i>Icarus</i> , 2015 , 249, 74-92	3.8	58
112	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		58
111	Thermal infrared spectroscopy of experimentally shocked anorthosite and pyroxenite: Implications for remote sensing of Mars. <i>Journal of Geophysical Research</i> , 2002 , 107, 3-1		57
110	Dust deposition on the Mars Exploration Rover Panoramic Camera (Pancam) calibration targets. <i>Journal of Geophysical Research</i> , 2007 , 112,		55

109	Spectral variability among rocks in visible and near-infrared multispectral Pancam data collected at Gusev crater: Examinations using spectral mixture analysis and related techniques. <i>Journal of Geophysical Research</i> , 2006 , 111, n/a-n/a		55
108	Dust deposition at the Mars Pathfinder landing site: observations and modeling of visible/near-infrared spectra. <i>Icarus</i> , 2003 , 163, 330-346	3.8	55
107	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	4.1	54
106	Hydrogen detection with ChemCam at Gale crater. <i>Icarus</i> , 2015 , 249, 43-61	3.8	48
105	Veneers, rinds, and fracture fills: Relatively late alteration of sedimentary rocks at Meridiani Planum, Mars. <i>Journal of Geophysical Research</i> , 2008 , 113,		48
104	Visible and near-infrared multispectral analysis of rocks at Meridiani Planum, Mars, by the Mars Exploration Rover Opportunity. <i>Journal of Geophysical Research</i> , 2007 , 112,		46
103	The color of the Martian sky and its influence on the illumination of the Martian surface. <i>Journal of Geophysical Research</i> , 1999 , 104, 8795-8808		46
102	Dust coatings on basaltic rocks and implications for thermal infrared spectroscopy of Mars. <i>Journal of Geophysical Research</i> , 2002 , 107, 2-1		45
101	Visible/near-infrared spectra of experimentally shocked plagioclase feldspars. <i>Journal of Geophysical Research</i> , 2003 , 108,		44
100	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	4.1	42
99	Persistent aeolian activity at Endeavour crater, Meridiani Planum, Mars; new observations from orbit and the surface. <i>Icarus</i> , 2015 , 251, 275-290	3.8	41
98	Spectral, mineralogical, and geochemical variations across Home Plate, Gusev Crater, Mars indicate high and low temperature alteration. <i>Earth and Planetary Science Letters</i> , 2009 , 281, 258-266	5.3	41
97	Remote sensing of potential lunar resources: 2. High spatial resolution mapping of spectral reflectance ratios and implications for nearside mare TiO ₂ content. <i>Journal of Geophysical Research</i> , 1994 , 99, 5601		41
96	Infrared Measurements of Pristine and Disturbed Soils 1. Spectral Contrast Differences between Field and Laboratory Data. <i>Remote Sensing of Environment</i> , 1998 , 64, 34-46	13.2	40
95	High concentrations of manganese and sulfur in deposits on Murray Ridge, Endeavour Crater, Mars. <i>American Mineralogist</i> , 2016 , 101, 1389-1405	2.9	40
94	Gone with the wind: Eolian erasure of the Mars Rover tracks. <i>Journal of Geophysical Research</i> , 2010 , 115,		38
93	Spectrophotometric properties of materials observed by Pancam on the Mars Exploration Rovers: 1. Spirit. <i>Journal of Geophysical Research</i> , 2006 , 111, n/a-n/a		38
92	Thermal infrared spectroscopy and modeling of experimentally shocked plagioclase feldspars. <i>American Mineralogist</i> , 2003 , 88, 1575-1582	2.9	38

91	Infrared Measurements of Pristine and Disturbed Soils 2. Environmental Effects and Field Data Reduction. <i>Remote Sensing of Environment</i> , 1998 , 64, 47-52	13.2	37
90	The SuperCam Instrument Suite on the Mars 2020 Rover: Science Objectives and Mast-Unit Description. <i>Space Science Reviews</i> , 2021 , 217, 1	7.5	37
89	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	4.1	36
88	Chemistry and texture of the rocks at Rocknest, Gale Crater: Evidence for sedimentary origin and diagenetic alteration. <i>Journal of Geophysical Research E: Planets</i> , 2014 , 119, 2109-2131	4.1	36
87	Dust deposition on the decks of the Mars Exploration Rovers: 10 years of dust dynamics on the Panoramic Camera calibration targets. <i>Earth and Space Science</i> , 2015 , 2, 144-172	3.1	36
86	First in situ investigation of a dark wind streak on Mars. <i>Journal of Geophysical Research</i> , 2008 , 113,		36
85	Terrain physical properties derived from orbital data and the first 360 sols of Mars Science Laboratory Curiosity rover observations in Gale Crater. <i>Journal of Geophysical Research E: Planets</i> , 2014 , 119, 1322-1344	4.1	35
84	Spectrogoniometry and modeling of martian and lunar analog samples and Apollo soils. <i>Icarus</i> , 2013 , 223, 383-406	3.8	35
83	Visible/near-infrared spectra and two-layer modeling of palagonite-coated basalts. <i>Geophysical Research Letters</i> , 2001 , 28, 2101-2104	4.9	35
82	Estimated solar wind-implanted helium-3 distribution on the Moon. <i>Geophysical Research Letters</i> , 1999 , 26, 385-388	4.9	35
81	A reevaluation of spectral ratios for Lunar Mare TiO ₂ mapping. <i>Geophysical Research Letters</i> , 1991 , 18, 2153-2156	4.9	33
80	Evidence for a Diagenetic Origin of Vera Rubin Ridge, Gale Crater, Mars: Summary and Synthesis of 's Exploration Campaign. <i>Journal of Geophysical Research E: Planets</i> , 2020 , 125, e2020JE006527	4.1	33
79	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	2.9	32
78	Digital photogrammetric analysis of the IMP camera images: Mapping the Mars Pathfinder landing site in three dimensions. <i>Journal of Geophysical Research</i> , 1999 , 104, 8869-8887		31
77	Context of ancient aqueous environments on Mars from in situ geologic mapping at Endeavour Crater. <i>Journal of Geophysical Research E: Planets</i> , 2015 , 120, 538-569	4.1	30
76	Surface albedo observations at Gusev Crater and Meridiani Planum, Mars. <i>Journal of Geophysical Research</i> , 2008 , 113,		30
75	Hematite spherules at Meridiani: Results from MI, Mini-TES, and Pancam. <i>Journal of Geophysical Research</i> , 2008 , 113,		29
74	Retrieval of water vapor column abundance and aerosol properties from ChemCam passive sky spectroscopy. <i>Icarus</i> , 2018 , 307, 294-326	3.8	27

73	The Mars 2020 Rover Mast Camera Zoom (Mastcam-Z) Multispectral, Stereoscopic Imaging Investigation. <i>Space Science Reviews</i> , 2021 , 217, 24	7.5	27
72	Oxalate minerals on Mars?. <i>Earth and Planetary Science Letters</i> , 2015 , 420, 127-139	5.3	26
71	Photogeologic Map of the Perseverance Rover Field Site in Jezero Crater Constructed by the Mars 2020 Science Team. <i>Space Science Reviews</i> , 2020 , 216, 1	7.5	26
70	Chemical variability in mineralized veins observed by ChemCam on the lower slopes of Mount Sharp in Gale crater, Mars. <i>Icarus</i> , 2018 , 311, 69-86	3.8	26
69	Rock spectral classes observed by the Spirit Rover's Pancam on the Gusev Crater Plains and in the Columbia Hills. <i>Journal of Geophysical Research</i> , 2008 , 113,		26
68	Coordinated analyses of orbital and Spirit Rover data to characterize surface materials on the cratered plains of Gusev Crater, Mars. <i>Journal of Geophysical Research</i> , 2007 , 112,		26
67	The 1999 Marsokhod rover mission simulation at Silver Lake, California: Mission overview, data sets, and summary of results. <i>Journal of Geophysical Research</i> , 2001 , 106, 7639-7663		26
66	Observation of > 5 wt % zinc at the Kimberley outcrop, Gale crater, Mars. <i>Journal of Geophysical Research E: Planets</i> , 2016 , 121, 338-352	4.1	26
65	Martian Eolian Dust Probed by ChemCam. <i>Geophysical Research Letters</i> , 2018 , 45, 10,968	4.9	26
64	Thermal infrared spectra of experimentally shocked andesine anorthosite. <i>Icarus</i> , 2012 , 221, 359-364	3.8	24
63	Radiative transfer modeling of dust-coated Pancam calibration target materials: Laboratory visible/near-infrared spectrogoniometry. <i>Journal of Geophysical Research</i> , 2006 , 111, n/a-n/a		24
62	The Spirit Rover's Athena science investigation at Gusev Crater, Mars. <i>Science</i> , 2004 , 305, 794-9	33.3	24
61	Overview of the magnetic properties experiments on the Mars Exploration Rovers. <i>Journal of Geophysical Research</i> , 2009 , 114,		23
60	Surface processes recorded by rocks and soils on Meridiani Planum, Mars: Microscopic Imager observations during Opportunity's first three extended missions. <i>Journal of Geophysical Research</i> , 2008 , 113,		23
59	Spectrophotometric properties of materials observed by Pancam on the Mars Exploration Rovers: 2. Opportunity. <i>Journal of Geophysical Research</i> , 2006 , 111, n/a-n/a		23
58	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	2.9	23
57	Low Abundance Materials at the Mars Pathfinder Landing Site: An Investigation Using Spectral Mixture Analysis and Related Techniques. <i>Icarus</i> , 2002 , 158, 56-71	3.8	21
56	Iron Mobility During Diagenesis at Vera Rubin Ridge, Gale Crater, Mars. <i>Journal of Geophysical Research E: Planets</i> , 2020 , 125, e2019JE006299	4.1	21

55	VNIR multispectral observations of rocks at Cape York, Endeavour crater, Mars by the Opportunity rover's Pancam. <i>Icarus</i> , 2013 , 225, 709-725	3.8	19
54	Evidence for mechanical and chemical alteration of iron-nickel meteorites on Mars: Process insights for Meridiani Planum. <i>Journal of Geophysical Research</i> , 2011 , 116,		19
53	Shocked plagioclase signatures in Thermal Emission Spectrometer data of Mars. <i>Icarus</i> , 2006 , 180, 60-74	3.8	19
52	Planetary science: bedrock formation at Meridiani Planum. <i>Nature</i> , 2006 , 443, E1-2; discussion E2	50.4	19
51	Field reconnaissance geologic mapping of the Columbia Hills, Mars, based on Mars Exploration Rover Spirit and MRO HiRISE observations. <i>Journal of Geophysical Research</i> , 2011 , 116,		18
50	Mars Oxygen ISRU Experiment (MOXIE). <i>Space Science Reviews</i> , 2021 , 217, 1	7.5	18
49	Temporal observations of bright soil exposures at Gusev crater, Mars. <i>Journal of Geophysical Research</i> , 2011 , 116,		17
48	Thermal infrared spectroscopy and modeling of experimentally shocked basalts. <i>American Mineralogist</i> , 2007 , 92, 1148-1157	2.9	17
47	Visible/near-infrared spectrogoniometric observations and modeling of dust-coated rocks. <i>Icarus</i> , 2004 , 171, 546-556	3.8	17
46	Analyses of High-Iron Sedimentary Bedrock and Diagenetic Features Observed With ChemCam at Vera Rubin Ridge, Gale Crater, Mars: Calibration and Characterization. <i>Journal of Geophysical Research E: Planets</i> , 2020 , 125, e2019JE006314	4.1	17
45	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	4.1	17
44	Properties and distribution of paired candidate stony meteorites at Meridiani Planum, Mars. <i>Journal of Geophysical Research</i> , 2010 , 115,		16
43	Diagenesis of Vera Rubin Ridge, Gale Crater, Mars, From Mastcam Multispectral Images. <i>Journal of Geophysical Research E: Planets</i> , 2020 , 125, e2019JE006322	4.1	16
42	Geological characterization of remote field sites using visible and infrared spectroscopy: Results from the 1999 Marsokhod field test. <i>Journal of Geophysical Research</i> , 2001 , 106, 7683-7711		15
41	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	4.1	15
40	Microspectroscopic and Petrographic Comparison of Experimentally Shocked Albite, Andesine, and Bytownite. <i>Journal of Geophysical Research E: Planets</i> , 2018 , 123, 1701-1722	4.1	15
39	SuperCam Calibration Targets: Design and Development. <i>Space Science Reviews</i> , 2020 , 216, 138	7.5	14
38	Bagnold Dunes Campaign Phase 2: Visible/Near-Infrared Reflectance Spectroscopy of Longitudinal Ripple Sands. <i>Geophysical Research Letters</i> , 2018 , 45, 9480-9487	4.9	14

37	Mineralogy and chemistry of cobbles at Meridiani Planum, Mars, investigated by the Mars Exploration Rover Opportunity. <i>Journal of Geophysical Research</i> , 2010 , 115,		14
36	VNIR multispectral observations of aqueous alteration materials by the Pancams on the Spirit and Opportunity Mars Exploration Rovers. <i>American Mineralogist</i> , 2016 , 101, 2005-2019	2.9	14
35	Observations of rock spectral classes by the Opportunity rover's Pancam on northern Cape York and on Matijevec Hill, Endeavour Crater, Mars. <i>Journal of Geophysical Research E: Planets</i> , 2014 , 119, 2349-2369	4.1	13
34	New views of the Moon: Improved understanding through data integration. <i>Eos</i> , 2000 , 81, 349	1.5	13
33	Search for life on Mars in surface samples: Lessons from the 1999 Marsokhod rover field experiment. <i>Journal of Geophysical Research</i> , 2001 , 106, 7713-7720		12
32	Pre-Flight Calibration of the Mars 2020 Rover Mastcam Zoom (Mastcam-Z) Multispectral, Stereoscopic Imager. <i>Space Science Reviews</i> , 2021 , 217, 29	7.5	12
31	Mars Exploration Rover Navigation Camera in-flight calibration. <i>Journal of Geophysical Research</i> , 2008 , 113,		11
30	Lunar Prospector epithermal neutrons from impact craters and landing sites: Implications for surface maturity and hydrogen distribution. <i>Journal of Geophysical Research</i> , 2002 , 107, 3-1		11
29	Techniques for identifying dust devils in Mars Pathfinder images. <i>IEEE Transactions on Geoscience and Remote Sensing</i> , 2000 , 38, 870-876	8.1	11
28	Spectrophotometric properties of materials observed by Pancam on the Mars Exploration Rovers: 3. Sols 500-525. <i>Icarus</i> , 2015 , 248, 25-71	3.8	10
27	Surface Property Variations in Venusian Fluidized Ejecta Blanket Craters. <i>Icarus</i> , 1994 , 110, 33-70	3.8	10
26	Centimeter to decimeter hollow concretions and voids in Gale Crater sediments, Mars. <i>Icarus</i> , 2017 , 289, 144-156	3.8	9
25	Radiometric Calibration Targets for the Mastcam-Z Camera on the Mars 2020 Rover Mission. <i>Space Science Reviews</i> , 2020 , 216, 1	7.5	9
24	Variability of diffusion of argon in albite, pyroxene, and olivine in shocked and unshocked samples. <i>Geochimica Et Cosmochimica Acta</i> , 2012 , 77, 546-560	5.5	8
23	Mars Exploration Rover Pancam multispectral imaging of rocks, soils, and dust at Gusev crater and Meridiani Planum		8
22	Digital mapping of the Mars Pathfinder landing site: Design, acquisition, and derivation of cartographic products for science applications. <i>Journal of Geophysical Research</i> , 1999 , 104, 8853-8868		8
21	Basaltic rocks analyzed by the Spirit Rover in Gusev Crater. <i>Science</i> , 2004 , 305, 842-5	33.3	8
20	Visible and near-infrared multispectral analysis of geochemically measured rock fragments at the Opportunity landing site in Meridiani Planum. <i>Journal of Geophysical Research</i> , 2010 , 115,		7

19	Physical properties of the Martian surface from spectrophotometric observations	428-450		7
18	Multispectral imaging from Mars Pathfinder	263-280		6
17	The albedo of Mars: Six Mars years of observations from Pancam on the Mars Exploration Rovers and comparisons to MOC, CTX and HiRISE. <i>Icarus</i> , 2018 , 314, 159-174		3.8	6
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15	Photometric characterization of Lucideon and Avian Technologies color standards including application for calibration of the Mastcam-Z instrument on the Mars 2020 rover. <i>Optical Engineering</i> , 2019 , 58, 1		1.1	5
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