

Richard Morris

List of Publications by Year in Descending Order

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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.

161
papers

16,115
citations

70
h-index

126
g-index

165
ext. papers

18,061
ext. citations

12.6
avg, IF

5.19
L-index

#	Paper	IF	Citations
161	Post-landing major element quantification using SuperCam laser induced breakdown spectroscopy. <i>Spectrochimica Acta, Part B: Atomic Spectroscopy</i> , 2022 , 188, 106347	3.1	5
160	A Review of Sample Analysis at Mars-Evolved Gas Analysis Laboratory Analog Work Supporting the Presence of Perchlorates and Chlorates in Gale Crater, Mars. <i>Minerals (Basel, Switzerland)</i> , 2021 , 11, 475	2.4	3
159	Formation of Fe(III) (Hydr)oxides from Fe(II) Sulfides: Implications for Akaganeite Detection on Mars. <i>ACS Earth and Space Chemistry</i> , 2021 , 5, 1934-1947	3.2	0
158	Formation of Tridymite and Evidence for a Hydrothermal History at Gale Crater, Mars. <i>Journal of Geophysical Research E: Planets</i> , 2021 , 126, e2020JE006569	4.1	9
157	Brine-driven destruction of clay minerals in Gale crater, Mars. <i>Science</i> , 2021 , 373, 198-204	33.3	11
156	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	2.4	6
155	Geology and Geochemistry of Noachian Bedrock and Alteration Events, Meridiani Planum, Mars: MER Opportunity Observations. <i>Journal of Geophysical Research E: Planets</i> , 2021 , 126, e2021JE006915	4.1	1
154	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	4.1	14
153	Mineralogy of Vera Rubin Ridge From the Mars Science Laboratory CheMin Instrument. <i>Journal of Geophysical Research E: Planets</i> , 2020 , 125, e2019JE006306	4.1	40
152	Hydrothermal Precipitation of Sanidine (Adularia) Having Full Al,Si Structural Disorder and Specular Hematite at Maunakea Volcano (Hawaii) and at Gale Crater (Mars). <i>Journal of Geophysical Research E: Planets</i> , 2020 , 125, e2019JE006324	4.1	10
151	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	4.1	23
150	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	3.8	6
149	Metasomatic control of hydrogen contents in the layered cratonic mantle lithosphere sampled by Lac de Gras xenoliths in the central Slave craton, Canada. <i>Geochimica Et Cosmochimica Acta</i> , 2020 , 286, 29-53	5.5	6
148	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
147	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
146	Reaction of Akaganeite with Mars-Relevant Anions. <i>ACS Earth and Space Chemistry</i> , 2019 , 3, 314-323	3.2	12
145	Mössbauer Spectroscopy at Gusev Crater and Meridiani Planum 2019 , 538-554		1

144	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	4.1	12
143	Diverse Lithologies and Alteration Events on the Rim of Noachian-Aged Endeavour Crater, Meridiani Planum, Mars: In Situ Compositional Evidence. <i>Journal of Geophysical Research E: Planets</i> , 2018 , 123, 1255-1306	4.1	17
142	Smectite formation in the presence of sulfuric acid: Implications for acidic smectite formation on early Mars. <i>Geochimica Et Cosmochimica Acta</i> , 2018 , 220, 248-260	5.5	16
141	Clay mineral diversity and abundance in sedimentary rocks of Gale crater, Mars. <i>Science Advances</i> , 2018 , 4, eaar3330	14.3	104
140	Gypsum, bassanite, and anhydrite at Gale crater, Mars. <i>American Mineralogist</i> , 2018 , 103, 1011-1020	2.9	55
139	Crystal chemistry of martian minerals from Bradbury Landing through Naukluft Plateau, Gale crater, Mars. <i>American Mineralogist</i> , 2018 , 103, 857-871	2.9	67
138	Relationships between unit-cell parameters and composition for rock-forming minerals on Earth, Mars, and other extraterrestrial bodies. <i>American Mineralogist</i> , 2018 , 103, 848-856	2.9	24
137	Chlorate/Fe-Bearing Phase Mixtures as a Possible Source of Oxygen and Chlorine Detected by the Sample Analysis at Mars Instrument in Gale Crater, Mars. <i>Journal of Geophysical Research E: Planets</i> , 2018 , 123, 2920-2938	4.1	21
136	Effect of Solution pH and Chloride Concentration on Akaganeite Precipitation: Implications for Akaganeite Formation on Mars. <i>Journal of Geophysical Research E: Planets</i> , 2018 , 123, 2211-2222	4.1	16
135	Sand Mineralogy Within the Bagnold Dunes, Gale Crater, as Observed In Situ and From Orbit. <i>Geophysical Research Letters</i> , 2018 , 45, 9488-9497	4.9	36
134	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	3.1	90
133	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	4.1	75
132	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
131	Improved accuracy in quantitative laser-induced breakdown spectroscopy using sub-models. <i>Spectrochimica Acta, Part B: Atomic Spectroscopy</i> , 2017 , 129, 49-57	3.1	50
130	Large sulfur isotope fractionations in Martian sediments at Gale crater. <i>Nature Geoscience</i> , 2017 , 10, 658-662	18.3	38
129	The Mars Science Laboratory Curiosity rover Mastcam instruments: Preflight and in-flight calibration, validation, and data archiving. <i>Earth and Space Science</i> , 2017 , 4, 396-452	3.1	65
128	Oxidative alteration of ferrous smectites and implications for the redox evolution of early Mars. <i>Journal of Geophysical Research E: Planets</i> , 2017 , 122, 2469-2488	4.1	18
127	Esperance: Multiple episodes of aqueous alteration involving fracture fills and coatings at Matijevec Hill, Mars. <i>American Mineralogist</i> , 2016 , 101, 1515-1526	2.9	17

126	Silicic volcanism on Mars evidenced by tridymite in high-SiO ₂ sedimentary rock at Gale crater. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2016 , 113, 7071-6	11.5	126
125	Recognizing sulfate and phosphate complexes chemisorbed onto nanophase weathering products on Mars using in-situ and remote observations. <i>American Mineralogist</i> , 2016 , 101, 678-689	2.9	17
124	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
123	Mineralogy, provenance, and diagenesis of a potassic basaltic sandstone on Mars: CheMin X-ray diffraction of the Windjana sample (Kimberley area, Gale Crater). <i>Journal of Geophysical Research E: Planets</i> , 2016 , 121, 75-106	4.1	128
122	Mars Reconnaissance Orbiter and Opportunity observations of the Burns formation: Crater hopping at Meridiani Planum. <i>Journal of Geophysical Research E: Planets</i> , 2015 , 120, 429-451	4.1	26
121	Synthesis and structural characterization of ferrous trioctahedral smectites: Implications for clay mineral genesis and detectability on Mars. <i>Journal of Geophysical Research E: Planets</i> , 2015 , 120, 1119-1140	4.1	31
120	The origin and implications of clay minerals from Yellowknife Bay, Gale crater, Mars. <i>American Mineralogist</i> , 2015 , 100, 824-836	2.9	90
119	Volatile and organic compositions of sedimentary rocks in Yellowknife Bay, Gale crater, Mars. <i>Science</i> , 2014 , 343, 1245267	33.3	277
118	A habitable fluvio-lacustrine environment at Yellowknife Bay, Gale crater, Mars. <i>Science</i> , 2014 , 343, 1242373	33.3	536
117	Mineralogy of a mudstone at Yellowknife Bay, Gale crater, Mars. <i>Science</i> , 2014 , 343, 1243480	33.3	344
116	Elemental geochemistry of sedimentary rocks at Yellowknife Bay, Gale crater, Mars. <i>Science</i> , 2014 , 343, 1244734	33.3	205
115	Ancient aqueous environments at Endeavour crater, Mars. <i>Science</i> , 2014 , 343, 1248097	33.3	132
114	Sulfur-bearing phases detected by evolved gas analysis of the Rocknest aeolian deposit, Gale Crater, Mars. <i>Journal of Geophysical Research E: Planets</i> , 2014 , 119, 373-393	4.1	50
113	Abundances and implications of volatile-bearing species from evolved gas analysis of the Rocknest aeolian deposit, Gale Crater, Mars. <i>Journal of Geophysical Research E: Planets</i> , 2014 , 119, 237-254	4.1	63
112	Ferrian saponite from the Santa Monica Mountains (California, U.S.A., Earth): Characterization as an analog for clay minerals on Mars with application to Yellowknife Bay in Gale Crater. <i>American Mineralogist</i> , 2014 , 99, 2234-2250	2.9	46
111	A hematite-bearing layer in Gale Crater, Mars: Mapping and implications for past aqueous conditions. <i>Geology</i> , 2013 , 41, 1103-1106	5	91
110	X-ray diffraction results from Mars Science Laboratory: mineralogy of Rocknest at Gale crater. <i>Science</i> , 2013 , 341, 1238932	33.3	217
109	Curiosity at Gale crater, Mars: characterization and analysis of the Rocknest sand shadow. <i>Science</i> , 2013 , 341, 1239505	33.3	222

108	Volatile, isotope, and organic analysis of martian fines with the Mars Curiosity rover. <i>Science</i> , 2013 , 341, 1238937	33.3	306
107	Geochemistry of Carbonates on Mars: Implications for Climate History and Nature of Aqueous Environments. <i>Space Science Reviews</i> , 2013 , 174, 301-328	7.5	106
106	Isotopic and geochemical investigation of two distinct Mars analog environments using evolved gas techniques in Svalbard, Norway. <i>Icarus</i> , 2013 , 224, 297-308	3.8	6
105	Martian fluvial conglomerates at Gale crater. <i>Science</i> , 2013 , 340, 1068-72	33.3	269
104	Mauna Kea, Hawaii, as an Analog Site for Future Planetary Resource Exploration: Results from the 2010 ILSO-ISRU Field-Testing Campaign. <i>Journal of Aerospace Engineering</i> , 2013 , 26, 183-196	1.4	6
103	The petrochemistry of Jake_M: a martian mugearite. <i>Science</i> , 2013 , 341, 1239463	33.3	114
102	Soil diversity and hydration as observed by ChemCam at Gale crater, Mars. <i>Science</i> , 2013 , 341, 1238670	33.3	185
101	Acid sulfate alteration of fluorapatite, basaltic glass and olivine by hydrothermal vapors and fluids: Implications for fumarolic activity and secondary phosphate phases in sulfate-rich Paso Robles soil at Gusev Crater, Mars. <i>Journal of Geophysical Research E: Planets</i> , 2013 , 118, 1-13	4.1	26
100	In-situ Mössbauer spectroscopy with MIMOS II 2013 , 533-541		0
99	The ChemCam Instrument Suite on the Mars Science Laboratory (MSL) Rover: Body Unit and Combined System Tests. <i>Space Science Reviews</i> , 2012 , 170, 167-227	7.5	336
98	Characterization and Calibration of the CheMin Mineralogical Instrument on Mars Science Laboratory. <i>Space Science Reviews</i> , 2012 , 170, 341-399	7.5	172
97	Clustering and training set selection methods for improving the accuracy of quantitative laser induced breakdown spectroscopy. <i>Spectrochimica Acta, Part B: Atomic Spectroscopy</i> , 2012 , 70, 24-32	3.1	31
96	The Sample Analysis at Mars Investigation and Instrument Suite. <i>Space Science Reviews</i> , 2012 , 170, 401-478		320
95	In-situ Mössbauer spectroscopy with MIMOS II. <i>Hyperfine Interactions</i> , 2012 , 207, 97-105	0.8	5
94	The ChemCam Instrument Suite on the Mars Science Laboratory (MSL) Rover: Body Unit and Combined System Tests 2012 , 167-227		0
93	Geochemistry of Carbonates on Mars: Implications for Climate History and Nature of Aqueous Environments. <i>Space Sciences Series of ISSI</i> , 2012 , 301-328	0.1	1
92	The Sample Analysis at Mars Investigation and Instrument Suite 2012 , 401-478		1
91	Characterization and Calibration of the CheMin Mineralogical Instrument on Mars Science Laboratory 2012 , 341-399		2

90	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
89	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
88	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
87	Bounce Rock shergottite-like basalt encountered at Meridiani Planum, Mars. <i>Meteoritics and Planetary Science</i> , 2011 , 46, no-no	2.8	16
86	Field-portable Mössbauer spectroscopy on Earth, the Moon, Mars, and beyond. <i>Geochemistry: Exploration, Environment, Analysis</i> , 2011 , 11, 129-143	1.8	3
85	New insights into the mineralogy and weathering of the Meridiani Planum meteorite, Mars. <i>Meteoritics and Planetary Science</i> , 2011 , 46, no-no	2.8	2
84	The influence of multivariate analysis methods and target grain size on the accuracy of remote quantitative chemical analysis of rocks using laser induced breakdown spectroscopy. <i>Icarus</i> , 2011 , 215, 608-627	3.8	67
83	Identification of carbonate-rich outcrops on Mars by the Spirit rover. <i>Science</i> , 2010 , 329, 421-4	33.3	303
82	Stratigraphy of hydrated sulfates in the sedimentary deposits of Aram Chaos, Mars. <i>Journal of Geophysical Research</i> , 2010 , 115,		63
81	Spectral and stratigraphic mapping of hydrated sulfate and phyllosilicate-bearing deposits in northern Sinus Meridiani, Mars. <i>Journal of Geophysical Research</i> , 2010 , 115,		59
80	Microscopy analysis of soils at the Phoenix landing site, Mars: Classification of soil particles and description of their optical and magnetic properties. <i>Journal of Geophysical Research</i> , 2010 , 115,		17
79	Concentrated perchlorate at the Mars Phoenix landing site: Evidence for thin film liquid water on Mars. <i>Geophysical Research Letters</i> , 2010 , 37, n/a-n/a	4.9	71
78	Properties and distribution of paired candidate stony meteorites at Meridiani Planum, Mars. <i>Journal of Geophysical Research</i> , 2010 , 115,		16
77	Distinct hematite populations from simultaneous fitting of Mössbauer spectra from Meridiani Planum, Mars. <i>Journal of Geophysical Research</i> , 2010 , 115,		9
76	Evidence for calcium carbonate at the Mars Phoenix landing site. <i>Science</i> , 2009 , 325, 61-4	33.3	257
75	The H ₂ O and CO ₂ adsorption properties of phyllosilicate-poor palagonitic dust and smectites under martian environmental conditions. <i>Icarus</i> , 2009 , 200, 463-467	3.8	32
74	Overview of the magnetic properties experiments on the Mars Exploration Rovers. <i>Journal of Geophysical Research</i> , 2009 , 114,		23
73	Mineralogy of volcanic rocks in Gusev Crater, Mars: Reconciling Mössbauer, Alpha Particle X-Ray Spectrometer, and Miniature Thermal Emission Spectrometer spectra. <i>Journal of Geophysical Research</i> , 2008 , 113,		80

72	Hydrothermal processes at Gusev Crater: An evaluation of Paso Robles class soils. <i>Journal of Geophysical Research</i> , 2008 , 113,		105
71	Meteorites on Mars observed with the Mars Exploration Rovers. <i>Journal of Geophysical Research</i> , 2008 , 113,		61
70	Depth selective Mössbauer spectroscopy: Analysis and simulation of 6.4 keV and 14.4 keV spectra obtained from rocks at Gusev Crater, Mars, and layered laboratory samples. <i>Journal of Geophysical Research</i> , 2008 , 113,		18
69	Hydrothermal origin of halogens at Home Plate, Gusev Crater. <i>Journal of Geophysical Research</i> , 2008 , 113,		62
68	Visible, near-infrared, and middle infrared spectroscopy of altered basaltic tephros: Spectral signatures of phyllosilicates, sulfates, and other aqueous alteration products with application to the mineralogy of the Columbia Hills of Gusev Crater, Mars. <i>Journal of Geophysical Research</i> , 2008 , 113,		71
67	Phyllosilicate and sulfate-hematite deposits within Miyamoto crater in southern Sinus Meridiani, Mars. <i>Geophysical Research Letters</i> , 2008 , 35,	4.9	59
66	Geomorphologic and mineralogic characterization of the northern plains of Mars at the Phoenix Mission candidate landing sites. <i>Journal of Geophysical Research</i> , 2008 , 113,		21
65	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
64	Geochemical properties of rocks and soils in Gusev Crater, Mars: Results of the Alpha Particle X-Ray Spectrometer from Cumberland Ridge to Home Plate. <i>Journal of Geophysical Research</i> , 2008 , 113,		132
63	Iron mineralogy and aqueous alteration from Husband Hill through Home Plate at Gusev Crater, Mars: Results from the Mössbauer instrument on the Spirit Mars Exploration Rover. <i>Journal of Geophysical Research</i> , 2008 , 113,		130
62	Detection of silica-rich deposits on Mars. <i>Science</i> , 2008 , 320, 1063-7	33.3	330
61	Search for magnetic minerals in Martian rocks: Overview of the Rock Abrasion Tool (RAT) magnet investigation on Spirit and Opportunity. <i>Journal of Geophysical Research</i> , 2008 , 113,		8
60	Extraterrestrial Mössbauer spectroscopy: more than 3 years of Mars exploration and developments for future missions. <i>Hyperfine Interactions</i> , 2008 , 182, 149-156	0.8	9
59	Mössbauer and VNIR study of dust generated from olivine basalt: application to Mars. <i>Hyperfine Interactions</i> , 2008 , 186, 127-133	0.8	3
58	Mössbauer and VNIR study of dust generated from olivine basalt: application to Mars 2008 , 1009-1015		
57	Extraterrestrial Mössbauer spectroscopy: more than 3 years of Mars exploration and developments for future missions 2008 , 149-156		
56	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
55	Hyperspectral reflectance mapping of cinder cones at the summit of Mauna Kea and implications for equivalent observations on Mars. <i>Journal of Geophysical Research</i> , 2007 , 112,		15

54	Pyroclastic activity at Home Plate in Gusev Crater, Mars. <i>Science</i> , 2007 , 316, 738-42	33.3	142
53	Evidence for montmorillonite or its compositional equivalent in Columbia Hills, Mars. <i>Journal of Geophysical Research</i> , 2007 , 112,		65
52	Two earth years of Mössbauer studies of the surface of Mars with MIMOS II 2007 , 169-177		
51	Mössbauer mineralogy of rock, soil, and dust at Meridiani Planum, Mars: Opportunity's journey across sulfate-rich outcrop, basaltic sand and dust, and hematite lag deposits. <i>Journal of Geophysical Research</i> , 2006 , 111, n/a-n/a		190
50	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
49	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
48	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
47	Geochemical and mineralogical indicators for aqueous processes in the Columbia Hills of Gusev crater, Mars. <i>Journal of Geophysical Research</i> , 2006 , 111, n/a-n/a		195
46	Rocks of the Columbia Hills. <i>Journal of Geophysical Research</i> , 2006 , 111, n/a-n/a		132
45	Mössbauer mineralogy of rock, soil, and dust at Gusev crater, Mars: Spirit's journey through weakly altered olivine basalt on the plains and pervasively altered basalt in the Columbia Hills. <i>Journal of Geophysical Research</i> , 2006 , 111, n/a-n/a		278
44	Alkaline volcanic rocks from the Columbia Hills, Gusev crater, Mars. <i>Journal of Geophysical Research</i> , 2006 , 111,		127
43	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
42	Nickel on Mars: Constraints on meteoritic material at the surface. <i>Journal of Geophysical Research</i> , 2006 , 111, n/a-n/a		56
41	Two earth years of Mössbauer studies of the surface of Mars with MIMOS II. <i>Hyperfine Interactions</i> , 2006 , 170, 169-177	0.8	16
40	Mössbauer spectroscopy on Mars: goethite in the Columbia Hills at Gusev crater 2006 , 549-554		1
39	Laboratory-simulated acid-sulfate weathering of basaltic materials: Implications for formation of sulfates at Meridiani Planum and Gusev crater, Mars. <i>Journal of Geophysical Research</i> , 2005 , 110,		54
38	An integrated view of the chemistry and mineralogy of martian soils. <i>Nature</i> , 2005 , 436, 49-54	50.4	299
37	Indication of drier periods on Mars from the chemistry and mineralogy of atmospheric dust. <i>Nature</i> , 2005 , 436, 62-5	50.4	111

36	Mössbauer spectroscopy on Mars: goethite in the Columbia Hills at Gusev crater. <i>Hyperfine Interactions</i> , 2005 , 166, 549-554	0.8	35
35	Soils of Eagle crater and Meridiani Planum at the Opportunity Rover landing site. <i>Science</i> , 2004 , 306, 1723-6	33.3	130
34	Jarosite and hematite at Meridiani Planum from Opportunity's Mossbauer Spectrometer. <i>Science</i> , 2004 , 306, 1740-5	33.3	636
33	Pancam multispectral imaging results from the Spirit Rover at Gusev Crater. <i>Science</i> , 2004 , 305, 800-6	33.3	141
32	Mineralogy at Gusev Crater from the Mössbauer spectrometer on the Spirit Rover. <i>Science</i> , 2004 , 305, 833-6	33.3	248
31	Initial results from the Mini-TES experiment in Gusev Crater from the Spirit Rover. <i>Science</i> , 2004 , 305, 837-42	33.3	154
30	In situ evidence for an ancient aqueous environment at Meridiani Planum, Mars. <i>Science</i> , 2004 , 306, 1709-14	33.3	693
29	The Spirit Rover's Athena Science Investigation at Gusev Crater, Mars. <i>Science</i> , 2004 , 305, 794-799	33.3	358
28	The Opportunity Rover's Athena science investigation at Meridiani Planum, Mars. <i>Science</i> , 2004 , 306, 1698-703	33.3	421
27	Basaltic Rocks Analyzed by the Spirit Rover in Gusev Crater. <i>Science</i> , 2004 , 305, 842-845	33.3	228
26	Basaltic rocks analyzed by the Spirit Rover in Gusev Crater. <i>Science</i> , 2004 , 305, 842-5	33.3	8
25	The Spirit Rover's Athena science investigation at Gusev Crater, Mars. <i>Science</i> , 2004 , 305, 794-9	33.3	24
24	Mars Exploration Rover Athena Panoramic Camera (Pancam) investigation. <i>Journal of Geophysical Research</i> , 2003 , 108,		197
23	Athena Microscopic Imager investigation. <i>Journal of Geophysical Research</i> , 2003 , 108,		109
22	Miniature Thermal Emission Spectrometer for the Mars Exploration Rovers. <i>Journal of Geophysical Research</i> , 2003 , 108,		133
21	Athena Mars rover science investigation. <i>Journal of Geophysical Research</i> , 2003 , 108,		199
20	Athena MIMOS II Mössbauer spectrometer investigation. <i>Journal of Geophysical Research</i> , 2003 , 108,		183
19	Evidence for platy hematite grains in Sinus Meridiani, Mars. <i>Journal of Geophysical Research</i> , 2002 , 107, 9-1-9-15		70

18	Phyllosilicate-poor palagonitic dust from Mauna Kea Volcano (Hawaii): A mineralogical analogue for magnetic Martian dust?. <i>Journal of Geophysical Research</i> , 2001 , 106, 5057-5083		75
17	An experimental study on kinetically-driven precipitation of calcium-magnesium-iron carbonates from solution: Implications for the low-temperature formation of carbonates in martian meteorite Allan Hills 84001. <i>Meteoritics and Planetary Science</i> , 2000 , 35, 457-465	2.8	56
16	Mineralogy, composition, and alteration of Mars Pathfinder rocks and soils: Evidence from multispectral, elemental, and magnetic data on terrestrial analogue, SNC meteorite, and Pathfinder samples. <i>Journal of Geophysical Research</i> , 2000 , 105, 1757-1817		264
15	Mineralogic and compositional properties of Martian soil and dust: Results from Mars Pathfinder. <i>Journal of Geophysical Research</i> , 2000 , 105, 1721-1755		225
14	Detection of crystalline hematite mineralization on Mars by the Thermal Emission Spectrometer: Evidence for near-surface water. <i>Journal of Geophysical Research</i> , 2000 , 105, 9623-9642		364
13	Mössbauer mineralogy on the Moon: The lunar regolith 1998 , 117, 405-432		21
12	Goldenrod Pigments and the Occurrence of Hematite and Possibly Goethite in the Olympus Amazonis Region of Mars. <i>Icarus</i> , 1998 , 134, 1-10	3.8	35
11	Hematite, pyroxene, and phyllosilicates on Mars: Implications from oxidized impact melt rocks from Manicouagan Crater, Quebec, Canada. <i>Journal of Geophysical Research</i> , 1995 , 100, 5319		59
10	Mineralogy of three slightly palagonitized basaltic tephra samples from the summit of Mauna Kea, Hawaii. <i>Journal of Geophysical Research</i> , 1993 , 98, 3401-3411		53
9	Pigmenting agents in Martian soils: inferences from spectral, Mossbauer, and magnetic properties of nanophase and other iron oxides in Hawaiian palagonitic soil PN-9. <i>Geochimica Et Cosmochimica Acta</i> , 1993 , 57, 4597-609	5.5	118
8	Matrix effects for reflectivity spectra of dispersed nanophase (superparamagnetic) hematite with application to Martian spectral data. <i>Journal of Geophysical Research</i> , 1990 , 95, 5101		65
7	Origins of Marslike spectral and magnetic properties of a Hawaiian palagonitic soil. <i>Journal of Geophysical Research</i> , 1990 , 95, 14427		72
6	Evidence for pigmentary hematite on Mars based on optical, magnetic, and Mossbauer studies of superparamagnetic (nanocrystalline) hematite. <i>Journal of Geophysical Research</i> , 1989 , 94, 2760-2778		178
5	Spectral and other physicochemical properties of submicron powders of hematite (α -Fe ₂ O ₃), maghemite (γ -Fe ₂ O ₃), magnetite (Fe ₃ O ₄), goethite (α -FeOOH), and lepidocrocite (γ -FeOOH). <i>Journal of Geophysical Research</i> , 1985 , 90, 3126-44		321
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