Harold Y Mcsween

List of Publications by Year
in descending order

191	20,008	6124	12272
papers	citations	83 h-index	138 g-index

195	195	195	6709
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Ceres, a wet planet: The view after Dawn. Chemie Der Erde, 2022, 82, 125745.	0.8	1
2	Protoplanet Vesta and HED Meteorites. , 2022, , 41-52.		2
3	Science Drivers for the Future Exploration of Ceres: From Solar System Evolution to Ocean World Science. Planetary Science Journal, 2022, 3, 64.	1.5	4
4	Replenishment of Nearâ€Surface Water Ice by Impacts Into Ceres' Volatileâ€Rich Crust: Observations by Dawn's Gamma Ray and Neutron Detector. Geophysical Research Letters, 2021, 48, e2021GL094223.	1.5	2
5	Evidence for early fragmentation-reassembly of ordinary chondrite (H, L, and LL) parent bodies from REE-in-two-pyroxene thermometry. Geochimica Et Cosmochimica Acta, 2020, 290, 366-390.	1.6	15
6	Differentiation and magmatic history of Vesta: Constraints from HED meteorites and Dawn spacecraft data. Chemie Der Erde, 2019, 79, 125526.	0.8	36
7	Petrology and geochemistry of olivineâ€phyric shergottites <scp>LAR</scp> 12095 and <scp>LAR</scp> 12240: Implications for their petrogenetic history on Mars. Meteoritics and Planetary Science, 2019, 54, 811-835.	0.7	11
8	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
9	The potential science and engineering value of samples delivered to Earth by Mars sample return. Meteoritics and Planetary Science, 2019, 54, 667-671.	0.7	11
10	Spectral properties and mineral compositions of acapulcoiteâ€“lodranite clan meteorites: Establishing Sâ€type asteroidâ€“meteorite connections. Meteoritics and Planetary Science, 2019, 54, 157-180.	0.7	16
11	Ferroan olivineâ€bearing eucrite clasts found in howardites. Meteoritics and Planetary Science, 2018, 53, 1131-1149.	0.7	6
12	Mgâ€rich harzburgites from Vesta: Mantle residua or cumulates from planetary differentiation?. Meteoritics and Planetary Science, 2018, 53, 514-546.	0.7	8
13	Carbonaceous chondrites as analogs for the composition and alteration of Ceres. Meteoritics and Planetary Science, 2018, 53, 1793-1804.	0.7	65
14	Composition of dwarf planet Ceres: Constraints from the Dawn spacecraft mission. Meteoritics and Planetary Science, 2018, 53, 1775-1777.	0.7	1
15	Insights into Ceres's evolution from surface composition. Meteoritics and Planetary Science, 2018, 53, 1820-1843.	0.7	73
16	Ceres's global and localized mineralogical composition determined by Dawn's Visible and Infrared Spectrometer (<scp>VIR</scp>). Meteoritics and Planetary Science, 2018, 53, 1844-1865.	0.7	29
17	Formation of Evolved Rocks at Gale Crater by Crystal Fractionation and Implications for Mars Crustal Composition. Journal of Geophysical Research E: Planets, 2018, 123, 1525-1540.	1.5	31
18	Igneous lithologies on asteroid (4) Vesta mapped using gamma-ray and neutron data. Icarus, 2017, 286, 35-45.	1.1	11

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19	Localized aliphatic organic material on the surface of Ceres. Science, 2017, 355, 719-722.	6.0	152
20	Dawn at Vesta: Paradigms and Paradoxes. , 2017, , 321-339.		8
21	Extensive water ice within Ceresâ€™ aqueously altered regolith: Evidence from nuclear spectroscopy. Science, 2017, 355, 55-59.	6.0	169
22	Dacite formation on Vesta: Partial melting of the eucritic crust. Meteoritics and Planetary Science, 2017, 52, 1173-1196.	0.7	16
23	Cryogenic flow features on Ceres: Implications for craterâ€related cryovolcanism. Geophysical Research Letters, 2016, 43, 11,994.	1.5	48
24	Grosvenor Mountains 95 howardite pairing group: Insights into the surface regolith of asteroid 4 Vesta. Meteoritics and Planetary Science, 2016, 51, 167-194.	0.7	13
25	Dawn arrives at Ceres: Exploration of a small, volatile-rich world. Science, 2016, 353, 1008-1010.	6.0	178
26	Distribution of phyllosilicates on the surface of Ceres. Science, 2016, 353, .	6.0	159
27	CV and CM chondrite impact melts. Geochimica Et Cosmochimica Acta, 2016, 189, 338-358.	1.6	51
28	Bright carbonate deposits as evidence of aqueous alteration on (1) Ceres. Nature, 2016, 536, 54-57.	13.7	240
29	Petrology on Mars. American Mineralogist, 2015, 100, 2380-2395.	0.9	126
30	Toward an understanding of phyllosilicate mineralogy in the outer main asteroid belt. Icarus, 2015, 257, 185-193.	1.1	39
31	Using <scp>HED</scp> meteorites to interpret neutron and gammaâ€ray data from asteroidÂ4 Vesta. Meteoritics and Planetary Science, 2015, 50, 1311-1337.	0.7	24
32	Ammoniated phyllosilicates with a likely outer Solar System origin on (1) Ceres. Nature, 2015, 528, 241-244.	13.7	276
33	Olivine and pyroxene from the mantle of asteroid 4 Vesta. Earth and Planetary Science Letters, 2015, 418, 126-135.	1.8	23
34	Grain size and hydrodynamic sorting controls on the composition of basaltic sediments: Implications for interpreting martian soils. Earth and Planetary Science Letters, 2015, 423, 67-77.	1.8	40
35	Metamorphism in the Martian crust. Meteoritics and Planetary Science, 2015, 50, 590-603.	0.7	26
36	Petrology and trace element geochemistry of Tissint, the newest shergottite fall. Meteoritics and Planetary Science, 2015, 50, 63-85.	0.7	47

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37	Geomorphological evidence for transient water flow on Vesta. Earth and Planetary Science Letters, 2015, 411, 151-163.	1.8	42
38	Crystallization kinetics of olivineâ€phyric shergottites. Meteoritics and Planetary Science, 2014, 49, 1440-1455.	0.7	16
39	Petrogenesis of a vitrophyre in the martian meteorite breccia NWA 7034. Geochimica Et Cosmochimica Acta, 2014, 141, 281-293.	1.6	40
40	Exploring fractionation models for Martian magmas. Journal of Geophysical Research E: Planets, 2014, 119, 1-18.	1.5	20
41	A chunk of ancient Mars. Nature, 2013, 503, 473-474.	13.7	2
42	The Tissint Martian meteorite as evidence for the largest impact excavation. Nature Communications, 2013, 4, 1404.	5.8	96
43	Nature and degree of aqueous alteration in <scp>CM</scp> and <scp>CI</scp> carbonaceous chondrites. Meteoritics and Planetary Science, 2013, 48, 1618-1637.	0.7	94
44	Two new eucrite breccias from Northwest Africa. Meteoritics and Planetary Science, 2013, 48, E1.	0.7	2
45	New constraints on the formation of shergottite Elephant Moraine 79001 lithology A. Geochimica Et Cosmochimica Acta, 2013, 108, 1-20.	1.6	21
46	High-velocity collisions from the lunar cataclysm recorded in asteroidal meteorites. Nature Geoscience, 2013, 6, 303-307.	5.4	113
47	The water content and parental magma of the second chassignite <scp>NWA</scp> 2737: Clues from trapped melt inclusions in olivine. Meteoritics and Planetary Science, 2013, 48, 474-492.	0.7	18
48	Glasses in howardites: Impact melts or pyroclasts?. Meteoritics and Planetary Science, 2013, 48, 715-729.	0.7	11
49	Dawn completes its mission at 4 Vesta. Meteoritics and Planetary Science, 2013, 48, 2076-2089.	0.7	54
50	In situ laser ablation <scp>ICP</scp>â€<scp>MS</scp> analyses of dimict diogenites: Further evidence for harzburgitic and orthopyroxenitic lithologies. Meteoritics and Planetary Science, 2013, 48, 1050-1059.	0.7	5
51	Water and the composition of Martian magmas. Geology, 2013, 41, 1115-1118.	2.0	52
52	Vestan lithologies mapped by the visual and infrared spectrometer on Dawn. Meteoritics and Planetary Science, 2013, 48, 2185-2198.	0.7	75
53	Dawn; the Vestaâ€“<scp>HED</scp> connection; and the geologic context for eucrites, diogenites, and howardites. Meteoritics and Planetary Science, 2013, 48, 2090-2104.	0.7	185
54	Chondritic models of 4 Vesta: Implications for geochemical and geophysical properties. Meteoritics and Planetary Science, 2013, 48, 2300-2315.	0.7	66

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55	Magmatic history and parental melt composition of olivineâ€phyric shergottite LAR 06319: Importance of magmatic degassing and olivine antecrysts in Martian magmatism. Meteoritics and Planetary Science, 2013, 48, 1359-1382.	0.7	35
56	Neutron absorption constraints on the composition of 4 Vesta. Meteoritics and Planetary Science, 2013, 48, 2211-2236.	0.7	47
57	Overview of the composition of asteroid 4 Vesta: Constraints from the Dawn spacecraft mission and <scp>HED</scp>s. Meteoritics and Planetary Science, 2013, 48, 2073-2075.	0.7	4
58	Olivine in an unexpected location on Vestaâ€™s surface. Nature, 2013, 504, 122-125.	13.7	82
59	Application of the MELTS algorithm to Martian compositions and implications for magma crystallization. Journal of Geophysical Research E: Planets, 2013, 118, 2502-2519.	1.5	31
60	Composition of the Rheasilvia basin, a window into Vesta's interior. Journal of Geophysical Research E: Planets, 2013, 118, 335-346.	1.5	84
61	Implications for early hydrothermal environments on Mars through the spectral evidence for carbonation and chloritization reactions in the Nili Fossae region. Journal of Geophysical Research E: Planets, 2013, 118, 1858-1872.	1.5	87
62	Dark material on Vesta from the infall of carbonaceous volatile-rich material. Nature, 2012, 491, 83-86.	13.7	151
63	Ordinary (mesostasis) and notâ€soâ€ordinary (symplectites) lateâ€stage assemblages in howardites. Meteoritics and Planetary Science, 2012, 47, 1475-1490.	0.7	21
64	Compositional constraints on the genesis of diogenites. Meteoritics and Planetary Science, 2012, 47, 72-98.	0.7	42
65	Elemental Mapping by Dawn Reveals Exogenic H in Vestaâ€™s Regolith. Science, 2012, 338, 242-246.	6.0	201
66	Soil mineralogy at the Mars Exploration Rover landing sites: An assessment of the competing roles of physical sorting and chemical weathering. Journal of Geophysical Research, 2012, 117, .	3.3	49
67	Delivery of dark material to Vesta via carbonaceous chondritic impacts. Icarus, 2012, 221, 544-559.	1.1	152
68	Dawn at Vesta: Testing the Protoplanetary Paradigm. Science, 2012, 336, 684-686.	6.0	422
69	Vestaâ€™s Shape and Morphology. Science, 2012, 336, 687-690.	6.0	222
70	The Geologically Recent Giant Impact Basins at Vestaâ€™s South Pole. Science, 2012, 336, 694-697.	6.0	194
71	Spectroscopic Characterization of Mineralogy and Its Diversity Across Vesta. Science, 2012, 336, 697-700.	6.0	240
72	The Violent Collisional History of Asteroid 4 Vesta. Science, 2012, 336, 690-694.	6.0	209

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73	Color and Albedo Heterogeneity of Vesta from Dawn. Science, 2012, 336, 700-704.	6.0	166
74	Petrologic and textural diversity among the PCA 02 howardite group, one of the largest pieces of the Vestan surface. Meteoritics and Planetary Science, 2012, 47, 947-969.	0.7	50
75	Origin of basaltic soils at Gusev crater, Mars, by aeolian modification of impact-generated sediment. Journal of Geophysical Research, 2011, 116, .	3.3	47
76	Petrology and geochemistry of Yamato 984028: a cumulate lherzolitic shergottite with affinities to Y 000027, Y 000047, and Y 000097. Polar Science, 2011, 4, 497-514.	0.5	15
77	Dawnâ€™s Gamma Ray and Neutron Detector. , 2011, , 371-459.		8
78	Bounce Rockâ€”A shergottiteâ€like basalt encountered at Meridiani Planum, Mars. Meteoritics and Planetary Science, 2011, 46, 1-20.	0.7	32
79	MIL 03443, a dunite from asteroid 4 Vesta: Evidence for its classification and cumulate origin. Meteoritics and Planetary Science, 2011, 46, 1133-1151.	0.7	42
80	HED Meteorites and Their Relationship to the Geology of Vesta and the Dawn Mission. Space Science Reviews, 2011, 163, 141-174.	3.7	192
81	Dawnâ€™s Gamma Ray and Neutron Detector. Space Science Reviews, 2011, 163, 371-459.	3.7	160
82	Spacecraft instrument technology and cosmochemistry. Proceedings of the National Academy of Sciences of the United States of America, 2011, 108, 19177-19182.	3.3	8
83	A coordinated spectral, mineralogical, and compositional study of ordinary chondrites. Icarus, 2010, 208, 789-797.	1.1	91
84	Reexamining the relationship between Apollinaris Patera and the basalts of the Gusev crater plains, Mars. Journal of Geophysical Research, 2010, 115, .	3.3	12
85	Distribution and variation of plagioclase compositions on Mars. Journal of Geophysical Research, 2010, 115, .	3.3	28
86	Determining the modal mineralogy of Martian soils. Journal of Geophysical Research, 2010, 115, .	3.3	60
87	Petrology and trace element geochemistry of Robert Massif 04261 and 04262 meteorites, the first examples of geochemically enriched lherzolitic shergottites. Geochimica Et Cosmochimica Acta, 2010, 74, 7283-7306.	1.6	50
88	Analysis of ordinary chondrites using powder X-ray diffraction: 1. Modal mineral abundances. Meteoritics and Planetary Science, 2010, 45, 123.	0.7	69
89	Analysis of ordinary chondrites using powder X-ray diffraction: 2. Applications to ordinary chondrite parent-body processes. Meteoritics and Planetary Science, 2010, 45, 135.	0.7	26
90	Diogenites as polymict breccias composed of orthopyroxenite and harzburgite. Meteoritics and Planetary Science, 2010, 45, 850-872.	0.7	101

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91	Kâ€Thâ€Ti systematics and new threeâ€component mixing model of HED meteorites: Prospective study for interpretation of gammaâ€ray and neutron spectra for the Dawn mission. Meteoritics and Planetary Science, 2010, 45, 1170-1190.	0.7	14
92	Tharsis-sourced relatively dust-free lavas and their possible relationship to Martian meteorites. Journal of Volcanology and Geothermal Research, 2009, 185, 103-115.	0.8	40
93	Volatility in Martian magmas. Nature, 2009, 458, 45-45.	13.7	3
94	Elemental Composition of the Martian Crust. Science, 2009, 324, 736-739.	6.0	380
95	Mineralogy of volcanic rocks in Gusev Crater, Mars: Reconciling MÃ¶ssbauer, Alpha Particle Xâ€Ray Spectrometer, and Miniature Thermal Emission Spectrometer spectra. Journal of Geophysical Research, 2008, 113, .	3.3	96
96	Surface and craterâ€exposed lithologic units of the Isidis Basin as mapped by coanalysis of THEMIS and TES derived data products. Journal of Geophysical Research, 2008, 113, .	3.3	86
97	Structure, stratigraphy, and origin of Husband Hill, Columbia Hills, Gusev Crater, Mars. Journal of Geophysical Research, 2008, 113, .	3.3	44
98	Petrogenesis of olivine-phyric shergottite Yamato 980459, revisited. Geochimica Et Cosmochimica Acta, 2008, 72, 1711-1730.	1.6	84
99	Spirit Mars Rover Mission to the Columbia Hills, Gusev Crater: Mission overview and selected results from the Cumberland Ridge to Home Plate. Journal of Geophysical Research, 2008, 113, .	3.3	99
100	Petrogenesis of highâ€phosphorous Wishstone Class rocks in Gusev Crater, Mars. Journal of Geophysical Research, 2008, 113, .	3.3	39
101	Martian meteorites as crustal samples. , 2008, , 381-396.		12
102	Implications of observed primary lithologies. , 2008, , 501-518.		10
103	Thermal emission spectra of terrestrial alkaline volcanic rocks: Applications to Martian remote sensing. Journal of Geophysical Research, 2007, 112, .	3.3	9
104	Geochemistry of 4 Vesta based on HED meteorites: Prospective study for interpretation of gamma ray and neutron spectra for the Dawn mission. Meteoritics and Planetary Science, 2007, 42, 255-269.	0.7	29
105	Plagioclase compositions derived from thermal emission spectra of compositionally complex mixtures: Implications for Martian feldspar mineralogy. Journal of Geophysical Research, 2007, 112, .	3.3	17
106	Pyroclastic Activity at Home Plate in Gusev Crater, Mars. Science, 2007, 316, 738-742.	6.0	174
107	Overview of the Opportunity Mars Exploration Rover Mission to Meridiani Planum: Eagle Crater to Purgatory Ripple. Journal of Geophysical Research, 2006, 111, n/a-n/a.	3.3	149
108	Petrology and chemistry of MIL 03346 and its significance in understanding the petrogenesis of nakhlites on Mars. Meteoritics and Planetary Science, 2006, 41, 581-606.	0.7	112

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109	Characterization and petrologic interpretation of olivine-rich basalts at Gusev Crater, Mars. Journal of Geophysical Research, 2006, 111, n/a-n/a.	3.3	227
110	Overview of the Spirit Mars Exploration Rover Mission to Gusev Crater: Landing site to Backstay Rock in the Columbia Hills. Journal of Geophysical Research, 2006, 111, n/a-n/a.	3.3	238
111	Geochemical and mineralogical indicators for aqueous processes in the Columbia Hills of Gusev crater, Mars. Journal of Geophysical Research, 2006, 111, n/a-n/a.	3.3	234
112	Rocks of the Columbia Hills. Journal of Geophysical Research, 2006, 111, n/a-n/a.	3.3	146
113	Identification of large (2â€“10 km) rayed craters on Mars in THEMIS thermal infrared images: Implications for possible Martian meteorite source regions. Journal of Geophysical Research, 2006, 111, .	3.3	98
114	Alkaline volcanic rocks from the Columbia Hills, Gusev crater, Mars. Journal of Geophysical Research, 2006, 111, .	3.3	148
115	Nickel on Mars: Constraints on meteoritic material at the surface. Journal of Geophysical Research, 2006, 111, n/a-n/a.	3.3	65
116	An integrated view of the chemistry and mineralogy of martian soils. Nature, 2005, 436, 49-54.	13.7	348
117	Evidence for magmatic evolution and diversity on Mars from infrared observations. Nature, 2005, 436, 504-509.	13.7	177
118	Water alteration of rocks and soils on Mars at the Spirit rover site in Gusev crater. Nature, 2005, 436, 66-69.	13.7	240
119	Melt inclusions in augite of the Nakhla martian meteorite: Evidence for basaltic parental melt. Meteoritics and Planetary Science, 2005, 40, 377-396.	0.7	45
120	Peak metamorphic temperatures in type 6 ordinary chondrites: An evaluation of pyroxene and plagioclase geothermometry. Meteoritics and Planetary Science, 2005, 40, 745-754.	0.7	62
121	Fluid lava flows in Gusev crater, Mars. Journal of Geophysical Research, 2005, 110, .	3.3	153
122	Effects of H2O, pH, and oxidation state on the stability of Fe minerals on Mars. Journal of Geophysical Research, 2005, 110, .	3.3	156
123	Mineralogy of Martian atmospheric dust inferred from thermal infrared spectra of aerosols. Journal of Geophysical Research, 2005, 110, .	3.3	58
124	Global geologic context for rock types and surface alteration on Mars. Geology, 2004, 32, 645.	2.0	68
125	Textures of the Soils and Rocks at Gusev Crater from Spirit's Microscopic Imager. Science, 2004, 305, 824-826.	6.0	130
126	Pancam Multispectral Imaging Results from the Spirit Rover at Gusev Crater. Science, 2004, 305, 800-806.	6.0	153

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127	Pancam Multispectral Imaging Results from the Opportunity Rover at Meridiani Planum. Science, 2004, 306, 1703-1709.	6.0	135
128	Initial Results from the Mini-TES Experiment in Gusev Crater from the Spirit Rover. Science, 2004, 305, 837-842.	6.0	168
129	In Situ Evidence for an Ancient Aqueous Environment at Meridiani Planum, Mars. Science, 2004, 306, 1709-1714.	6.0	845
130	Surficial Deposits at Gusev Crater Along Spirit Rover Traverses. Science, 2004, 305, 807-810.	6.0	82
131	The Spirit Rover's Athena Science Investigation at Gusev Crater, Mars. Science, 2004, 305, 794-799.	6.0	404
132	Basaltic Rocks Analyzed by the Spirit Rover in Gusev Crater. Science, 2004, 305, 842-845.	6.0	244
133	Identification of quartzofeldspathic materials on Mars. Journal of Geophysical Research, 2004, 109, .	3.3	110
134	Basaltic rocks analyzed by the Spirit Rover in Gusev Crater. Science, 2004, 305, 842-5.	6.0	9
135	The Spirit Rover's Athena science investigation at Gusev Crater, Mars. Science, 2004, 305, 794-9.	6.0	27
136	Analysis of surface compositions in the Oxia Palus region on Mars from Mars Global Surveyor Thermal Emission Spectrometer Observations. Journal of Geophysical Research, 2003, 108, .	3.3	15
137	THEMIS characterization of the MER Gusev crater landing site. Journal of Geophysical Research, 2003, 108, .	3.3	52
138	Constraints on the composition and petrogenesis of the Martian crust. Journal of Geophysical Research, 2003, 108, .	3.3	138
139	Importance of the accretion process in asteroid thermal evolution: 6 Hebe as an example. Meteoritics and Planetary Science, 2003, 38, 711-724.	0.7	50
140	Searching for the source regions of martian meteorites using MGS TES: Integrating martian meteorites into the global distribution of igneous materials on Mars. Meteoritics and Planetary Science, 2003, 38, 871-885.	0.7	157
141	The rocks of Mars, from far and near. Meteoritics and Planetary Science, 2002, 37, 7-25.	0.7	131
142	A critical evaluation of oxidation versus reduction during metamorphism of L and LL group chondrites, and implications for asteroid spectroscopy. Meteoritics and Planetary Science, 2002, 37, 75-89.	0.7	38
143	Martian meteorite Dhofar 019: A new shergottite. Meteoritics and Planetary Science, 2002, 37, 1107-1128.	0.7	108
144	Spectral evidence for weathered basalt as an alternative to andesite in the northern lowlands of Mars. Nature, 2002, 417, 263-266.	13.7	236

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145	Analysis of terrestrial and Martian volcanic compositions using thermal emission spectroscopy: 2. Application to Martian surface spectra from the Mars Global Surveyor Thermal Emission Spectrometer. Journal of Geophysical Research, 2001, 106, 14733-14746.	3.3	126
146	Analysis of terrestrial and Martian volcanic compositions using thermal emission spectroscopy: 1. Determination of mineralogy, chemistry, and classification strategies. Journal of Geophysical Research, 2001, 106, 14711-14732.	3.3	124
147	A petrologic and trace element study of Dar al Gani 476 and Dar al Gani 489: Twin meteorites with affinities to basaltic and lherzolitic shergottites. Meteoritics and Planetary Science, 2001, 36, 195-208.	0.7	66
148	Phase equilibria of the Shergotty meteorite: Constraints on preâ€eruptive water contents of martian magmas and fractional crystallization under hydrous conditions. Meteoritics and Planetary Science, 2001, 36, 793-806.	0.7	83
149	Geochemical evidence for magmatic water within Mars from pyroxenes in the Shergotty meteorite. Nature, 2001, 409, 487-490.	13.7	176
150	Modified sulfur isotopic compositions of sulfides in the nakhlites and Chassigny. Geochimica Et Cosmochimica Acta, 2000, 64, 1121-1131.	1.6	43
151	Mixing relationships in the Martian regolith and the composition of globally homogeneous dust. Geochimica Et Cosmochimica Acta, 2000, 64, 2155-2166.	1.6	111
152	Crystallization of the basaltic shergottites: Insights from crystal size distribution (CSD) analysis of pyroxenes. Meteoritics and Planetary Science, 2000, 35, 919-927.	0.7	43
153	Mineralogic and compositional properties of Martian soil and dust: Results from Mars Pathfinder. Journal of Geophysical Research, 2000, 105, 1721-1755.	3.3	274
154	Sizes and Masses of Chondrules and Metalâ€“Troilite Grains in Ordinary Chondrites: Possible Implications for Nebular Sorting. Icarus, 1999, 141, 96-106.	1.1	69
155	Temperature dependence of specific heat capacity and its effect on asteroid thermal models. Meteoritics and Planetary Science, 1999, 34, 121-127.	0.7	51
156	Re-evaluation of intercumulus liquid composition and oxidation state for the Shergotty meteorite. Geochimica Et Cosmochimica Acta, 1999, 63, 1459-1470.	1.6	53
157	Chemical, multispectral, and textural constraints on the composition and origin of rocks at the Mars Pathfinder landing site. Journal of Geophysical Research, 1999, 104, 8679-8715.	3.3	226
158	A Thermal Model for the Differentiation of Asteroid 4 Vesta, Based on Radiogenic Heating. Icarus, 1998, 134, 187-206.	1.1	213
159	Martian basalt (shergottite) Queen Alexandra Range 94201 and lunar basalt 15555: A tale of two pyroxenes. Meteoritics and Planetary Science, 1998, 33, 321-328.	0.7	17
160	Determination of Martian meteorite lithologies and mineralogies using vibrational spectroscopy. Journal of Geophysical Research, 1997, 102, 25593-25603.	3.3	79
161	The Chemical Composition of Martian Soil and Rocks Returned by the Mobile Alpha Proton X-ray Spectrometer: Preliminary Results from the X-ray Mode. Science, 1997, 278, 1771.1-1774.	6.0	536
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164	Fractionated sulfur isotopes in sulfides of the Kaidun meteorite. Meteoritics and Planetary Science, 1997, 32, 51-54.	0.7	11
165	Correlated alteration effects in CM carbonaceous chondrites. Geochimica Et Cosmochimica Acta, 1996, 60, 2621-2633.	1.6	280
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167	Magnetite whiskers and platelets in the ALH84001 Martian meteorite: Evidence of vapor phase growth. Geochimica Et Cosmochimica Acta, 1996, 60, 5149-5155.	1.6	105
168	Shock features in ironâ€nickel metal and troilite of Lâ€group ordinary chondrites. Meteoritics and Planetary Science, 1996, 31, 255-264.	0.7	95
169	The role of meteoritics in spaceflight missions and vice versa. Meteoritics and Planetary Science, 1996, 31, 727-738.	0.7	3
170	Revised model calculations for the thermal histories of ordinary chondrite parent bodies. Meteoritics and Planetary Science, 1996, 31, 783-792.	0.7	138
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172	What we have learned about Mars from SNC meteorites. Meteoritics, 1994, 29, 757-779.	1.5	579
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