

# Harold Y Mcsween

## List of Publications by Year in descending order

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191  
papers

20,008  
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5268

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195  
docs citations

195  
times ranked

6140  
citing authors

#	ARTICLE	IF	CITATIONS
1	In Situ Evidence for an Ancient Aqueous Environment at Meridiani Planum, Mars. <i>Science</i> , 2004, 306, 1709-1714.	12.6	845
2	What we have learned about Mars from SNC meteorites. <i>Meteoritics</i> , 1994, 29, 757-779.	1.4	579
3	The Chemical Composition of Martian Soil and Rocks Returned by the Mobile Alpha Proton X-ray Spectrometer: Preliminary Results from the X-ray Mode. <i>Science</i> , 1997, 278, 1771.1-1774.	12.6	536
4	Dawn at Vesta: Testing the Protoplanetary Paradigm. <i>Science</i> , 2012, 336, 684-686.	12.6	422
5	The Spirit Rover's Athena Science Investigation at Gusev Crater, Mars. <i>Science</i> , 2004, 305, 794-799.	12.6	404
6	Elemental Composition of the Martian Crust. <i>Science</i> , 2009, 324, 736-739.	12.6	380
7	An integrated view of the chemistry and mineralogy of martian soils. <i>Nature</i> , 2005, 436, 49-54.	27.8	348
8	SNC meteorites: Clues to Martian petrologic evolution?. <i>Reviews of Geophysics</i> , 1985, 23, 391-416.	23.0	321
9	Petrology and origin of the shergottite meteorites. <i>Geochimica Et Cosmochimica Acta</i> , 1979, 43, 1475-1498.	3.9	281
10	Correlated alteration effects in CM carbonaceous chondrites. <i>Geochimica Et Cosmochimica Acta</i> , 1996, 60, 2621-2633.	3.9	280
11	Water and the thermal evolution of carbonaceous chondrite parent bodies. <i>Icarus</i> , 1989, 82, 244-280.	2.5	276
12	Ammoniated phyllosilicates with a likely outer Solar System origin on (1) Ceres. <i>Nature</i> , 2015, 528, 241-244.	27.8	276
13	Mineralogic and compositional properties of Martian soil and dust: Results from Mars Pathfinder. <i>Journal of Geophysical Research</i> , 2000, 105, 1721-1755.	3.3	274
14	Are carbonaceous chondrites primitive or processed? A review. <i>Reviews of Geophysics</i> , 1979, 17, 1059-1078.	23.0	254
15	Alteration in CM carbonaceous chondrites inferred from modal and chemical variations in matrix. <i>Geochimica Et Cosmochimica Acta</i> , 1979, 43, 1761-1770.	3.9	251
16	Basaltic Rocks Analyzed by the Spirit Rover in Gusev Crater. <i>Science</i> , 2004, 305, 842-845.	12.6	244
17	Water alteration of rocks and soils on Mars at the Spirit rover site in Gusev crater. <i>Nature</i> , 2005, 436, 66-69.	27.8	240
18	Spectroscopic Characterization of Mineralogy and Its Diversity Across Vesta. <i>Science</i> , 2012, 336, 697-700.	12.6	240

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19	Bright carbonate deposits as evidence of aqueous alteration on (1) Ceres. <i>Nature</i> , 2016, 536, 54-57.	27.8	240
20	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.	3.3	238
21	Spectral evidence for weathered basalt as an alternative to andesite in the northern lowlands of Mars. <i>Nature</i> , 2002, 417, 263-266.	27.8	236
22	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.	3.3	234
23	Characterization and petrologic interpretation of olivine-rich basalts at Gusev Crater, Mars. <i>Journal of Geophysical Research</i> , 2006, 111, n/a-n/a.	3.3	227
24	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.	3.3	226
25	Vesta's Shape and Morphology. <i>Science</i> , 2012, 336, 687-690.	12.6	222
26	Heliocentric Zoning of the Asteroid Belt by Aluminum-26 Heating. <i>Science</i> , 1993, 259, 653-655.	12.6	217
27	A Thermal Model for the Differentiation of Asteroid 4 Vesta, Based on Radiogenic Heating. <i>Icarus</i> , 1998, 134, 187-206.	2.5	213
28	The Violent Collisional History of Asteroid 4 Vesta. <i>Science</i> , 2012, 336, 690-694.	12.6	209
29	Elemental Mapping by Dawn Reveals Exogenic H in Vesta's Regolith. <i>Science</i> , 2012, 338, 242-246.	12.6	201
30	The Geologically Recent Giant Impact Basins at Vesta's South Pole. <i>Science</i> , 2012, 336, 694-697.	12.6	194
31	HED Meteorites and Their Relationship to the Geology of Vesta and the Dawn Mission. <i>Space Science Reviews</i> , 2011, 163, 141-174.	8.1	192
32	Dawn; the Vesta's HED connection; and the geologic context for eucrites, diogenites, and howardites. <i>Meteoritics and Planetary Science</i> , 2013, 48, 2090-2104.	1.6	185
33	Petrogenesis of the Elephant Moraine A79001 meteorite: Multiple magma pulses on the shergottite parent body. <i>Geochimica Et Cosmochimica Acta</i> , 1983, 47, 1501-1513.	3.9	179
34	Dawn arrives at Ceres: Exploration of a small, volatile-rich world. <i>Science</i> , 2016, 353, 1008-1010.	12.6	178
35	Evidence for magmatic evolution and diversity on Mars from infrared observations. <i>Nature</i> , 2005, 436, 504-509.	27.8	177
36	Geochemical evidence for magmatic water within Mars from pyroxenes in the Shergotty meteorite. <i>Nature</i> , 2001, 409, 487-490.	27.8	176

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37	Pyroclastic Activity at Home Plate in Gusev Crater, Mars. <i>Science</i> , 2007, 316, 738-742.	12.6	174
38	Extensive water ice within Ceres's aqueously altered regolith: Evidence from nuclear spectroscopy. <i>Science</i> , 2017, 355, 55-59.	12.6	169
39	Initial Results from the Mini-TES Experiment in Gusev Crater from the Spirit Rover. <i>Science</i> , 2004, 305, 837-842.	12.6	168
40	Color and Albedo Heterogeneity of Vesta from Dawn. <i>Science</i> , 2012, 336, 700-704.	12.6	166
41	Dawn's Gamma Ray and Neutron Detector. <i>Space Science Reviews</i> , 2011, 163, 371-459.	8.1	160
42	Distribution of phyllosilicates on the surface of Ceres. <i>Science</i> , 2016, 353, .	12.6	159
43	Searching for the source regions of martian meteorites using MGS TES: Integrating martian meteorites into the global distribution of igneous materials on Mars. <i>Meteoritics and Planetary Science</i> , 2003, 38, 871-885.	1.6	157
44	Effects of H <sub>2</sub> O, pH, and oxidation state on the stability of Fe minerals on Mars. <i>Journal of Geophysical Research</i> , 2005, 110, .	3.3	156
45	Pancam Multispectral Imaging Results from the Spirit Rover at Gusev Crater. <i>Science</i> , 2004, 305, 800-806.	12.6	153
46	Fluid lava flows in Gusev crater, Mars. <i>Journal of Geophysical Research</i> , 2005, 110, .	3.3	153
47	Delivery of dark material to Vesta via carbonaceous chondritic impacts. <i>Icarus</i> , 2012, 221, 544-559.	2.5	152
48	Localized aliphatic organic material on the surface of Ceres. <i>Science</i> , 2017, 355, 719-722.	12.6	152
49	Dark material on Vesta from the infall of carbonaceous volatile-rich material. <i>Nature</i> , 2012, 491, 83-86.	27.8	151
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.	3.3	149
51	Alkaline volcanic rocks from the Columbia Hills, Gusev crater, Mars. <i>Journal of Geophysical Research</i> , 2006, 111, .	3.3	148
52	Rocks of the Columbia Hills. <i>Journal of Geophysical Research</i> , 2006, 111, n/a-n/a.	3.3	146
53	Revised model calculations for the thermal histories of ordinary chondrite parent bodies. <i>Meteoritics and Planetary Science</i> , 1996, 31, 783-792.	1.6	138
54	Constraints on the composition and petrogenesis of the Martian crust. <i>Journal of Geophysical Research</i> , 2003, 108, .	3.3	138

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55	Pancam Multispectral Imaging Results from the Opportunity Rover at Meridiani Planum. <i>Science</i> , 2004, 306, 1703-1709.	12.6	135
56	The rocks of Mars, from far and near. <i>Meteoritics and Planetary Science</i> , 2002, 37, 7-25.	1.6	131
57	Textures of the Soils and Rocks at Gusev Crater from Spirit's Microscopic Imager. <i>Science</i> , 2004, 305, 824-826.	12.6	130
58	Aqueous alteration in carbonaceous chondrites: Mass balance constraints on matrix mineralogy. <i>Geochimica Et Cosmochimica Acta</i> , 1987, 51, 2469-2477.	3.9	127
59	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. <i>Journal of Geophysical Research</i> , 2001, 106, 14733-14746.	3.3	126
60	Petrology on Mars. <i>American Mineralogist</i> , 2015, 100, 2380-2395.	1.9	126
61	Analysis of terrestrial and Martian volcanic compositions using thermal emission spectroscopy: 1. Determination of mineralogy, chemistry, and classification strategies. <i>Journal of Geophysical Research</i> , 2001, 106, 14711-14732.	3.3	124
62	QUE94201 shergottite: Crystallization of a Martian basaltic magma. <i>Geochimica Et Cosmochimica Acta</i> , 1996, 60, 4563-4569.	3.9	123
63	The mineralogy of ordinary chondrites and implications for asteroid spectrophotometry. <i>Icarus</i> , 1991, 90, 107-116.	2.5	120
64	Petrogenesis of shergottite meteorites inferred from minor and trace element microdistributions. <i>Geochimica Et Cosmochimica Acta</i> , 1994, 58, 4213-4229.	3.9	113
65	High-velocity collisions from the lunar cataclysm recorded in asteroidal meteorites. <i>Nature Geoscience</i> , 2013, 6, 303-307.	12.9	113
66	Petrology and chemistry of MIL 03346 and its significance in understanding the petrogenesis of nakhlites on Mars. <i>Meteoritics and Planetary Science</i> , 2006, 41, 581-606.	1.6	112
67	Mixing relationships in the Martian regolith and the composition of globally homogeneous dust. <i>Geochimica Et Cosmochimica Acta</i> , 2000, 64, 2155-2166.	3.9	111
68	Identification of quartzofeldspathic materials on Mars. <i>Journal of Geophysical Research</i> , 2004, 109, .	3.3	110
69	Martian meteorite Dhofar 019: A new shergottite. <i>Meteoritics and Planetary Science</i> , 2002, 37, 1107-1128.	1.6	108
70	Magnetite whiskers and platelets in the ALH84001 Martian meteorite: Evidence of vapor phase growth. <i>Geochimica Et Cosmochimica Acta</i> , 1996, 60, 5149-5155.	3.9	105
71	Diogenites as polymict breccias composed of orthopyroxenite and harzburgite. <i>Meteoritics and Planetary Science</i> , 2010, 45, 850-872.	1.6	101
72	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, .	3.3	99

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73	Identification of large (2â€“10 km) rayed craters on Mars in THEMIS thermal infrared images: Implications for possible Martian meteorite source regions. <i>Journal of Geophysical Research</i> , 2006, 111, .	3.3	98
74	Mineralogy of volcanic rocks in Gusev Crater, Mars: Reconciling MÃƒssbauer, Alpha Particle Xâ€“Ray Spectrometer, and Miniature Thermal Emission Spectrometer spectra. <i>Journal of Geophysical Research</i> , 2008, 113, .	3.3	96
75	The Tissint Martian meteorite as evidence for the largest impact excavation. <i>Nature Communications</i> , 2013, 4, 1404.	12.8	96
76	Shock features in ironâ€“nickel metal and troilite of Lâ€“group ordinary chondrites. <i>Meteoritics and Planetary Science</i> , 1996, 31, 255-264.	1.6	95
77	Nature and degree of aqueous alteration in <sc>CM</sc> and <sc>CI</sc> carbonaceous chondrites. <i>Meteoritics and Planetary Science</i> , 2013, 48, 1618-1637.	1.6	94
78	Oxidation during metamorphism of the ordinary chondrites. <i>Geochimica Et Cosmochimica Acta</i> , 1993, 57, 1105-1114.	3.9	93
79	A coordinated spectral, mineralogical, and compositional study of ordinary chondrites. <i>Icarus</i> , 2010, 208, 789-797.	2.5	91
80	Implications for early hydrothermal environments on Mars through the spectral evidence for carbonation and chloritization reactions in the Nili Fossae region. <i>Journal of Geophysical Research E: Planets</i> , 2013, 118, 1858-1872.	3.6	87
81	Surface and craterâ€“exposed lithologic units of the Isidis Basin as mapped by coanalysis of THEMIS and TES derived data products. <i>Journal of Geophysical Research</i> , 2008, 113, .	3.3	86
82	Petrogenesis of olivine-phyric shergottite Yamato 980459, revisited. <i>Geochimica Et Cosmochimica Acta</i> , 2008, 72, 1711-1730.	3.9	84
83	Composition of the Rheasilvia basin, a window into Vesta's interior. <i>Journal of Geophysical Research E: Planets</i> , 2013, 118, 335-346.	3.6	84
84	Phase equilibria of the Shergotty meteorite: Constraints on preâ€“eruptive water contents of martian magmas and fractional crystallization under hydrous conditions. <i>Meteoritics and Planetary Science</i> , 2001, 36, 793-806.	1.6	83
85	Allan Hills 77005: A New Meteorite Type Found in Antarctica. <i>Science</i> , 1979, 204, 1201-1203.	12.6	82
86	Petrogenetic relationship between Allan Hills 77005 and other achondrites. <i>Earth and Planetary Science Letters</i> , 1979, 45, 275-284.	4.4	82
87	Surficial Deposits at Gusev Crater Along Spirit Rover Traverses. <i>Science</i> , 2004, 305, 807-810.	12.6	82
88	Olivine in an unexpected location on Vestaâ€™s surface. <i>Nature</i> , 2013, 504, 122-125.	27.8	82
89	Outgassed Water on Mars: Constraints from Melt Inclusions in SNC Meteorites. <i>Science</i> , 1993, 259, 1890-1892.	12.6	80
90	Determination of Martian meteorite lithologies and mineralogies using vibrational spectroscopy. <i>Journal of Geophysical Research</i> , 1997, 102, 25593-25603.	3.3	79

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91	Vestan lithologies mapped by the visual and infrared spectrometer on Dawn. <i>Meteoritics and Planetary Science</i> , 2013, 48, 2185-2198.	1.6	75
92	Rare earth elements in minerals of the ALHA77005 shergottite and implications for its parent magma and crystallization history. <i>Geochimica Et Cosmochimica Acta</i> , 1990, 54, 2535-2547.	3.9	74
93	Insights into Ceres's evolution from surface composition. <i>Meteoritics and Planetary Science</i> , 2018, 53, 1820-1843.	1.6	73
94	The potential science and engineering value of samples delivered to Earth by Mars sample return. <i>Meteoritics and Planetary Science</i> , 2019, 54, S3.	1.6	73
95	A new type of chondritic meteorite found in lunar soil. <i>Earth and Planetary Science Letters</i> , 1976, 31, 193-199.	4.4	72
96	Sizes and Masses of Chondrules and Metal-Troilite Grains in Ordinary Chondrites: Possible Implications for Nebular Sorting. <i>Icarus</i> , 1999, 141, 96-106.	2.5	69
97	Analysis of ordinary chondrites using powder X-ray diffraction: 1. Modal mineral abundances. <i>Meteoritics and Planetary Science</i> , 2010, 45, 123.	1.6	69
98	Global geologic context for rock types and surface alteration on Mars. <i>Geology</i> , 2004, 32, 645.	4.4	68
99	A petrologic and trace element study of Dar al Gani 476 and Dar al Gani 489: Twin meteorites with affinities to basaltic and lherzolithic shergottites. <i>Meteoritics and Planetary Science</i> , 2001, 36, 195-208.	1.6	66
100	Chondritic models of 4 Vesta: Implications for geochemical and geophysical properties. <i>Meteoritics and Planetary Science</i> , 2013, 48, 2300-2315.	1.6	66
101	Nickel on Mars: Constraints on meteoritic material at the surface. <i>Journal of Geophysical Research</i> , 2006, 111, n/a-n/a.	3.3	65
102	Carbonaceous chondrites as analogs for the composition and alteration of Ceres. <i>Meteoritics and Planetary Science</i> , 2018, 53, 1793-1804.	1.6	65
103	Peak metamorphic temperatures in type 6 ordinary chondrites: An evaluation of pyroxene and plagioclase geothermometry. <i>Meteoritics and Planetary Science</i> , 2005, 40, 745-754.	1.6	62
104	Pyroxene thermobarometry in LL-group chondrites and implications for parent body metamorphism. <i>Meteoritics</i> , 1989, 24, 219-226.	1.4	61
105	Determining the modal mineralogy of Martian soils. <i>Journal of Geophysical Research</i> , 2010, 115, .	3.3	60
106	Mineralogy of Martian atmospheric dust inferred from thermal infrared spectra of aerosols. <i>Journal of Geophysical Research</i> , 2005, 110, .	3.3	58
107	Dawn completes its mission at 4 Vesta. <i>Meteoritics and Planetary Science</i> , 2013, 48, 2076-2089.	1.6	54
108	Re-evaluation of intercumulus liquid composition and oxidation state for the Shergotty meteorite. <i>Geochimica Et Cosmochimica Acta</i> , 1999, 63, 1459-1470.	3.9	53

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109	THEMIS characterization of the MER Gusev crater landing site. <i>Journal of Geophysical Research</i> , 2003, 108, .	3.3	52
110	Water and the composition of Martian magmas. <i>Geology</i> , 2013, 41, 1115-1118.	4.4	52
111	Temperature dependence of specific heat capacity and its effect on asteroid thermal models. <i>Meteoritics and Planetary Science</i> , 1999, 34, 121-127.	1.6	51
112	CV and CM chondrite impact melts. <i>Geochimica Et Cosmochimica Acta</i> , 2016, 189, 338-358.	3.9	51
113	Sulfide isotopic compositions in shergottites and ALH84001, and possible implications for life on Mars. <i>Geochimica Et Cosmochimica Acta</i> , 1997, 61, 4449-4453.	3.9	50
114	Importance of the accretion process in asteroid thermal evolution: 6 Hebe as an example. <i>Meteoritics and Planetary Science</i> , 2003, 38, 711-724.	1.6	50
115	Petrology and trace element geochemistry of Robert Massif 04261 and 04262 meteorites, the first examples of geochemically enriched lherzolithic shergottites. <i>Geochimica Et Cosmochimica Acta</i> , 2010, 74, 7283-7306.	3.9	50
116	Petrologic and textural diversity among the PCA 02 howardite group, one of the largest pieces of the Vestan surface. <i>Meteoritics and Planetary Science</i> , 2012, 47, 947-969.	1.6	50
117	Soil mineralogy at the Mars Exploration Rover landing sites: An assessment of the competing roles of physical sorting and chemical weathering. <i>Journal of Geophysical Research</i> , 2012, 117, .	3.3	49
118	Cryogenic flow features on Ceres: Implications for crater-related cryovolcanism. <i>Geophysical Research Letters</i> , 2016, 43, 11,994.	4.0	48
119	Origin of basaltic soils at Gusev crater, Mars, by aeolian modification of impact-generated sediment. <i>Journal of Geophysical Research</i> , 2011, 116, .	3.3	47
120	Neutron absorption constraints on the composition of 4 Vesta. <i>Meteoritics and Planetary Science</i> , 2013, 48, 2211-2236.	1.6	47
121	Petrology and trace element geochemistry of Tissint, the newest shergottite fall. <i>Meteoritics and Planetary Science</i> , 2015, 50, 63-85.	1.6	47
122	Basaltic Meteorites. <i>Scientific American</i> , 1980, 242, 54-63.	1.0	46
123	Melt inclusions in augite of the Nakhla martian meteorite: Evidence for basaltic parental melt. <i>Meteoritics and Planetary Science</i> , 2005, 40, 377-396.	1.6	45
124	Structure, stratigraphy, and origin of Husband Hill, Columbia Hills, Gusev Crater, Mars. <i>Journal of Geophysical Research</i> , 2008, 113, .	3.3	44
125	Modified sulfur isotopic compositions of sulfides in the nakhlites and Chassigny. <i>Geochimica Et Cosmochimica Acta</i> , 2000, 64, 1121-1131.	3.9	43
126	Crystallization of the basaltic shergottites: Insights from crystal size distribution (CSD) analysis of pyroxenes. <i>Meteoritics and Planetary Science</i> , 2000, 35, 919-927.	1.6	43

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127	MIL 03443, a dunite from asteroid 4 Vesta: Evidence for its classification and cumulate origin. <i>Meteoritics and Planetary Science</i> , 2011, 46, 1133-1151.	1.6	42
128	Compositional constraints on the genesis of diogenites. <i>Meteoritics and Planetary Science</i> , 2012, 47, 72-98.	1.6	42
129	Geomorphological evidence for transient water flow on Vesta. <i>Earth and Planetary Science Letters</i> , 2015, 411, 151-163.	4.4	42
130	Tharsis-sourced relatively dust-free lavas and their possible relationship to Martian meteorites. <i>Journal of Volcanology and Geothermal Research</i> , 2009, 185, 103-115.	2.1	40
131	Petrogenesis of a vitrophyre in the martian meteorite breccia NWA 7034. <i>Geochimica Et Cosmochimica Acta</i> , 2014, 141, 281-293.	3.9	40
132	Grain size and hydrodynamic sorting controls on the composition of basaltic sediments: Implications for interpreting martian soils. <i>Earth and Planetary Science Letters</i> , 2015, 423, 67-77.	4.4	40
133	Petrogenesis of high-phosphorous Wishstone Class rocks in Gusev Crater, Mars. <i>Journal of Geophysical Research</i> , 2008, 113, .	3.3	39
134	Toward an understanding of phyllosilicate mineralogy in the outer main asteroid belt. <i>Icarus</i> , 2015, 257, 185-193.	2.5	39
135	A critical evaluation of oxidation versus reduction during metamorphism of L and LL group chondrites, and implications for asteroid spectroscopy. <i>Meteoritics and Planetary Science</i> , 2002, 37, 75-89.	1.6	38
136	Differentiation and magmatic history of Vesta: Constraints from HED meteorites and Dawn spacecraft data. <i>Chemie Der Erde</i> , 2019, 79, 125526.	2.0	36
137	Magmatic history and parental melt composition of olivine-phyric shergottite LAR 06319: Importance of magmatic degassing and olivine antecrysts in Martian magmatism. <i>Meteoritics and Planetary Science</i> , 2013, 48, 1359-1382.	1.6	35
138	Bounce Rock – A shergottite-like basalt encountered at Meridiani Planum, Mars. <i>Meteoritics and Planetary Science</i> , 2011, 46, 1-20.	1.6	32
139	A comparison of sulfur isotope ratio measurement using two ion microprobe techniques and application to analysis of troilite in ordinary chondrites. <i>Geochimica Et Cosmochimica Acta</i> , 1997, 61, 601-609.	3.9	31
140	Application of the MELTS algorithm to Martian compositions and implications for magma crystallization. <i>Journal of Geophysical Research E: Planets</i> , 2013, 118, 2502-2519.	3.6	31
141	Formation of Evolved Rocks at Gale Crater by Crystal Fractionation and Implications for Mars Crustal Composition. <i>Journal of Geophysical Research E: Planets</i> , 2018, 123, 1525-1540.	3.6	31
142	Cosmochemical implications of the physical processing of cometary nuclei. <i>Geochimica Et Cosmochimica Acta</i> , 1989, 53, 3263-3271.	3.9	29
143	Geochemistry of 4 Vesta based on HED meteorites: Prospective study for interpretation of gamma ray and neutron spectra for the Dawn mission. <i>Meteoritics and Planetary Science</i> , 2007, 42, 255-269.	1.6	29
144	Ceres's global and localized mineralogical composition determined by Dawn's Visible and Infrared Spectrometer (VIR). <i>Meteoritics and Planetary Science</i> , 2018, 53, 1844-1865.	1.6	29

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145	Distribution and variation of plagioclase compositions on Mars. <i>Journal of Geophysical Research</i> , 2010, 115, .	3.3	28
146	The Spirit Rover's Athena Science Investigation at Gusev Crater, Mars. <i>Science</i> , 2004, 305, 794-799.	12.6	27
147	Analysis of ordinary chondrites using powder X-ray diffraction: 2. Applications to ordinary chondrite parent-body processes. <i>Meteoritics and Planetary Science</i> , 2010, 45, 135.	1.6	26
148	Metamorphism in the Martian crust. <i>Meteoritics and Planetary Science</i> , 2015, 50, 590-603.	1.6	26
149	Using <sc>HED</sc> meteorites to interpret neutron and gamma-ray data from asteroid 4 Vesta. <i>Meteoritics and Planetary Science</i> , 2015, 50, 1311-1337.	1.6	24
150	Olivine and pyroxene from the mantle of asteroid 4 Vesta. <i>Earth and Planetary Science Letters</i> , 2015, 418, 126-135.	4.4	23
151	Ordinary (mesostasis) and not-so-ordinary (symplectites) late-stage assemblages in howardites. <i>Meteoritics and Planetary Science</i> , 2012, 47, 1475-1490.	1.6	21
152	New constraints on the formation of shergottite Elephant Moraine 79001 lithology A. <i>Geochimica Et Cosmochimica Acta</i> , 2013, 108, 1-20.	3.9	21
153	Exploring fractionation models for Martian magmas. <i>Journal of Geophysical Research E: Planets</i> , 2014, 119, 1-18.	3.6	20
154	The water content and parental magma of the second chassignite <sc>NWA</sc> 2737: Clues from trapped melt inclusions in olivine. <i>Meteoritics and Planetary Science</i> , 2013, 48, 474-492.	1.6	18
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