Tim McCoy

List of Publications by Year
in descending order

184 papers	12,738 citations	18436 62 h-index	29081 104 g-index
195 all docs	195 docs citations	195 times ranked	5492 citing authors

#	Article	IF	Citations
1	Mineral evolution. American Mineralogist, 2008, 93, 1693-1720.	0.9	569
2	OSIRIS-REx: Sample Return from Asteroid (101955) Bennu. Space Science Reviews, 2017, 212, 925-984.	3.7	426
3	Dawn at Vesta: Testing the Protoplanetary Paradigm. Science, 2012, 336, 684-686.	6.0	422
4	Detection of Silica-Rich Deposits on Mars. Science, 2008, 320, 1063-1067.	6.0	399
5	The Major-Element Composition of Mercuryâ€™s Surface from MESSENGER X-ray Spectrometry. Science, 2011, 333, 1847-1850.	6.0	386
6	Systematics and Evaluation of Meteorite Classification. , 2006, , 19-52.		335
7	Evidence for widespread hydrated minerals on asteroid (101955) Bennu. Nature Astronomy, 2019, 3, 332-340.	4.2	251
8	Chapter 4. NON-CHONDRITIC METEORITES FROM ASTEROIDAL BODIES. , 1998, , 523-718.		242
9	Radioactive Elements on Mercuryâ€™s Surface from MESSENGER: Implications for the Planetâ€™s Formation and Evolution. Science, 2011, 333, 1850-1852.	6.0	233
10	The curious case of Mercury's internal structure. Journal of Geophysical Research E: Planets, 2013, 118, 1204-1220.	1.5	210
11	Elemental Mapping by Dawn Reveals Exogenic H in Vestaâ€™s Regolith. Science, 2012, 338, 242-246.	6.0	201
12	The Evolution of Mercuryâ€™s Crust: A Global Perspective from MESSENGER. Science, 2009, 324, 613-618.	6.0	194
13	HED Meteorites and Their Relationship to the Geology of Vesta and the Dawn Mission. Space Science Reviews, 2011, 163, 141-174.	3.7	192
14	A petrologic, chemical, and isotopic study of Monument Draw and comparison with other acapulcoites: Evidence for formation by incipient partial melting. Geochimica Et Cosmochimica Acta, 1996, 60, 2681-2708.	1.6	178
15	Vesta, Vestoids, and the howardite, eucrite, diogenite group: Relationships and the origin of spectral differences. Meteoritics and Planetary Science, 2001, 36, 761-781.	0.7	173
16	A petrologic and isotopic study of lodranites: Evidence for early formation as partial melt residues from heterogeneous precursors. Geochimica Et Cosmochimica Acta, 1997, 61, 623-637.	1.6	169
17	Reflectance and Color Variations on Mercury: Regolith Processes and Compositional Heterogeneity. Science, 2008, 321, 66-69.	6.0	167
18	Color and Albedo Heterogeneity of Vesta from Dawn. Science, 2012, 336, 700-704.	6.0	166

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19	A petrologic study of the IAB iron meteorites: Constraints on the formation of the IABâ€Winonaite parent body. Meteoritics and Planetary Science, 2000, 35, 1127-1141.	0.7	165
20	Partial melting of the Indarch (EH4) meteorite: A textural, chemical, and phase relations view of melting and melt migration. Meteoritics and Planetary Science, 1999, 34, 735-746.	0.7	164
21	Geochemical properties of rocks and soils in Gusev Crater, Mars: Results of the Alpha Particle Xâ€Ray Spectrometer from Cumberland Ridge to Home Plate. Journal of Geophysical Research, 2008, 113, .	3.3	162
22	Iron mineralogy and aqueous alteration from Husband Hill through Home Plate at Gusev Crater, Mars: Results from the MÃ¶ssbauer instrument on the Spirit Mars Exploration Rover. Journal of Geophysical Research, 2008, 113, .	3.3	162
23	Craters, boulders and regolith of (101955) Bennu indicative of an old and dynamic surface. Nature Geoscience, 2019, 12, 242-246.	5.4	161
24	Alkaline volcanic rocks from the Columbia Hills, Gusev crater, Mars. Journal of Geophysical Research, 2006, 111, .	3.3	148
25	Majorâ€element abundances on the surface of Mercury: Results from the MESSENGER Gammaâ€Ray Spectrometer. Journal of Geophysical Research, 2012, 117, .	3.3	146
26	Chemical heterogeneity on Mercury's surface revealed by the MESSENGER Xâ€Ray Spectrometer. Journal of Geophysical Research, 2012, 117, .	3.3	144
27	Partial melting and melt migration in the acapulcoite-lodranite parent body. Geochimica Et Cosmochimica Acta, 1997, 61, 639-650.	1.6	142
28	Exploration of Victoria Crater by the Mars Rover Opportunity. Science, 2009, 324, 1058-1061.	6.0	141
29	Modeling fractional crystallization of group IVB iron meteorites. Geochimica Et Cosmochimica Acta, 2008, 72, 2198-2216.	1.6	136
30	Hollows on Mercury: MESSENGER Evidence for Geologically Recent Volatile-Related Activity. Science, 2011, 333, 1856-1859.	6.0	136
31	Petrology of the unbrecciated eucrites. Geochimica Et Cosmochimica Acta, 2009, 73, 794-819.	1.6	129
32	Meteoritic Parent Bodies:. , 2002, , 653-668.		124
33	The Elemental Composition of Asteroid 433 Eros: Results of the NEAR-Shoemaker X-ray Spectrometer. Science, 2000, 289, 2101-2105.	6.0	123
34	Zagami: Product of a two-stage magmatic history. Geochimica Et Cosmochimica Acta, 1992, 56, 3571-3582.	1.6	120
35	Signatures of the martian atmosphere in glass of the Zagami meteorite. Science, 1995, 267, 1981-1984.	6.0	115
36	A petrologic and isotopic study of winonaites: evidence for early partial melting, brecciation, and metamorphism. Geochimica Et Cosmochimica Acta, 1998, 62, 2535-2553.	1.6	112

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37	Xâ€ray fluorescence measurements of the surface elemental composition of asteroid 433 Eros. Meteoritics and Planetary Science, 2001, 36, 1673-1695.	0.7	110
38	Spectra of extremely reduced assemblages: Implications for Mercury. Meteoritics and Planetary Science, 2002, 37, 1233-1244.	0.7	108
39	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
40	Highâ€calcium pyroxene as an indicator of igneous differentiation in asteroids and meteorites. Meteoritics and Planetary Science, 2004, 39, 1343-1357.	0.7	96
41	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
42	Spectroscopic Observations of Mercury's Surface Reflectance During MESSENGER's First Mercury Flyby. Science, 2008, 321, 62-65.	6.0	94
43	The composition of 433 Eros: A mineralogicalâ€”chemical synthesis. Meteoritics and Planetary Science, 2001, 36, 1661-1672.	0.7	93
44	Variations in the abundance of iron on Mercuryâ€™s surface from MESSENGER X-Ray Spectrometer observations. Icarus, 2014, 235, 170-186.	1.1	93
45	A coordinated spectral, mineralogical, and compositional study of ordinary chondrites. Icarus, 2010, 208, 789-797.	1.1	91
46	Pitted Terrain on Vesta and Implications for the Presence of Volatiles. Science, 2012, 338, 246-249.	6.0	91
47	The Meteoritical Bulletin, No. 87, 2003 July. Meteoritics and Planetary Science, 2003, 38, A189.	0.7	88
48	Composition of chondrule silicates in LL3-5 chondrites and implications for their nebular history and parent body metamorphism. Geochimica Et Cosmochimica Acta, 1991, 55, 601-619.	1.6	86
49	Variations in the abundances of potassium and thorium on the surface of Mercury: Results from the MESSENGER Gammaâ€Ray Spectrometer. Journal of Geophysical Research, 2012, 117, .	3.3	85
50	Enhanced sodium abundance in Mercuryâ€™s north polar region revealed by the MESSENGER Gamma-Ray Spectrometer. Icarus, 2014, 228, 86-95.	1.1	85
51	Composition of the Rheasilvia basin, a window into Vesta's interior. Journal of Geophysical Research E: Planets, 2013, 118, 335-346.	1.5	84
52	Magnesiumâ€rich crustal compositions on Mercury: Implications for magmatism from petrologic modeling. Journal of Geophysical Research, 2012, 117, .	3.3	83
53	Geochemistry, mineralogy, and petrology of boninitic and komatiitic rocks on the mercurian surface: Insights into the mercurian mantle. Icarus, 2017, 285, 155-168.	1.1	79
54	Origin and history of impact-melt rocks of enstatite chondrite parentage. Geochimica Et Cosmochimica Acta, 1995, 59, 161-175.	1.6	76

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55	Olivineâ€dominated asteroids and meteorites: Distinguishing nebular and igneous histories. Meteoritics and Planetary Science, 2007, 42, 155-170.	0.7	76
56	Group IVA irons: New constraints on the crystallization and cooling history of an asteroidal core with a complex history. Geochimica Et Cosmochimica Acta, 2011, 75, 6821-6843.	1.6	76
57	Meteorites on Mars observed with the Mars Exploration Rovers. Journal of Geophysical Research, 2008, 113, .	3.3	75
58	Hydrothermal origin of halogens at Home Plate, Gusev Crater. Journal of Geophysical Research, 2008, 113, .	3.3	71
59	Ancient Asteroids Enriched in Refractory Inclusions. Science, 2008, 320, 514-517.	6.0	71
60	Bright carbonate veins on asteroid (101955) Bennu: Implications for aqueous alteration history. Science, 2020, 370, .	6.0	71
61	Analysis of ordinary chondrites using powder X-ray diffraction: 1. Modal mineral abundances. Meteoritics and Planetary Science, 2010, 45, 123.	0.7	69
62	Chronology and petrology of silicates from IIE iron meteorites: evidence of a complex parent body evolution. Geochimica Et Cosmochimica Acta, 2000, 64, 2133-2154.	1.6	68
63	Chondritic models of 4 Vesta: Implications for geochemical and geophysical properties. Meteoritics and Planetary Science, 2013, 48, 2300-2315.	0.7	66
64	Chlorine on the surface of Mercury: MESSENGER gamma-ray measurements and implications for the planetâ€™s formation and evolution. Icarus, 2015, 257, 417-427.	1.1	66
65	Nickel on Mars: Constraints on meteoritic material at the surface. Journal of Geophysical Research, 2006, 111, n/a-n/a.	3.3	65
66	Thermodynamic constraints on the formation conditions of winonaites and silicate-bearing IAB irons. Geochimica Et Cosmochimica Acta, 2005, 69, 5123-5131.	1.6	61
67	Observations, Meteorites, and Models: A Preflight Assessment of the Composition and Formation of (16) Psyche. Journal of Geophysical Research E: Planets, 2020, 125, e2019JE006296.	1.5	61
68	Global Patterns of Recent Mass Movement on Asteroid (101955) Bennu. Journal of Geophysical Research E: Planets, 2020, 125, e2020JE006475.	1.5	60
69	Elemental composition from gammaâ€ray spectroscopy of the NEARâ€Shoemaker landing site on 433 Eros. Meteoritics and Planetary Science, 2001, 36, 1639-1660.	0.7	58
70	Core crystallization and silicate-metal mixing in the parent body of the IVA iron and stony-iron meteorites. Geochimica Et Cosmochimica Acta, 1996, 60, 1615-1631.	1.6	57
71	Constraints on the abundance of carbon in near-surface materials on Mercury: Results from the MESSENGER Gamma-Ray Spectrometer. Planetary and Space Science, 2015, 108, 98-107.	0.9	57
72	Evidence from MESSENGER for sulfurâ€•and carbonâ€driven explosive volcanism on Mercury. Geophysical Research Letters, 2016, 43, 3653-3661.	1.5	57

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73	Exogenic basalt on asteroid (101955) Bennu. Nature Astronomy, 2021, 5, 31-38.	4.2	57
74	Acapulcoite-lodranite meteorites: Ultramafic asteroidal partial melt residues. Chemie Der Erde, 2018, 78, 153-203.	0.8	54
75	Compositional variability on the surface of 4 Vesta revealed through <scp>GR</scp>a<scp>ND</scp> measurements of highâ€energy gamma rays. Meteoritics and Planetary Science, 2013, 48, 2252-2270.	0.7	53
76	New lithologies in the Zagami meteorite: evidence for fractional crystallization of a single magma unit on Mars. Geochimica Et Cosmochimica Acta, 1999, 63, 1249-1262.	1.6	52
77	Identification and measurement of neutron-absorbing elements on Mercuryâ€™s surface. Icarus, 2010, 209, 195-209.	1.1	52
78	Asteroid Differentiation. , 2006, , 733-746.		51
79	Advanced Curation of Astromaterials for Planetary Science. Space Science Reviews, 2019, 215, 1.	3.7	50
80	Thermal histories of IVA stony-iron and iron meteorites: Evidence for asteroid fragmentation and reaccretion. Geochimica Et Cosmochimica Acta, 1996, 60, 3103-3113.	1.6	48
81	Spectral, mineralogical, and geochemical variations across Home Plate, Gusev Crater, Mars indicate high and low temperature alteration. Earth and Planetary Science Letters, 2009, 281, 258-266.	1.8	48
82	Mineralogy, petrology, chronology, and exposure history of the Chelyabinsk meteorite and parent body. Meteoritics and Planetary Science, 2015, 50, 1790-1819.	0.7	48
83	Neutron absorption constraints on the composition of 4 Vesta. Meteoritics and Planetary Science, 2013, 48, 2211-2236.	0.7	47
84	Minor element evidence that Asteroid 433 Eros is a space-weathered ordinary chondrite parent body. Icarus, 2006, 184, 338-343.	1.1	44
85	Structure, stratigraphy, and origin of Husband Hill, Columbia Hills, Gusev Crater, Mars. Journal of Geophysical Research, 2008, 113, .	3.3	44
86	Graves Nunataks 95209: A snapshot of metal segregation and core formation. Geochimica Et Cosmochimica Acta, 2006, 70, 516-531.	1.6	43
87	A petrologic, thermodynamic and experimental study of brachinites: Partial melt residues of an R chondrite-like precursor. Geochimica Et Cosmochimica Acta, 2013, 122, 36-57.	1.6	43
88	Geochronology of the Martian meteorite Zagami revealed by Uâ€“Pb ion probe dating of accessory minerals. Earth and Planetary Science Letters, 2013, 374, 156-163.	1.8	43
89	Challenges in detecting olivine on the surface of 4 Vesta. Meteoritics and Planetary Science, 2013, 48, 2155-2165.	0.7	43
90	The Tafassasset primitive achondrite: Insights into initial stages of planetary differentiation. Geochimica Et Cosmochimica Acta, 2012, 85, 142-159.	1.6	42

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91	Formation of vesicles in asteroidal basaltic meteorites. Earth and Planetary Science Letters, 2006, 246, 102-108.	1.8	41
92	Widespread evidence for high-temperature formation of pentlandite in chondrites. Geochimica Et Cosmochimica Acta, 2016, 189, 359-376.	1.6	41
93	The formation and chronology of the PAT 91501 impact-melt L chondrite with vesicleâ€“metalâ€“sulfide assemblages. Geochimica Et Cosmochimica Acta, 2008, 72, 2417-2428.	1.6	38
94	Spectral characterization of analog samples in anticipation of OSIRIS-REx's arrival at Bennu: A blind test study. Icarus, 2019, 319, 701-723.	1.1	38
95	Martian parent craters for the SNC meteorites. Journal of Geophysical Research, 1992, 97, 10213-10225.	3.3	36
96	A Low O/Si Ratio on the Surface of Mercury: Evidence for Silicon Smelting?. Journal of Geophysical Research E: Planets, 2017, 122, 2053-2076.	1.5	36
97	The ironâ€“nickelâ€“phosphorus system: Effects on the distribution of trace elements during the evolution of iron meteorites. Geochimica Et Cosmochimica Acta, 2009, 73, 2674-2691.	1.6	35
98	Distribution of iron on Vesta. Meteoritics and Planetary Science, 2013, 48, 2237-2251.	0.7	35
99	Interpreting the Cratering Histories of Bennu, Ryugu, and Other Spacecraft-explored Asteroids. Astronomical Journal, 2020, 160, 14.	1.9	34
100	Relict chondrules in primitive achondrites: Remnants from their precursor parent bodies. Geochimica Et Cosmochimica Acta, 2017, 205, 295-312.	1.6	33
101	Particle Size-Frequency Distributions of the OSIRIS-REx Candidate Sample Sites on Asteroid (101955) Bennu. Remote Sensing, 2021, 13, 1315.	1.8	33
102	Bounce Rockâ€”A shergottiteâ€like basalt encountered at Meridiani Planum, Mars. Meteoritics and Planetary Science, 2011, 46, 1-20.	0.7	32
103	The retention of dust in protoplanetary disks: Evidence from agglomeratic olivine chondrules from the outer Solar System. Geochimica Et Cosmochimica Acta, 2018, 223, 405-421.	1.6	32
104	Petrologic insights from the spectra of the unbrecciated eucrites: Implications for Vesta and basaltic asteroids. Meteoritics and Planetary Science, 2010, 45, 1074-1092.	0.7	31
105	Thermal and impact histories of reheated group IVA, IVB, and ungrouped iron meteorites and their parent asteroids. Meteoritics and Planetary Science, 2011, 46, 1227-1252.	0.7	31
106	Iron and Stony-Iron Meteorites. , 2014, , 267-285.		30
107	Compositional terranes on Mercury: Information from fast neutrons. Icarus, 2017, 281, 32-45.	1.1	30
108	The Milton pallasite and South Byron Trio irons: Evidence for oxidation and core crystallization. Geochimica Et Cosmochimica Acta, 2019, 259, 358-370.	1.6	30

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109	Evidence for limited compositional and particle size variation on asteroid (101955) Bennu from thermal infrared spectroscopy. Astronomy and Astrophysics, 2021, 650, A120.	2.1	30
110	The origin of Vestaâ€™s crust: Insights from spectroscopy of the Vestoids. Icarus, 2011, 214, 147-160.	1.1	29
111	Evidence for mechanical and chemical alteration of iron-nickel meteorites on Mars: Process insights for Meridiani Planum. Journal of Geophysical Research, 2011, 116, .	3.3	28
112	The primary fO2 of basalts examined by the Spirit rover in Gusev Crater, Mars: Evidence for multiple redox states in the martian interior. Earth and Planetary Science Letters, 2013, 384, 198-208.	1.8	28
113	Anatomy of a Partially Differentiated Asteroid: A â€œNEARâ€•Sighted View of Acapulcoites and Lodranites. Icarus, 2000, 148, 29-36.	1.1	27
114	Shock melts in QUE 94411, Hammadah al Hamra 237, and Bencubbin: Remains of the missing matrix?. Meteoritics and Planetary Science, 2005, 40, 1377-1391.	0.7	27
115	The evolution of a heterogeneous Martian mantle: Clues from K, P, Ti, Cr, and Ni variations in Gusev basalts and shergottite meteorites. Earth and Planetary Science Letters, 2010, 296, 67-77.	1.8	27
116	Genetics, crystallization sequence, and age of the South Byron Trio iron meteorites: New insights to carbonaceous chondrite (CC) type parent bodies. Geochimica Et Cosmochimica Acta, 2019, 251, 217-228.	1.6	27
117	The Burnwell, Kentucky, low iron oxide chondrite fall: Description, classification and origin. Meteoritics and Planetary Science, 1998, 33, 853-856.	0.7	26
118	Spectral properties of angrites. Meteoritics and Planetary Science, 2006, 41, 1139-1145.	0.7	26
119	The effect of Ni on element partitioning during iron meteorite crystallization. Meteoritics and Planetary Science, 2007, 42, 1735-1750.	0.7	26
120	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
121	Cosmogenic radionuclides in L5 and LL5 chondrites from Queen Alexandra Range, Antarctica: Identification of a large L/LL5 chondrite shower with a preatmospheric mass of approximately 50,000 kg. Meteoritics and Planetary Science, 2011, 46, 177-196.	0.7	26
122	Overview of Mars surface geochemical diversity through Alpha Particle Xâ€Ray Spectrometer data multidimensional analysis: First attempt at modeling rock alteration. Journal of Geophysical Research, 2008, 113, .	3.3	25
123	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
124	The Fe/S ratio of pyrrhotite group sulfides in chondrites: An indicator of oxidation and implications for return samples from asteroids Ryugu and Bennu. Geochimica Et Cosmochimica Acta, 2021, 303, 66-91.	1.6	24
125	Volatiles in unequilibrated ordinary chondrites: Abundances, sources and implications for explosive volcanism on differentiated asteroids. Meteoritics, 1995, 30, 639-645.	1.5	23
126	Combining meteorites and missions to explore Mars. Proceedings of the National Academy of Sciences of the United States of America, 2011, 108, 19159-19164.	3.3	23

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127	Outward migration of chondrule fragments in the early Solar System: O-isotopic evidence for rocky material crossing the Jupiter Gap?. Geochimica Et Cosmochimica Acta, 2020, 282, 133-155.	1.6	23
128	Insights into the formation of silicaâ€rich achondrites from impact melts in Rumurutiâ€type chondrites. Meteoritics and Planetary Science, 2020, 55, 130-148.	0.7	22
129	The Geochemical and Mineralogical Diversity of Mercury. , 2018, , 176-190.		21
130	Oxygen isotopic compositions of IVA iron meteorites: implications for the thermal evolution derived from in situ ultraviolet laser microprobe analyses. Geochimica Et Cosmochimica Acta, 2004, 68, 1159-1171.	1.6	20
131	Crater population on asteroid (101955) Bennu indicates impact armouring and a young surface. Nature Geoscience, 2022, 15, 440-446.	5.4	20
132	Experimental rareâ€earthâ€element partitioning in oldhamite: Implications for the igneous origin of aubritic oldhamite. Meteoritics and Planetary Science, 1997, 32, 395-412.	0.7	19
133	The NEARâ€Shoemaker xâ€ray/gammaâ€ray spectrometer experiment: Overview and lessons learned. Meteoritics and Planetary Science, 2001, 36, 1605-1616.	0.7	19
134	Analysis of MESSENGER Gamma-Ray Spectrometer data from the Mercury flybys. Planetary and Space Science, 2011, 59, 1829-1841.	0.9	18
135	Asteroid (4) Vesta II: Exploring a geologically and geochemically complex world with the Dawn Mission. Chemie Der Erde, 2015, 75, 273-285.	0.8	18
136	Partial melting of oxidized planetesimals: An experimental study to test the formation of oligoclase-rich achondrites Graves Nunataks 06128 and 06129. Geochimica Et Cosmochimica Acta, 2017, 214, 73-85.	1.6	18
137	The Near Earth Asteroid Rendezvous Mission to Asteroid 433 Eros: A Milestone in the Study of Asteroids and their Relationship to Meteorites. Chemie Der Erde, 2002, 62, 89-121.	0.8	17
138	Pyroclast loss or retention during explosive volcanism on asteroids: Influence of asteroid size and gas content of melt. Meteoritics and Planetary Science, 2010, 45, 1284-1301.	0.7	17
139	A composite Fe,Niâ€FeS and enstatiteâ€forsteriteâ€diopsideâ€glass vitrophyre clast in the Larkman Nunatak 04316 aubrite: Origin by pyroclastic volcanism. Meteoritics and Planetary Science, 2011, 46, 1719-1741.	0.7	17
140	Partial melting of H6 ordinary chondrite KernouvÃ©: Constraints on the effects of reducing conditions on oxidized compositions. Meteoritics and Planetary Science, 2008, 43, 1399-1414.	0.7	15
141	Mineralogical Evolution of Meteorites. Elements, 2010, 6, 19-23.	0.5	15
142	Reclassification of four aubrites as enstatite chondrite impact melts: Potential geochemical analogs for Mercury. Meteoritics and Planetary Science, 2019, 54, 785-810.	0.7	14
143	Global geologic map of asteroid (101955) Bennu indicates heterogeneous resurfacing in the past 500,000Âyears. Icarus, 2022, 381, 114992.	1.1	13
144	Distinguishing the Origin of Asteroid (16) Psyche. Space Science Reviews, 2022, 218, 17.	3.7	13

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145	Spinelâ€bearing, Alâ€rich chondrules in two chondrite finds from Roosevelt County, New Mexico: Indicators of nebular and parent body processes. Meteoritics, 1991, 26, 301-309.	1.5	12
146	Assessing the Sampleability of Bennuâ€™s Surface for the OSIRIS-REx Asteroid Sample Return Mission. Space Science Reviews, 2022, 218, 20.	3.7	12
147	Asteroid 3628 BoÅ¾nÄ›mcovÃ¡: Covered with angrite-like basalts?. Meteoritics and Planetary Science, 2006, 41, 1147-1161.	0.7	11
148	Igneous lithologies on asteroid (4) Vesta mapped using gamma-ray and neutron data. Icarus, 2017, 286, 35-45.	1.1	11
149	X-ray absorption characterization of Cr in forsterite within the MacAlpine Hills 88136 EL3 chondritic meteorite. American Mineralogist, 2014, 99, 190-197.	0.9	10
150	Spectral evidence for amorphous silicates in least-processed CO meteorites and their parent bodies. Icarus, 2018, 306, 32-49.	1.1	10
151	Spectral Characterization of Bennu Analogs Using PASCALE: A New Experimental Setâ€Up for Simulating the Nearâ€Surface Conditions of Airless Bodies. Journal of Geophysical Research E: Planets, 2021, 126, e2020JE006624.	1.5	10
152	Oxideâ€bearing and FeOâ€rich clasts in aubrites. Meteoritics and Planetary Science, 2006, 41, 495-503.	0.7	9
153	The Anoka, Minnesota iron meteorite as parent to Hopewell meteoritic metal beads from Havana, Illinois. Journal of Archaeological Science, 2017, 81, 13-22.	1.2	9
154	The effects of highly reduced magmatism revealed through aubrites. Meteoritics and Planetary Science, 2022, 57, 1387-1420.	0.7	9
155	Mercuryâ€™s Global Evolution. , 2018, , 516-543.		8
156	HED Meteorites and Their Relationship to the Geology of Vesta and the Dawn Mission. , 2010, , 141-174.		8
157	Classification of four ordinary chondrites from Spain. Meteoritics, 1990, 25, 77-79.	1.5	7
158	Sulfideâ€dominated partial melting pathways in brachinites. Meteoritics and Planetary Science, 2020, 55, 2021-2043.	0.7	7
159	The Fayette County, Texas, meteorites. Meteoritics, 1995, 30, 776-780.	1.5	5
160	Differentiation Under Highly Reducing Conditions: New Insights from Enstatite Meteorites and Mercury. , 2017, , 71-91.		5
161	Grove Mountains (GRV) 020043: Insights into acapulcoite-lodranite genesis from the most primitive member. Chemie Der Erde, 2019, 79, 125536.	0.8	5
162	Advances in Cosmochemistry Enabled by Antarctic Meteorites. Annual Review of Earth and Planetary Sciences, 2020, 48, 233-258.	4.6	5

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163	The Roosevelt County 079â€“090 meteorites. Meteoritics, 1995, 30, 788-791.	1.5	4
164	The Travis County, Texas, meteorites. Meteoritics, 1995, 30, 348-351.	1.5	4
165	Experimental insights into Stannern-trend eucrite petrogenesis. Meteoritics and Planetary Science, 2018, 53, 2122-2137.	0.7	4
166	Deciphering Redox State for a Metal-Rich World. Space Science Reviews, 2022, 218, 6.	3.7	4
167	Exploring the Possible Continuum Between Comets and Asteroids. , 2018, , 409-438.		3
168	Classification of five new chondrite finds from Roosevelt County, New Mexico. Meteoritics, 1990, 25, 233-234.	1.5	2
169	The Old Woman, California, IIAB iron meteorite. Meteoritics and Planetary Science, 2012, 47, 929-946.	0.7	2
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