James W. Head

List of Publications by Year
in descending order

239	22,218	5261 83	9854 141
papers	citations	h-index	g-index

242	242	242	6082
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Mars Orbiter Laser Altimeter: Experiment summary after the first year of global mapping of Mars. Journal of Geophysical Research, 2001, 106, 23689-23722.	3.3	1,344
2	The Global Topography of Mars and Implications for Surface Evolution. Science, 1999, 284, 1495-1503.	6.0	826
3	Recent ice ages on Mars. Nature, 2003, 426, 797-802.	13.7	705
4	Ascent and eruption of basaltic magma on the Earth and Moon. Journal of Geophysical Research, 1981, 86, 2971-3001.	3.3	642
5	Geologic history of Mars. Earth and Planetary Science Letters, 2010, 294, 185-203.	1.8	538
6	Formation of Glaciers on Mars by Atmospheric Precipitation at High Obliquity. Science, 2006, 311, 368-371.	6.0	405
7	Lunar mare volcanism: Stratigraphy, eruption conditions, and the evolution of secondary crusts. Geochimica Et Cosmochimica Acta, 1992, 56, 2155-2175.	1.6	399
8	Valley network-fed, open-basin lakes on Mars: Distribution and implications for Noachian surface and subsurface hydrology. Icarus, 2008, 198, 37-56.	1.1	385
9	The timing of martian valley network activity: Constraints from buffered crater counting. Icarus, 2008, 195, 61-89.	1.1	375
10	Ages and stratigraphy of mare basalts in Oceanus Procellarum, Mare Nubium, Mare Cognitum, and Mare Insularum. Journal of Geophysical Research, 2003, 108, .	3.3	366
11	Initial observations from the Lunar Orbiter Laser Altimeter (LOLA). Geophysical Research Letters, 2010, 37, .	1.5	356
12	Antarctic dry valleys: Microclimate zonation, variable geomorphic processes, and implications for assessing climate change on Mars. Icarus, 2007, 192, 187-222.	1.1	354
13	Ages of mare basalts on the lunar nearside. Journal of Geophysical Research, 2000, 105, 29239-29275.	3.3	327
14	Lunar volcanism in space and time. Reviews of Geophysics, 1976, 14, 265-300.	9.0	317
15	Kilometer-scale roughness of Mars: Results from MOLA data analysis. Journal of Geophysical Research, 2000, 105, 26695-26711.	3.3	313
16	Lunar Mascon Basins: Lava filling, tectonics, and evolution of the lithosphere. Reviews of Geophysics, 1980, 18, 107-141.	9.0	301
17	Clay minerals in delta deposits and organic preservation potential on Mars. Nature Geoscience, 2008, 1, 355-358.	5.4	293
18	New Perspectives on Ancient Mars. Science, 2005, 307, 1214-1220.	6.0	265

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19	Amazonian northern mid-latitude glaciation on Mars: A proposed climate scenario. Icarus, 2009, 203, 390-405.	1.1	240
20	Cold-based mountain glaciers on Mars: Western Arsia Mons. Geology, 2003, 31, 641.	2.0	212
21	Global Distribution of Large Lunar Craters: Implications for Resurfacing and Impactor Populations. Science, 2010, 329, 1504-1507.	6.0	210
22	Vertical movement in mare basins: Relation to mare emplacement, basin tectonics, and lunar thermal history. Journal of Geophysical Research, 1979, 84, 1667-1682.	3.3	205
23	Topography of the Northern Hemisphere of Mars from the Mars Orbiter Laser Altimeter. Science, 1998, 279, 1686-1692.	6.0	196
24	Mars: Nature and evolution of young latitude-dependent water-ice-rich mantle. Geophysical Research Letters, 2002, 29, 14-1-14-4.	1.5	180
25	Transient reducing greenhouse warming on early Mars. Geophysical Research Letters, 2017, 44, 665-671.	1.5	178
26	Rock types of South Pole-Aitken basin and extent of basaltic volcanism. Journal of Geophysical Research, 2001, 106, 28001-28022.	3.3	174
27	The Moon Mineralogy Mapper (M³) imaging spectrometer for lunar science: Instrument description, calibration, on-orbit measurements, science data calibration and on-orbit validation. Journal of Geophysical Research, 2011, 116, .	3.3	173
28	Lunar impact basins revealed by Gravity Recovery and Interior Laboratory measurements. Science Advances, 2015, 1, e1500852.	4.7	173
29	Evidence for geochemical terranes on Mercury: Global mapping of major elements with MESSENGER's X-Ray Spectrometer. Earth and Planetary Science Letters, 2015, 416, 109-120.	1.8	167
30	Fate of outflow channel effluents in the northern lowlands of Mars: The Vastitas Borealis Formation as a sublimation residue from frozen ponded bodies of water. Journal of Geophysical Research, 2002, 107, 4-1-4-25.	3.3	166
31	Global geological map of Venus. Planetary and Space Science, 2011, 59, 1559-1600.	0.9	165
32	Constraints on the volatile distribution within Shackleton crater at the lunar south pole. Nature, 2012, 486, 378-381.	13.7	159
33	The geologic history of Venus: A stratigraphic view. Journal of Geophysical Research, 1998, 103, 8531-8544.	3.3	156
34	Comparison of â€œwarm and wetâ€•and â€œcold and icyâ€•scenarios for early Mars in a 3â€Ð climate model. Journal of Geophysical Research E: Planets, 2015, 120, 1201-1219.	1.5	153
35	Global surface slopes and roughness of the Moon from the Lunar Orbiter Laser Altimeter. Journal of Geophysical Research, 2011, 116, .	3.3	149
36	Orientale multi-ringed basin interior and implications for the petrogenesis of lunar highland samples. The Moon, 1974, 11, 327-356.	0.4	148

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37	Age and composition of young basalts on the Moon, measured from samples returned by Changâ€™e-5. Science, 2021, 374, 887-890.	6.0	148
38	Episodic warming of early Mars by punctuatedÂvolcanism. Nature Geoscience, 2014, 7, 865-868.	5.4	147
39	Generation, ascent and eruption of magma on the Moon: New insights into source depths, magma supply, intrusions and effusive/explosive eruptions (Part 2: Predicted emplacement processes and) Tj ETQq1 1 0.784314 rgBT /Overlock	1.1	140
40	Sequence and timing of conditions on early Mars. Icarus, 2011, 211, 1204-1214.	1.1	140
41	An overfilled lacustrine system and progradational delta in Jezero crater, Mars: Implications for Noachian climate. Planetary and Space Science, 2012, 67, 28-45.	0.9	138
42	Formation of gullies on Mars: Link to recent climate history and insolation microenvironments implicate surface water flow origin. Proceedings of the National Academy of Sciences of the United States of America, 2008, 105, 13258-13263.	3.3	137
43	Lunar impact basins: New data for the western limb and far side (Orientale and South Poleâ€Aitken) Tj ETQq1 1 0.784314 rgBT /Overlock	3.3	131
44	Mineralogy of the Nili Fossae region with OMEGA/Mars Express data: 1. Ancient impact melt in the Isidis Basin and implications for the transition from the Noachian to Hesperian. Journal of Geophysical Research, 2007, 112, .	3.3	130
45	Venus Volcanism: Initial Analysis from Magellan Data. Science, 1991, 252, 276-288.	6.0	128
46	Generation, ascent and eruption of magma on the Moon: New insights into source depths, magma supply, intrusions and effusive/explosive eruptions (Part 1: Theory). Icarus, 2017, 283, 146-175.	1.1	124
47	Ages and stratigraphy of lunar mare basalts in Mare Frigoris and other nearside maria based on crater sizeâ€frequency distribution measurements. Journal of Geophysical Research, 2010, 115, .	3.3	123
48	Lunar mare domes: Classification and modes of origin. The Moon and the Planets, 1980, 22, 235-258.	0.5	120
49	Summary of the results from the lunar orbiter laser altimeter after seven years in lunar orbit. Icarus, 2017, 283, 70-91.	1.1	116
50	Lunar mare basalt flow units: Thicknesses determined from crater size-frequency distributions. Geophysical Research Letters, 2002, 29, 89-1-89-4.	1.5	114
51	Lunar impact basins: Stratigraphy, sequence and ages from superposed impact crater populations measured from Lunar Orbiter Laser Altimeter (LOLA) data. Journal of Geophysical Research, 2012, 117, .	3.3	114
52	Geology and petrology of enormous volumes of impact melt on the Moon: A case study of the Orientale basin impact melt sea. Icarus, 2013, 223, 749-765.	1.1	114
53	Geological Characteristics of Von KÃ¡rmÃ¡n Crater, Northwestern South Poleâ€Aitken Basin: Chang'Eâ€4 Landing Site Region. Journal of Geophysical Research E: Planets, 2018, 123, 1684-1700.	1.5	114
54	Steepâ€sided domes on Venus: Characteristics, geologic setting, and eruption conditions from Magellan data. Journal of Geophysical Research, 1992, 97, 13445-13478.	3.3	113

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55	Martian surface/nearâ€surface water inventory: Sources, sinks, and changes with time. Geophysical Research Letters, 2015, 42, 726-732.	1.5	113
56	Concentric crater fill in the northern mid-latitudes of Mars: Formation processes and relationships to similar landforms of glacial origin. Icarus, 2010, 209, 390-404.	1.1	111
57	Mineralogy of the Mafic Anomaly in the South Pole-Aitken Basin: Implications for excavation of the lunar mantle. Geophysical Research Letters, 1997, 24, 1903-1906.	1.5	110
58	Modification of the dichotomy boundary on Mars by Amazonian mid-latitude regional glaciation. Geophysical Research Letters, 2006, 33, .	1.5	109
59	Lunar sinuous rilles: Distribution, characteristics, and implications for their origin. Planetary and Space Science, 2013, 79-80, 1-38.	0.9	109
60	Periods of active permafrost layer formation during the geological history of Mars: Implications for circum-polar and mid-latitude surface processes. Planetary and Space Science, 2008, 56, 289-302.	0.9	108
61	Characteristics and origin of polygonal terrain in southern Utopia Planitia, Mars: Results from Mars Orbiter Laser Altimeter and Mars Orbiter Camera data. Journal of Geophysical Research, 2000, 105, 11999-12022.	3.3	107
62	Active volcanism on Venus in the Ganiki Chasma rift zone. Geophysical Research Letters, 2015, 42, 4762-4769.	1.5	107
63	An analysis of open-basin lake deposits on Mars: Evidence for the nature of associated lacustrine deposits and post-lacustrine modification processes. Icarus, 2012, 219, 211-229.	1.1	105
64	Lunar graben formation due to near-surface deformation accompanying dike emplacement. Planetary and Space Science, 1993, 41, 719-727.	0.9	103
65	Mars outflow channels: A reappraisal of the estimation of water flow velocities from water depths, regional slopes, and channel floor properties. Journal of Geophysical Research, 2004, 109, .	3.3	102
66	Lunar floorâ€fractured craters: Classification, distribution, origin and implications for magmatism and shallow crustal structure. Journal of Geophysical Research, 2012, 117, .	3.3	99
67	China's Chang'e-5 landing site: Geology, stratigraphy, and provenance of materials. Earth and Planetary Science Letters, 2021, 561, 116855.	1.8	99
68	Lunar regional dark mantle deposits: Geologic, multispectral, and modeling studies. Journal of Geophysical Research, 1998, 103, 22725-22759.	3.3	98
69	The global albedo of the Moon at 1064 nm from LOLA. Journal of Geophysical Research E: Planets, 2014, 119, 1665-1679.	1.5	96
70	Lunar cryptomaria: Physical characteristics, distribution, and implications for ancient volcanism. Icarus, 2015, 247, 150-171.	1.1	94
71	Criteria for the detection of lunar cryptomaria. Earth, Moon and Planets, 1995, 69, 141-172.	0.3	93
72	Lineated valley fill (LVF) and lobate debris aprons (LDA) in the Deuteronilus Mensae northern dichotomy boundary region, Mars: Constraints on the extent, age and episodicity of Amazonian glacial events. Icarus, 2009, 202, 22-38.	1.1	92

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73	Lunar mare deposits associated with the Orientale impact basin: New insights into mineralogy, history, mode of emplacement, and relation to Orientale Basin evolution from Moon Mineralogy Mapper (M³) data from Chandrayaan-1. Journal of Geophysical Research, 2011, 116, .	3.3	92
74	Impact melt differentiation in the South Pole-Aitken basin: Some observations and speculations. Planetary and Space Science, 2014, 91, 101-106.	0.9	92
75	Geology and Scientific Significance of the RÃ¼mker Region in Northern Oceanus Procellarum: China's Chang'Eâ€5 Landing Region. Journal of Geophysical Research E: Planets, 2018, 123, 1407-1430.	1.5	92
76	Classification and analysis of candidate impact crater-hosted closed-basin lakes on Mars. Icarus, 2015, 260, 346-367.	1.1	91
77	The evolution of impact basins: Viscous relaxation of topographic relief. Journal of Geophysical Research, 1982, 87, 3975-3992.	3.3	90
78	Supraglacial and proglacial valleys on Amazonian Mars. Icarus, 2010, 208, 86-100.	1.1	90
79	Lunar topographic roughness maps from Lunar Orbiter Laser Altimeter (LOLA) data: Scale dependence and correlation with geologic features and units. Icarus, 2013, 226, 52-66.	1.1	90
80	Young lunar mare basalts in the Chang'e-5 sample return region, northern Oceanus Procellarum. Earth and Planetary Science Letters, 2021, 555, 116702.	1.8	88
81	Glaciation in the Late Noachian Icy Highlands: Ice accumulation, distribution, flow rates, basal melting, and top-down melting rates and patterns. Planetary and Space Science, 2015, 106, 82-98.	0.9	86
82	Imbrian-Age Highland Volcanism on the Moon: The Gruithuisen and Mairan Domes. Science, 1978, 199, 1433-1436.	6.0	85
83	Stratigraphy of Oceanus Procellarum basalts: Sources and styles of emplacement. Journal of Geophysical Research, 1980, 85, 6579-6609.	3.3	85
84	Crustal diversity of the moon: Compositional analyses of Galileo solid state imaging data. Journal of Geophysical Research, 1993, 98, 17127-17148.	3.3	85
85	Structure and evolution of the lunar Procellarum region as revealed by GRAIL gravity data. Nature, 2014, 514, 68-71.	13.7	85
86	The climate history of early Mars: insights from the Antarctic McMurdo Dry Valleys hydrologic system. Antarctic Science, 2014, 26, 774-800.	0.5	84
87	Compositional diversity and geologic insights of the Aristarchus crater from Moon Mineralogy Mapper data. Journal of Geophysical Research, 2011, 116, .	3.3	83
88	Processes of lunar crater degradation: Changes in style with geologic time. The Moon, 1975, 12, 299-329.	0.4	82
89	Lunar Impact Basins and Crustal Heterogeneity: New Western Limb and Far Side Data from Galileo. Science, 1992, 255, 570-576.	6.0	82
90	The dispersal of pyroclasts from ancient explosive volcanoes on Mars: Implications for the friable layered deposits. Icarus, 2012, 219, 358-381.	1.1	82

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91	New insights into lunar petrology: Distribution and composition of prominent low-Ca pyroxene exposures as observed by the Moon Mineralogy Mapper (M³). Journal of Geophysical Research, 2011, 116, .	3.3	80
92	Lunar Gruithuisen and Mairan domes: Rheology and mode of emplacement. Journal of Geophysical Research, 2003, 108, n/a-n/a.	3.3	79
93	Formation of the Orientale lunar multiring basin. Science, 2016, 354, 441-444.	6.0	78
94	Spectral properties of the Marius Hills volcanic complex and implications for the formation of lunar domes and cones. Journal of Geophysical Research, 1999, 104, 18933-18956.	3.3	74
95	The transition from complex crater to peak-ring basin on the Moon: New observations from the Lunar Orbiter Laser Altimeter (LOLA) instrument. Icarus, 2011, 214, 377-393.	1.1	74
96	Insights into surface runoff on early Mars from paleolake basin morphology and stratigraphy. Geology, 2016, 44, 419-422.	2.0	72
97	The mineralogy of late stage lunar volcanism as observed by the Moon Mineralogy Mapper on Chandrayaan-1. Journal of Geophysical Research, 2011, 116, .	3.3	71
98	Lunar floor-fractured craters as magmatic intrusions: Geometry, modes of emplacement, associated tectonic and volcanic features, and implications for gravity anomalies. Icarus, 2015, 248, 424-447.	1.1	71
99	Global geological mapping of Ganymede. Icarus, 2010, 207, 845-867.	1.1	69
100	Lava flooding of ancient planetary crusts: Geometry, thickness, and volumes of flooded lunar impact basins. The Moon and the Planets, 1982, 26, 61-88.	0.5	68
101	Thickness of proximal ejecta from the Orientale Basin from Lunar Orbiter Laser Altimeter (LOLA) data: Implications for multi-ring basin formation. Geophysical Research Letters, 2011, 38, n/a-n/a.	1.5	68
102	Areally Extensive Surface Bedrock Exposures on Mars: Many Are Clastic Rocks, Not Lavas. Geophysical Research Letters, 2018, 45, 1767-1777.	1.5	68
103	Images of surface volatiles in Mercuryâ€™s polar craters acquired by the MESSENGER spacecraft. Geology, 2014, 42, 1051-1054.	2.0	67
104	A coupled model of episodic warming, oxidation and geochemical transitions on early Mars. Nature Geoscience, 2021, 14, 127-132.	5.4	64
105	The fractured Moon: Production and saturation of porosity in the lunar highlands from impact cratering. Geophysical Research Letters, 2015, 42, 6939-6944.	1.5	63
106	Venus: The Atmosphere, Climate, Surface, Interior and Near-Space Environment of an Earth-Like Planet. Space Science Reviews, 2018, 214, 1.	3.7	63
107	The deep structure of lunar basins: Implications for basin formation and modification. Journal of Geophysical Research, 1985, 90, 3049-3064.	3.3	62
108	The evolution of impact basins: Cooling, subsidence, and thermal stress. Journal of Geophysical Research, 1985, 90, 12415-12433.	3.3	62

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109	Amazonianâ€aged fluvial valley systems in a climatic microenvironment on Mars: Melting of ice deposits on the interior of Lyot Crater. Geophysical Research Letters, 2009, 36, .	1.5	61
110	Volumes of lunar lava ponds in South Pole-Aitken and Orientale Basins: Implications for eruption conditions, transport mechanisms, and magma source regions. Journal of Geophysical Research, 1997, 102, 10909-10931.	3.3	60
111	Venus as a Laboratory for Exoplanetary Science. Journal of Geophysical Research E: Planets, 2019, 124, 2015-2028.	1.5	59
112	Origin of lunar sinuous rilles: Modeling effects of gravity, surface slope, and lava composition on erosion rates during the formation of Rima Prinz. Journal of Geophysical Research, 2012, 117, .	3.3	58
113	Patterns of accumulation and flow of ice in the mid-latitudes of Mars during the Amazonian. Icarus, 2012, 219, 723-732.	1.1	57
114	Recent shallow moonquake and impact-triggered boulder falls on the Moon: New insights from the SchrÃ¶dinger basin. Journal of Geophysical Research E: Planets, 2016, 121, 147-179.	1.5	57
115	Absence of large shield volcanoes and calderas on the Moon: Consequence of magma transport phenomena?. Geophysical Research Letters, 1991, 18, 2121-2124.	1.5	55
116	Layered mantling deposits in northeast Arabia Terra, Mars: Noachianâ€Hesperian sedimentation, erosion, and terrain inversion. Journal of Geophysical Research, 2007, 112, .	3.3	55
117	North-south topographic slope asymmetry on Mars: Evidence for insolation-related erosion at high obliquity. Geophysical Research Letters, 2003, 30, .	1.5	53
118	Analyzing the ages of south polar craters on the Moon: Implications for the sources and evolution of surface water ice.. Icarus, 2020, 336, 113455.	1.1	53
119	Viscous flow lobes in central Taylor Valley, Antarctica: Origin as remnant buried glacial ice. Geomorphology, 2010, 120, 174-185.	1.1	52
120	Compositional variability of the Marius Hills volcanic complex from the Moon Mineralogy Mapper (M³). Journal of Geophysical Research, 2011, 116, .	3.3	52
121	Buried stratigraphic relationships along the southwestern shores of Oceanus Procellarum: Implications for early lunar volcanism. Journal of Geophysical Research, 1996, 101, 18913-18925.	3.3	51
122	Mare Tranquillitatis: Basalt emplacement history and relation to lunar samples. Journal of Geophysical Research, 1996, 101, 23213-23228.	3.3	51
123	Formation of lobate debris aprons on Mars: Assessment of regional ice sheet collapse and debris-cover armoring. Icarus, 2014, 228, 54-63.	1.1	51
124	Thicknesses of mare basalts on the Moon from gravity and topography. Journal of Geophysical Research E: Planets, 2016, 121, 854-870.	1.5	51
125	Stratigraphic sequence and ages of volcanic units in the Gruithuisen region of the Moon. Journal of Geophysical Research, 2002, 107, 14-1-14-15.	3.3	50
126	Galileo observations of postâ€imbrium lunar craters during the first Earthâ€Moon flyby. Journal of Geophysical Research, 1993, 98, 17207-17231.	3.3	49

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127	Sequence of tectonic deformation in the history of Venus: Evidence from global stratigraphic relationships. Geology, 1998, 26, 35.	2.0	49
128	Thermal stress weathering and the spalling of Antarctic rocks. Journal of Geophysical Research F: Earth Surface, 2017, 122, 3-24.	1.0	49
129	Eruption of magmatic foams on the Moon: Formation in the waning stages of dike emplacement events as an explanation of â€œirregular mare patchesâ€. Journal of Volcanology and Geothermal Research, 2017, 335, 113-127.	0.8	49
130	Late Noachian Icy Highlands climate model: Exploring the possibility of transient melting and fluvial/lacustrine activity through peak annual and seasonal temperatures. Icarus, 2018, 300, 261-286.	1.1	49
131	Pedestal crater heights on Mars: A proxy for the thicknesses of past, ice-rich, Amazonian deposits. Icarus, 2010, 210, 92-101.	1.1	48
132	Dark ring in southwestern Orientale Basin: Origin as a single pyroclastic eruption. Journal of Geophysical Research, 2002, 107, 1-1.	3.3	44
133	Formation of doubleâ€layered ejecta craters on Mars: A glacial substrate model. Geophysical Research Letters, 2013, 40, 3819-3824.	1.5	44
134	Ina pit crater on the Moon: Extrusion of waning-stage lava lake magmatic foam results in extremely young crater retention ages. Geology, 2017, 45, 455-458.	2.0	44
135	Controls on Lunar Basaltic Volcanic Eruption Structure and Morphology: Gas Release Patterns in Sequential Eruption Phases. Geophysical Research Letters, 2018, 45, 5852-5859.	1.5	44
136	Sinton crater, Mars: Evidence for impact into a plateau icefield and melting to produce valley networks at the Hesperianâ€"Amazonian boundary. Icarus, 2009, 202, 39-59.	1.1	43
137	Amazonian mid- to high-latitude glaciation on Mars: Supply-limited ice sources, ice accumulation patterns, and concentric crater fill glacial flow and ice sequestration. Planetary and Space Science, 2014, 91, 60-76.	0.9	42
138	Deep generation of magmatic gas on the Moon and implications for pyroclastic eruptions. Geophysical Research Letters, 2003, 30, .	1.5	40
139	The transition from complex craters to multiâ€ring basins on the Moon: Quantitative geometric properties from Lunar Reconnaissance Orbiter Lunar Orbiter Laser Altimeter (LOLA) data. Journal of Geophysical Research, 2012, 117, .	3.3	40
140	Lunar cryptomaria: Mineralogy and composition of ancient volcanic deposits. Planetary and Space Science, 2015, 106, 67-81.	0.9	40
141	Comparison of areas in shadow from imaging and altimetry in the north polar region of Mercury and implications for polar ice deposits. Icarus, 2016, 280, 158-171.	1.1	40
142	An extended period of episodic northern mid-latitude glaciation on Mars during the Middle to Late Amazonian: Implications for long-term obliquity history. Geology, 2014, 42, 763-766.	2.0	39
143	Geology of mare deposits in South Pole-Aitken basin as seen by Clementine UV/VIS data. Journal of Geophysical Research, 1999, 104, 18957-18979.	3.3	38
144	Venus, an Astrobiology Target. Astrobiology, 2021, 21, 1163-1185.	1.5	38

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145	Lava fountains from the 1999 Tvashtar Catena fissure eruption on Io: Implications for dike emplacement mechanisms, eruption rates, and crustal structure. Journal of Geophysical Research, 2001, 106, 32997-33004.	3.3	37
146	Lunar red spots: Stratigraphic sequence and ages of domes and plains in the Hansteen and Helmet regions on the lunar nearside. Journal of Geophysical Research, 2010, 115, .	3.3	37
147	3D modelling of the climatic impact of outflow channel formation events on early Mars. Icarus, 2017, 288, 10-36.	1.1	37
148	New evidence for surface water ice in smallâ€scale cold traps and in three large craters at the north polar region of Mercury from the Mercury Laser Altimeter. Geophysical Research Letters, 2017, 44, 9233-9241.	1.5	37
149	Geological Characteristics and Targets of High Scientific Interest in the Zhurong Landing Region on Mars. Geophysical Research Letters, 2021, 48, e2021GL094903.	1.5	37
150	Evidence for Amazonian northern mid-latitude regional glacial landsystems on Mars: Glacial flow models using GCM-driven climate results and comparisons to geological observations. Icarus, 2011, 216, 23-39.	1.1	36
151	Geologic History of the Northern Portion of the South Poleâ€Aitken Basin on the Moon. Journal of Geophysical Research E: Planets, 2018, 123, 2585-2612.	1.5	36
152	Duration of tessera deformation on Venus. Journal of Geophysical Research, 1997, 102, 13357-13368.	3.3	35
153	Comparisons of fresh complex impact craters on Mercury and the Moon: Implications for controlling factors in impact excavation processes. Icarus, 2014, 228, 260-275.	1.1	34
154	The regolith properties of the Chang'e-5 landing region and the ground drilling experiments using lunar regolith simulants. Icarus, 2020, 337, 113508.	1.1	34
155	Impact crater air fall deposits on the surface of Venus: Areal distribution, estimated thickness, recognition in surface panoramas, and implications for provenance of sampled surface materials. Journal of Geophysical Research, 2004, 109, .	3.3	33
156	Modification of impact craters in the northern plains of Mars: Implications for Amazonian climate history. Meteoritics and Planetary Science, 2006, 41, 1633-1646.	0.7	33
157	Late Noachian and early Hesperian ridge systems in the south circumpolar Dorsa Argentea Formation, Mars: Evidence for two stages of melting of an extensive late Noachian ice sheet. Planetary and Space Science, 2015, 109-110, 1-20.	0.9	33
158	New observational evidence of global seismic effects of basinâ€forming impacts on the Moon from Lunar Reconnaissance Orbiter Lunar Orbiter Laser Altimeter data. Journal of Geophysical Research, 2012, 117, .	3.3	32
159	Stratigraphy of Ice and Ejecta Deposits at the Lunar Poles. Geophysical Research Letters, 2020, 47, e2020GL088920.	1.5	32
160	Coldâ€based debrisâ€covered glaciers: Evaluating their potential as climate archives through studies of groundâ€penetrating radar and surface morphology. Journal of Geophysical Research F: Earth Surface, 2014, 119, 2505-2540.	1.0	31
161	Rethinking Lunar Mare Basalt Regolith Formation: New Concepts of Lava Flow Protolith and Evolution of Regolith Thickness and Internal Structure. Geophysical Research Letters, 2020, 47, e2020GL088334.	1.5	31
162	The role of substrate characteristics in producing anomalously young crater retention ages in volcanic deposits on the Moon: Morphology, topography, subresolution roughness, and mode of emplacement of the Sosigenes lunar irregular mare patch. Meteoritics and Planetary Science, 2018, 53, 778-812.	0.7	30

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163	The environmental effects of very large bolide impacts on early Mars explored with a hierarchy of numerical models. Icarus, 2020, 335, 113419.	1.1	30
164	Modeling vapor diffusion within cold and dry supraglacial tills of Antarctica: Implications for the preservation of ancient ice. Geomorphology, 2011, 126, 159-173.	1.1	29
165	Model for the origin, ascent, and eruption of lunar picritic magmas. American Mineralogist, 2017, 102, 2045-2053.	0.9	29
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