Lionel Wilson

List of Publications by Year
in descending order

163 papers	10,050 citations	36303 51 h-index	38395 95 g-index
163 all docs	163 docs citations	163 times ranked	4092 citing authors

#	Article	IF	Citations
1	Ascent and eruption of basaltic magma on the Earth and Moon. Journal of Geophysical Research, 1981, 86, 2971-3001.	3.3	642
2	Lunar mare volcanism: Stratigraphy, eruption conditions, and the evolution of secondary crusts. Geochimica Et Cosmochimica Acta, 1992, 56, 2155-2175.	3.9	399
3	Giant radiating dyke swarms on Earth and Venus. Earth-Science Reviews, 1995, 39, 1-58.	9.1	346
4	Mars: Review and analysis of volcanic eruption theory and relationships to observed landforms. Reviews of Geophysics, 1994, 32, 221.	23.0	313
5	Relationships between pressure, volatile content and ejecta velocity in three types of volcanic explosion. Journal of Volcanology and Geothermal Research, 1980, 8, 297-313.	2.1	302
6	Mechanisms and dynamics of strombolian activity. Journal of the Geological Society, 1976, 132, 429-440.	2.1	290
7	Explosive volcanic eruptions-IX. The transition between Hawaiian-style lava fountaining and Strombolian explosive activity. Geophysical Journal International, 1995, 121, 226-232.	2.4	218
8	Tarawera 1886, New Zealand â€" A basaltic plinian fissure eruption. Journal of Volcanology and Geothermal Research, 1984, 21, 61-78.	2.1	215
9	Factors controlling the lengths of channel-fed lava flows. Bulletin of Volcanology, 1994, 56, 108-120.	3.0	211
10	Volcanic processes and landforms on Venus: Theory, predictions, and observations. Journal of Geophysical Research, 1986, 91, 9407-9446.	3.3	205
11	Tharsis-radial graben systems as the surface manifestation of plume-related dike intrusion complexes: Models and implications. Journal of Geophysical Research, 2002, 107, 1-1.	3.3	205
12	A comparison of volcanic eruption processes on Earth, Moon, Mars, Io and Venus. Nature, 1983, 302, 663-669.	27.8	201
13	Basaltic pyroclastic eruptions: Influence of gas-release patterns and volume fluxes on fountain structure, and the formation of cinder cones, spatter cones, rootless flows, lava ponds and lava flows. Journal of Volcanology and Geothermal Research, 1989, 37, 261-271.	2.1	190
14	Deep submarine pyroclastic eruptions: theory and predicted landforms and deposits. Journal of Volcanology and Geothermal Research, 2003, 121, 155-193.	2.1	182
15	An integrated model of kimberlite ascent and eruption. Nature, 2007, 447, 53-57.	27.8	149
16	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 ETQq0 0 0 rgBT /Overlock 10 Tf 50	2.5	147
17	Generation of recent massive water floods at Cerberus Fossae, Mars by dike emplacement, cryospheric cracking, and confined aquifer groundwater release. Geophysical Research Letters, 2003, 30, .	4.0	143
18	Vulcanian eruption mechanisms. Nature, 1979, 277, 440-443.	27.8	138

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19	The dispersal of pyroclasts from Apollinaris Patera, Mars: Implications for the origin of the Medusae Fossae Formation. Icarus, 2011, 216, 212-220.	2.5	134
20	Explosive volcanic eruptions on Mercury: Eruption conditions, magma volatile content, and implications for interior volatile abundances. Earth and Planetary Science Letters, 2009, 285, 263-271.	4.4	128
21	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.	2.5	124
22	Magma reservoirs and neutral buoyancy zones on Venus: Implications for the formation and evolution of volcanic landforms. Journal of Geophysical Research, 1992, 97, 3877-3903.	3.3	119
23	Photometric observations of Mercury from Mariner 10. Journal of Geophysical Research, 1975, 80, 2431-2443.	3.3	118
24	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.	2.5	114
25	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
26	The global distribution of pyroclastic deposits on Mercury: The view from MESSENGER flybys 1â€“3. Planetary and Space Science, 2011, 59, 1895-1909.	1.7	105
27	Lunar graben formation due to near-surface deformation accompanying dike emplacement. Planetary and Space Science, 1993, 41, 719-727.	1.7	103
28	Mid-ocean ridge eruptive vent morphology and substructure: Evidence for dike widths, eruption rates, and evolution of eruptions and axial volcanic ridges. Journal of Geophysical Research, 1996, 101, 28265-28280.	3.3	102
29	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
30	Fractional melting and smelting on the ureilite parent body. Geochimica Et Cosmochimica Acta, 2007, 71, 2876-2895.	3.9	100
31	Explosive volcanism on Hecates Tholus, Mars: Investigation of eruption conditions. Journal of Geophysical Research, 1982, 87, 9890-9904.	3.3	97
32	Consequences of explosive eruptions on small Solar System bodies: the case of the missing basalts on the aubrite parent body. Earth and Planetary Science Letters, 1991, 104, 505-512.	4.4	93
33	Origin and history of ureilitic material in the solar system: The view from asteroidÂ2008 <scp>TC</scp>₃ and the Almahata Sitta meteorite. Meteoritics and Planetary Science, 2015, 50, 782-809.	1.6	92
34	Lava fountain heights at Pu'u 'O'o, Kilauea, Hawaii: Indicators of amount and variations of exsolved magma volatiles. Journal of Geophysical Research, 1987, 92, 13715-13719.	3.3	91
35	Young lunar mare basalts in the Chang'e-5 sample return region, northern Oceanus Procellarum. Earth and Planetary Science Letters, 2021, 555, 116702.	4.4	88
36	The dispersal of pyroclasts from ancient explosive volcanoes on Mars: Implications for the friable layered deposits. Icarus, 2012, 219, 358-381.	2.5	82

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37	Evidence for episodicity in the magma supply to the large Tharsis volcanoes. Journal of Geophysical Research, 2001, 106, 1423-1433.	3.3	81
38	Explosive volcanic eruptions on Mars: Tephra and accretionary lapilli formation, dispersal and recognition in the geologic record. Journal of Volcanology and Geothermal Research, 2007, 163, 83-97.	2.1	81
39	Lunar Gruithuisen and Mairan domes: Rheology and mode of emplacement. Journal of Geophysical Research, 2003, 108, n/a-n/a.	3.3	79
40	Elysium planitia, mars: Regional geology, volcanology, and evidence for volcano-ground ice interactions. Earth, Moon and Planets, 1984, 30, 149-173.	0.6	71
41	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.	2.5	71
42	Thermal evolution and physics of melt extraction on the ureilite parent body. Geochimica Et Cosmochimica Acta, 2008, 72, 6154-6176.	3.9	70
43	The Huygens-Hellas giant dike system on Mars: Implications for Late Noachianâ€“Early Hesperian volcanic resurfacing and climatic evolution. Geology, 2006, 34, 285.	4.4	68
44	Volumetric characteristics of lava flows from interferometric radar and multispectral satellite data: the 1995 Fernandina and 1998 Cerro Azul eruptions in the western Galï¿½pagos. Bulletin of Volcanology, 2003, 65, 311-330.	3.0	62
45	"Nature of local magma storage zones and geometry of conduit systems below basaltic eruption sites: Pu'u 'O 'o, Kilauea East Rift, Hawaii, Example"". Journal of Geophysical Research, 1988, 93, 14785-14792.	3.3	61
46	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
47	Volcanic activity on differentiated asteroids: A review and analysis. Chemie Der Erde, 2012, 72, 289-321.	2.0	58
48	Emplacement of giant radial dikes in the northern Tharsis region of Mars. Journal of Geophysical Research, 2002, 107, 3-1.	3.3	57
49	Absence of large shield volcanoes and calderas on the Moon: Consequence of magma transport phenomena?. Geophysical Research Letters, 1991, 18, 2121-2124.	4.0	55
50	Heat transfer in volcanoâ€“ice interactions on Mars: synthesis of environments and implications for processes and landforms. Annals of Glaciology, 2007, 45, 1-13.	1.4	54
51	The 1983â€“86 Pu'u â€˜Oâ€™o eruption of Kilauea Volcano, Hawaii: a study of dike geometry and eruption mechanisms for a long-lived eruption. Journal of Volcanology and Geothermal Research, 1994, 59, 179-205.	2.1	53
52	Evidence for a massive phreatomagmatic eruption in the initial stages of formation of the Mangala Valles outflow channel, Mars. Geophysical Research Letters, 2004, 31, .	4.0	52
53	Origin of small pits in martian impact craters. Icarus, 2012, 221, 262-275.	2.5	51
54	Explosive volcanism and the compositions of cores of differentiated asteroids. Earth and Planetary Science Letters, 1993, 117, 111-124.	4.4	50

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55	Dynamics of a confined lava flow on Kilauea volcano, Hawaii. Bulletin of Volcanology, 1989, 51, 415-432.	3.0	49
56	Volcanism in the Solar System. Nature Geoscience, 2009, 2, 389-397.	12.9	49
57	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.	2.1	49
58	Cooling rates of hyaloclastites: applications of relaxation geospeedometry to undersea volcanic deposits. Bulletin of Volcanology, 2000, 61, 527-536.	3.0	47
59	Phreatomagmatic explosive origin of Hrad Vallis, Mars. Journal of Geophysical Research, 2003, 108, .	3.3	47
60	High-temperature mass spectrometric degassing of enstatite chondrites: Implications for pyroclastic volcanism on the aubrite parent body. Geochimica Et Cosmochimica Acta, 1992, 56, 4267-4280.	3.9	46
61	Magnetic signature of the lunar South Poleâ€Aitken basin: Character, origin, and age. Journal of Geophysical Research, 2012, 117, .	3.3	46
62	A Plinian treatment of fallout from Hawaiian lava fountains. Journal of Volcanology and Geothermal Research, 1999, 88, 67-75.	2.1	44
63	Dark ring in southwestern Orientale Basin: Origin as a single pyroclastic eruption. Journal of Geophysical Research, 2002, 107, 1-1.	3.3	44
64	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.	4.4	44
65	Controls on Lunar Basaltic Volcanic Eruption Structure and Morphology: Gas Release Patterns in Sequential Eruption Phases. Geophysical Research Letters, 2018, 45, 5852-5859.	4.0	44
66	Volcanic eruptions and intrusions on the asteroid 4 Vesta. Journal of Geophysical Research, 1996, 101, 18927-18940.	3.3	43
67	The internal structures and densities of asteroids. Meteoritics and Planetary Science, 1999, 34, 479-483.	1.6	43
68	Analysis of active volcanoes from the earth observing system. Remote Sensing of Environment, 1991, 36, 1-12.	11.0	40
69	The formation of perched lava ponds on basaltic volcanoes: the influence of flow geometry on cooling-limited lava flow lengths. Journal of Volcanology and Geothermal Research, 1993, 56, 113-123.	2.1	40
70	Eruption of lava flows on Europa: Theory and application to Thrace Macula. Journal of Geophysical Research, 1997, 102, 9263-9272.	3.3	40
71	Heat transfer and melting in subglacial basaltic volcanic eruptions: implications for volcanic deposit morphology and meltwater volumes. Geological Society Special Publication, 2002, 202, 5-26.	1.3	40
72	Deep generation of magmatic gas on the Moon and implications for pyroclastic eruptions. Geophysical Research Letters, 2003, 30, .	4.0	40

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73	Volcanoâ€“ice interactions in the Arsia Mons tropical mountain glacier deposits. Icarus, 2014, 237, 315-339.	2.5	40
74	Explosive volcanism on Mercury: Analysis of vent and deposit morphology and modes of eruption. Icarus, 2018, 302, 191-212.	2.5	40
75	Mars: a review and synthesis of general environments and geological settings of magma-H2O interactions. Geological Society Special Publication, 2002, 202, 27-57.	1.3	39
76	The fate of pyroclasts produced in explosive eruptions on the asteroid 4 Vesta. Meteoritics and Planetary Science, 1997, 32, 813-823.	1.6	38
77	MANGALA VALLES, MARS: ASSESSMENT OF EARLY STAGES OF FLOODING AND DOWNSTREAM FLOOD EVOLUTION. Earth, Moon and Planets, 2005, 96, 1-57.	0.6	38
78	Formation of Mangala Valles outflow channel, Mars: Morphological development and water discharge and duration estimates. Journal of Geophysical Research, 2007, 112, .	3.3	38
79	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
80	Volcanism on the Marius Hills plateau: Observational analyses using Clementine multispectral data. Journal of Geophysical Research, 2003, 108, .	3.3	37
81	Heat transfer in volcanoâ€“ice interactions on Earth. Annals of Glaciology, 2007, 45, 83-86.	1.4	37
82	Formation of Aromatum Chaos, Mars: Morphological development as a result of volcano-ice interactions. Journal of Geophysical Research, 2006, 111, .	3.3	36
83	Fissure eruptions in Tharsis, Mars: Implications for eruption conditions and magma sources. Journal of Volcanology and Geothermal Research, 2009, 185, 28-46.	2.1	36
84	Volcanism on Mercury: A new model for the history of magma ascent and eruption. Geophysical Research Letters, 2008, 35, .	4.0	34
85	Numerical Modeling of Ejecta Dispersal from Transient Volcanic Explosions on Mars. Icarus, 1996, 123, 284-295.	2.5	33
86	Plinian eruptions and passive collapse events as mechanisms of formation for Martian pit chain craters. Journal of Geophysical Research, 2002, 107, 4-1.	3.3	32
87	Formation of Ravi Vallis outflow channel, Mars: Morphological development, water discharge, and duration estimates. Journal of Geophysical Research, 2006, 111, .	3.3	32
88	An igneous origin for Rima Hyginus and Hyginus crater on the Moon. Icarus, 2011, 215, 584-595.	2.5	31
89	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.	4.0	31
90	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.	1.6	30

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91	The heartbeat of the volcano: The discovery of episodic activity at Prometheus on Io. Icarus, 2006, 184, 460-477.	2.5	29
92	Model for the origin, ascent, and eruption of lunar picritic magmas. American Mineralogist, 2017, 102, 2045-2053.	1.9	29
93	Lunar floor-fractured craters: Modes of dike and sill emplacement and implications of gas production and intrusion cooling on surface morphology and structure. Icarus, 2018, 305, 105-122.	2.5	29
94	Experimental evidence for lava-like mud flows under Martian surface conditions. Nature Geoscience, 2020, 13, 403-407.	12.9	29
95	Density structure of Io and the migration of magma through its lithosphere. Journal of Geophysical Research, 2001, 106, 32983-32995.	3.3	28
96	Estimation of volcanic eruption conditions for a large flank event on Elysium Mons, Mars. Journal of Geophysical Research, 2001, 106, 20621-20628.	3.3	27
97	Dynamics of a fluid flow on Mars: Lava or mud?. Icarus, 2014, 233, 268-280.	2.5	26
98	Sources of water for the outflow channels on Mars: Implications of the Late Noachian â€œicy highlandsâ€•model for melting and groundwater recharge on the Tharsis rise. Planetary and Space Science, 2015, 108, 54-65.	1.7	26
99	Volcanic input to the atmosphere from Alba Patera on Mars. Nature, 1987, 330, 354-357.	27.8	25
100	Firn densification in a Late Noachian â€œicy highlandsâ€•Mars: Implications for ice sheet evolution and thermal response. Icarus, 2015, 253, 243-255.	2.5	25
101	Volcanically Induced Transient Atmospheres on the Moon: Assessment of Duration, Significance, and Contributions to Polar Volatile Traps. Geophysical Research Letters, 2020, 47, e2020GL089509.	4.0	25
102	Magma vesiculation and pyroclastic volcanism on Venus. Icarus, 1982, 52, 365-372.	2.5	24
103	The geothermal gradient of Io: Consequences for lithosphere structure and volcanic eruptive activity. Icarus, 2011, 211, 623-635.	2.5	23
104	Observational constraints on the identification of shallow lunar magmatism: Insights from floor-fractured craters. Icarus, 2017, 283, 224-231.	2.5	23
105	Remote sensing of volcanos and volcanic terrains. Eos, 1989, 70, 1567.	0.1	22
106	The relationship between the height of a volcano and the depth to its magma source zone: A critical reexamination. Geophysical Research Letters, 1992, 19, 1395-1398.	4.0	22
107	Evidence for a sill emplacement event on the upper flanks of the Ascraeus Mons shield volcano, Mars. Journal of Geophysical Research, 1999, 104, 27079-27089.	3.3	22
108	The Long Sinuous Rille System in Northern Oceanus Procellarum and Its Relation to the Chang'eâ€5 Returned Samples. Geophysical Research Letters, 2021, 48, e2021GL092663.	4.0	22

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109	The effect of atmospheric pressure on the dispersal of pyroclasts from martian volcanoes. Icarus, 2013, 223, 149-156.	2.5	21
110	Geological Characterization of the Ina Shield Volcano Summit Pit Crater on the Moon: Evidence for Extrusion of Waningâ€Stage Lava Lake Magmatic Foams and Anomalously Young Crater Retention Ages. Journal of Geophysical Research E: Planets, 2019, 124, 1100-1140.	3.6	21
111	Factors controlling the lengths of channel-fed lava flows. Bulletin of Volcanology, 1994, 56, 108-120.	3.0	21
112	Clast sizes of ejecta from explosive eruptions on asteroids: implications for the fate of the basaltic products of differentiation. Earth and Planetary Science Letters, 1996, 140, 191-200.	4.4	20
113	A pyroclastic flow deposit on Venus. Geological Society Special Publication, 2015, 401, 97-106.	1.3	20
114	Lava heating and loading of ice sheets on early Mars: Predictions for meltwater generation, groundwater recharge, and resulting landforms. Icarus, 2016, 271, 237-264.	2.5	20
115	GRAIL-identified gravity anomalies in Oceanus Procellarum: Insight into subsurface impact and magmatic structures on the Moon. Icarus, 2019, 331, 192-208.	2.5	20
116	Clast sizes in terrestrial and Martian ignimbrite lag deposits. Journal of Geophysical Research, 1990, 95, 17309-17314.	3.3	19
117	Explosive volcanism on Venus: Transient volcanic explosions as a mechanism for localized pyroclast dispersal. Journal of Geophysical Research, 1995, 100, 26327.	3.3	19
118	Phreato-magmatic dikeâ€“cryosphere interactions as the origin of small ridges north of Olympus Mons, Mars. Icarus, 2003, 165, 242-252.	2.5	19
119	The transport and eruption of magma from volcanoes: A review. Contemporary Physics, 2002, 43, 197-210.	1.8	18
120	Newly Discovered Ringâ€Moat Dome Structures in the Lunar Maria: Possible Origins and Implications. Geophysical Research Letters, 2017, 44, 9216-9224.	4.0	18
121	Lunar Irregular Mare Patches: Classification, Characteristics, Geologic Settings, Updated Catalog, Origin, and Outstanding Questions. Journal of Geophysical Research E: Planets, 2020, 125, e2019JE006362.	3.6	18
122	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.	1.6	17
123	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.	1.6	17
124	Large-scale lava-ice interactions on Mars: Investigating its role during Late Amazonian Central Elysium Planitia volcanism and the formation of Athabasca Valles. Planetary and Space Science, 2018, 158, 96-109.	1.7	17
125	A model for large-scale volcanic plumes on Io: Implications for eruption rates and interactions between magmas and near-surface volatiles. Journal of Geophysical Research, 2002, 107, 19-1-19-12.	3.3	16
126	Dynamics of the ascent and eruption of water containing dissolved CO₂ on Mars. Journal of Geophysical Research, 2010, 115, .	3.3	16

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127	MERC: a fortran iv program for the production of topographic data for the planet mercury. Computers and Geosciences, 1981, 7, 35-45.	4.2	15
128	Meteoritic and other constraints on the internal structure and impact history of small asteroids. Icarus, 2005, 174, 46-53.	2.5	15
129	Formation of Mangala Fossa, the source of the Mangala Valles, Mars: Morphological development as a result of volcano-cryosphere interactions. Journal of Geophysical Research, 2007, 112, .	3.3	15
130	A theoretical model for the formation of Ring Moat Dome Structures: Products of second boiling in lunar basaltic lava flows. Journal of Volcanology and Geothermal Research, 2019, 374, 160-180.	2.1	15
131	Volcanic history, geologic analysis and map of the Prometheus Patera region on Io. Journal of Volcanology and Geothermal Research, 2009, 187, 93-105.	2.1	14
132	Comment on â€œParent body depthâ€pressureâ€temperature relationships and the style of the ureilite anatexisâ€•by P. H. Warren (MAPS 47:209â€“227). Meteoritics and Planetary Science, 2013, 48, 1096-1106.	1.6	14
133	Formation and dispersal of pyroclasts on the Moon: Indicators of lunar magma volatile contents. Journal of Volcanology and Geothermal Research, 2021, 413, 107217.	2.1	14
134	The initial responses of hot liquid water released under low atmospheric pressures: Experimental insights. Icarus, 2010, 210, 488-506.	2.5	13
135	Discovery of a Powerful, Transient, Explosive Thermal Event at Marduk Fluctus, Io, in Galileo NIMS Data. Geophysical Research Letters, 2018, 45, 2926-2933.	4.0	13
136	Glaciovolcanism in the Tharsis volcanic province of Mars: Implications for regional geology and hydrology. Planetary and Space Science, 2019, 169, 45-69.	1.7	13
137	Ringâ€Moat Dome Structures (RMDSs) in the Lunar Maria: Statistical, Compositional, and Morphological Characterization and Assessment of Theories of Origin. Journal of Geophysical Research E: Planets, 2020, 125, e2019JE005967.	3.6	13
138	Formation of outflow channels on Mars: Testing the origin of Reull Vallis in Hesperia Planum by large-scale lava-ice interactions and top-down melting. Icarus, 2018, 305, 56-79.	2.5	12
139	The Cauchy 5 Small, Lowâ€Volume Lunar Shield Volcano: Evidence for Volatile Exsolutionâ€Eruption Patterns and Type 1/Type 2 Hybrid Irregular Mare Patch Formation. Journal of Geophysical Research E: Planets, 2020, 125, e2019JE006171.	3.6	11
140	Did the Alba Patera and Syria Planum regions of Mars lose their lithospheric roots in convective overturn events?. Journal of Geophysical Research, 2003, 108, .	3.3	9
141	Cooling process recorded in subglacially erupted rhyolite glasses: Rapid quenching, thermal buffering, and the formation of meltwater. Journal of Geophysical Research, 2004, 109, .	3.3	9
142	Possible sub-glacial eruptions in the Galaxias Quadrangle, Mars. Icarus, 2016, 267, 68-85.	2.5	9
143	The Lunar Mare Ringâ€Moat Dome Structure (RMDS) Age Conundrum: Contemporaneous With Imbrianâ€Aged Host Lava Flows or Emplaced in the Copernican?. Journal of Geophysical Research E: Planets, 2021, 126, e2021JE006880.	3.6	9
144	Wilson & Head reply. Nature, 2007, 450, E22-E22.	27.8	8

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145	Assessing the formation of valley networks on a cold early Mars: Predictions for erosion rates and channel morphology. Icarus, 2019, 321, 216-231.	2.5	8
146	The influences of planetary environments on the eruption styles of volcanoes. New Astronomy Reviews, 1984, 27, 333-360.	0.3	6
147	Moon and Mercury. , 2000, , 143-178.		6
148	Vent geometry and eruption conditions of the mixed rhyoliteâ€“basalt NÃ¡mshraun lava flow, Iceland. Journal of Volcanology and Geothermal Research, 2007, 164, 127-141.	2.1	6
149	Magmatic intrusion-related processes in the upper lunar crust: The role of country rock porosity/permeability in magmatic percolation and thermal annealing, and implications for gravity signatures. Planetary and Space Science, 2020, 180, 104765.	1.7	6
150	Degassing of volcanic extrusives on Mercury: Potential contributions to transient atmospheres and buried polar deposits. Earth and Planetary Science Letters, 2021, 564, 116907.	4.4	6
151	Mare Domes in Mare Tranquillitatis: Identification, Characterization, and Implications for Their Origin. Journal of Geophysical Research E: Planets, 2021, 126, e2021JE006888.	3.6	6
152	Arguments for the Non-existence of Magma Oceans in Asteroids. , 2017, , 159-179.		5
153	Ina Lunar Irregular Mare Patch Mission Concepts: Distinguishing between Ancient and Modern Volcanism Models. Planetary Science Journal, 2021, 2, 66.	3.6	5
154	Planetary volcanology: progress, problems, and opportunities. Bulletin of Volcanology, 2022, 84, 1.	3.0	3
155	Martian volcanism: Current state of knowledge and known unknowns. Chemie Der Erde, 2022, 82, 125886.	2.0	3
156	The role of regolith redistribution in influencing the evolution of the shapes of asteroids. Meteoritics and Planetary Science, 2001, 36, 817-829.	1.6	2
157	Volcanism on Mercury. , 2015, , 701-716.		2
158	Io writes its history in hot metal. Nature, 1998, 394, 520-521.	27.8	1
159	Planetary Volcanism. , 2014, , 101-119.		1
160	Model for the Origin, Ascent, and Eruption of Lunar Picritic Magmas. American Mineralogist, 2017, , .	1.9	1
161	Planetary volcanism: Craters, lava flows, fissures, and insights into their formation from observations of the Aprilâ€“August 2018 eruption of KÄ«lauea Volcano, Hawaiâ€˜i. , 2022, , 77-114.		1
162	Explosive volcanism: Observations and processes. , 2022, , 115-160.		1

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163	Lunar Floor-Fractured Craters Provide Evidence For Ancient Magmatic Intrusions. , 2018, , .		0