# James W. Head

## List of Publications by Year in descending order

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|---|---|---|---|
| 239 papers | 22,218 citations | 5261 83 h-index | 9854 141 g-index |
| 242 all docs | 242 docs citations | 242 times ranked | 6082 citing authors |

| # | Article | IF | Citations |
|---|---|---|---|
| 1 | Planetary volcanology: progress, problems, and opportunities. Bulletin of Volcanology, 2022, 84, 1. | 1.1 | 3 |
| 2 | Noachian Proglacial Paleolakes on Mars: Regionally Recurrent Fluvial Activity and Lake Formation within Closed-source Drainage Basin Craters. Planetary Science Journal, 2022, 3, 38. | 1.5 | 5 |
| 3 | Sulfides in Mercury's Mantle: Implications for Mercury's Interior as Interpreted From Moment of Inertia. Geophysical Research Letters, 2022, 49, . | 1.5 | 3 |
| 4 | 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 |
| 5 | Patterns of late Amazonian deglaciation from the distribution of martian paraglacial features. Icarus, 2021, 355, 114117. | 1.1 | 3 |
| 6 | In search of the RNA world on Mars. Geobiology, 2021, 19, 307-321. | 1.1 | 9 |
| 7 | A Noachian Proglacial Paleolake on Mars: Fluvial Activity and Lake Formation within a Closed-source Drainage Basin Crater and Implications for Early Mars Climate. Planetary Science Journal, 2021, 2, 52. | 1.5 | 14 |
| 8 | A coupled model of episodic warming, oxidation and geochemical transitions on early Mars. Nature Geoscience, 2021, 14, 127-132. | 5.4 | 64 |
| 9 | Ina Lunar Irregular Mare Patch Mission Concepts: Distinguishing between Ancient and Modern Volcanism Models. Planetary Science Journal, 2021, 2, 66. | 1.5 | 5 |
| 10 | A Volcanic Ash Layer in the NÃ¶rdlinger Ries Impact Structure (Miocene, Germany): Indication of Crater Fill Geometry and Origins of Longâ€Term Crater Floor Sagging. Journal of Geophysical Research E: Planets, 2021, 126, e2020JE006764. | 1.5 | 10 |
| 11 | Formation and dispersal of pyroclasts on the Moon: Indicators of lunar magma volatile contents. Journal of Volcanology and Geothermal Research, 2021, 413, 107217. | 0.8 | 14 |
| 12 | China's Chang'e-5 landing site: Geology, stratigraphy, and provenance of materials. Earth and Planetary Science Letters, 2021, 561, 116855. | 1.8 | 99 |
| 13 | 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. | 1.5 | 22 |
| 14 | Venus, an Astrobiology Target. Astrobiology, 2021, 21, 1163-1185. | 1.5 | 38 |
| 15 | Degassing of volcanic extrusives on Mercury: Potential contributions to transient atmospheres and buried polar deposits. Earth and Planetary Science Letters, 2021, 564, 116907. | 1.8 | 6 |
| 16 | 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. | 1.5 | 9 |
| 17 | Mare Domes in Mare Tranquillitatis: Identification, Characterization, and Implications for Their Origin. Journal of Geophysical Research E: Planets, 2021, 126, e2021JE006888. | 1.5 | 6 |
| 18 | Boulders on Mercury. Icarus, 2021, 369, 114628. | 1.1 | 3 |

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|---|---|---|---|
| 19 | Copernicanâ€Aged (<200ÂMa) Impact Ejecta at the Chang'eâ€5 Landing Site: Statistical Evidence From Crater Morphology, Morphometry, and Degradation Models. Geophysical Research Letters, 2021, 48, e2021GL095341. | 1.5 | 24 |
| 20 | 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 |
| 21 | Geological Characteristics and Targets of High Scientific Interest in the Zhurong Landing Region on Mars. Geophysical Research Letters, 2021, 48, e2021GL094903. | 1.5 | 37 |
| 22 | 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 |
| 23 | 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 |
| 24 | 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. | 0.9 | 6 |
| 25 | 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 |
| 26 | Thermophysical Features of the RÃ¼mker Region in Northern Oceanus Procellarum: Insights from CE-2 CELMS Data. Remote Sensing, 2020, 12, 3272. | 1.8 | 10 |
| 27 | Erosion of lunar surface rocks by impact processes: A synthesis. Planetary and Space Science, 2020, 194, 105105. | 0.9 | 27 |
| 28 | 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 |
| 29 | Experimental Investigations on the Effects of Dissolved Gases on the Freezing Dynamics of Ocean Worlds. Journal of Geophysical Research E: Planets, 2020, 125, e2020JE006528. | 1.5 | 2 |
| 30 | Stratigraphy of Ice and Ejecta Deposits at the Lunar Poles. Geophysical Research Letters, 2020, 47, e2020GL088920. | 1.5 | 32 |
| 31 | Volcanically Induced Transient Atmospheres on the Moon: Assessment of Duration, Significance, and Contributions to Polar Volatile Traps. Geophysical Research Letters, 2020, 47, e2020GL089509. | 1.5 | 25 |
| 32 | Quantitative Characterization of Impact Crater Materials on the Moon: Changes in Topographic Roughness and Thermophysical Properties With Age. Journal of Geophysical Research E: Planets, 2020, 125, e2019JE006091. | 1.5 | 9 |
| 33 | Temperatureâ€Dependent Changes in the Normal Albedo of the Lunar Surface at 1,064Ânm. Journal of Geophysical Research E: Planets, 2020, 125, e2019JE006338. | 1.5 | 4 |
| 34 | Assessing the Roughness Properties of Circumpolar Lunar Craters: Implications for the Timing of Waterâ€Ice Delivery to the Moon. Geophysical Research Letters, 2020, 47, e2020GL087782. | 1.5 | 13 |
| 35 | Lunar Irregular Mare Patches: Classification, Characteristics, Geologic Settings, Updated Catalog, Origin, and Outstanding Questions. Journal of Geophysical Research E: Planets, 2020, 125, e2019JE006362. | 1.5 | 18 |
| 36 | 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. | 1.5 | 11 |

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| 37 | Regolith textures on Mercury: Comparison with the Moon. Icarus, 2020, 351, 113945. | 1.1 | 10 |
| 38 | 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. | 1.5 | 13 |
| 39 | Rainfall on Noachian Mars: Nature, timing, and influence on geologic processes and climate history. Icarus, 2020, 347, 113782. | 1.1 | 18 |
| 40 | Groundwater Release on Early Mars: Utilizing Models and Proposed Evidence for Groundwater Release to Estimate the Required Climate and Subsurface Water Budget. Geophysical Research Letters, 2020, 47, e2020GL087230. | 1.5 | 5 |
| 41 | Glaciation on Mercury: Accumulation and flow of ice in permanently shadowed circum-polar crater interiors. Icarus, 2019, 317, 81-93. | 1.1 | 3 |
| 42 | The volume of water required to carve the martian valley networks: Improved constraints using updated methods. Icarus, 2019, 317, 379-387. | 1.1 | 16 |
| 43 | Potential Lunar Base on Mons Malapert: Topographic, Geologic and Trafficability Considerations. Solar System Research, 2019, 53, 383-398. | 0.3 | 19 |
| 44 | Searching for Lunar Horizon Glow With the Lunar Orbiter Laser Altimeter. Journal of Geophysical Research E: Planets, 2019, 124, 2728-2744. | 1.5 | 6 |
| 45 | Venus as a Laboratory for Exoplanetary Science. Journal of Geophysical Research E: Planets, 2019, 124, 2015-2028. | 1.5 | 59 |
| 46 | Age constraints of Mercury's polar deposits suggest recent delivery of ice. Earth and Planetary Science Letters, 2019, 520, 26-33. | 1.8 | 19 |
| 47 | Oceans on Mars: The possibility of a Noachian groundwater-fed ocean in a sub-freezing martian climate. Icarus, 2019, 331, 209-225. | 1.1 | 7 |
| 48 | Analyses of Lunar Orbiter Laser Altimeter 1,064â€nm Albedo in Permanently Shadowed Regions of Polar Crater Flat Floors: Implications for Surface Water Ice Occurrence and Future In Situ Exploration. Earth and Space Science, 2019, 6, 467-488. | 1.1 | 24 |
| 49 | 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. | 1.5 | 21 |
| 50 | 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. | 0.8 | 15 |
| 51 | Areally Extensive Surface Bedrock Exposures on Mars: Many Are Clastic Rocks, Not Lavas. Geophysical Research Letters, 2018, 45, 1767-1777. | 1.5 | 68 |
| 52 | Transient post-glacial processes on Mars: Geomorphologic evidence for a paraglacial period. Icarus, 2018, 309, 187-206. | 1.1 | 15 |
| 53 | Mars Climate History: Insights From Impact Crater Wall Slope Statistics. Geophysical Research Letters, 2018, 45, 1751-1758. | 1.5 | 15 |
| 54 | The Apollo peak-ring impact basin: Insights into the structure and evolution of the South Poleâ€“Aitken basin. Icarus, 2018, 306, 139-149. | 1.1 | 14 |

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|---|---|---|---|
| 55 | Constraining the thickness of polar ice deposits on Mercury using the Mercury Laser Altimeter and small craters in permanently shadowed regions. Icarus, 2018, 305, 139-148. | 1.1 | 17 |
| 56 | 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. | 1.1 | 29 |
| 57 | Geology, tectonism and composition of the northwest Imbrium region. Icarus, 2018, 303, 67-90. | 1.1 | 24 |
| 58 | 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 |
| 59 | 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 |
| 60 | Impact cratering as a cause of climate change, surface alteration, and resurfacing during the early history of Mars. Meteoritics and Planetary Science, 2018, 53, 687-725. | 0.7 | 26 |
| 61 | Testing landslide and atmosphericâ€effects models for the formation of doubleâ€layered ejecta craters on Mars. Meteoritics and Planetary Science, 2018, 53, 741-777. | 0.7 | 10 |
| 62 | Early Mars Climate History: Characterizing a â€œWarm and Wetâ€•Martian Climate With a 3â€D Global Climate Model and Testing Geological Predictions. Geophysical Research Letters, 2018, 45, 10,249. | 1.5 | 22 |
| 63 | 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 |
| 64 | 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 |
| 65 | 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 |
| 66 | Lunar Orientale Impact Basin Secondary Craters: Spatial Distribution, Sizeâ€Frequency Distribution, and Estimation of Fragment Size. Journal of Geophysical Research E: Planets, 2018, 123, 1344-1367. | 1.5 | 18 |
| 67 | Venus: The Atmosphere, Climate, Surface, Interior and Near-Space Environment of an Earth-Like Planet. Space Science Reviews, 2018, 214, 1. | 3.7 | 63 |
| 68 | Reexamination of Early Lunar Chronology With GRAIL Data: Terranes, Basins, and Impact Fluxes. Journal of Geophysical Research E: Planets, 2018, 123, 1596-1617. | 1.5 | 25 |
| 69 | 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 |
| 70 | 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 |
| 71 | 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 | |
| 72 | Geological mapping of impact melt deposits at lunar complex craters Jackson and Tycho: Morphologic and topographic diversity and relation to the cratering process. Icarus, 2017, 283, 268-281. | 1.1 | 23 |

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| 73 | Transient reducing greenhouse warming on early Mars. Geophysical Research Letters, 2017, 44, 665-671. | 1.5 | 178 |
| 74 | Salt or ice diapirism origin for the honeycomb terrain in Hellas basin, Mars?: Implications for the early martian climate. Icarus, 2017, 284, 249-263. | 1.1 | 13 |
| 75 | Thermal stress weathering and the spalling of Antarctic rocks. Journal of Geophysical Research F: Earth Surface, 2017, 122, 3-24. | 1.0 | 49 |
| 76 | 3D modelling of the climatic impact of outflow channel formation events on early Mars. Icarus, 2017, 288, 10-36. | 1.1 | 37 |
| 77 | 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 |
| 78 | Evidence for stabilization of the ice-cemented cryosphere in earlier martian history: Implications for the current abundance of groundwater at depth on Mars. Icarus, 2017, 288, 120-147. | 1.1 | 28 |
| 79 | Extensive Amazonianâ€aged fluvial channels on Mars: Evaluating the role of Lyot crater in their formation. Geophysical Research Letters, 2017, 44, 5336-5344. | 1.5 | 9 |
| 80 | GRAIL gravity observations of the transition from complex crater to peak-ring basin on the Moon: Implications for crustal structure and impact basin formation. Icarus, 2017, 292, 54-73. | 1.1 | 19 |
| 81 | 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 |
| 82 | Model for the origin, ascent, and eruption of lunar picritic magmas. American Mineralogist, 2017, 102, 2045-2053. | 0.9 | 29 |
| 83 | 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 |
| 84 | Newly Discovered Ringâ€Moat Dome Structures in the Lunar Maria: Possible Origins and Implications. Geophysical Research Letters, 2017, 44, 9216-9224. | 1.5 | 18 |
| 85 | Basin formation on Mercury: Caloris and the origin of its low-reflectance material. Earth and Planetary Science Letters, 2017, 474, 427-435. | 1.8 | 9 |
| 86 | Low-amplitude topographic features and textures on the Moon: Initial results from detrended Lunar Orbiter Laser Altimeter (LOLA) topography. Icarus, 2017, 283, 138-145. | 1.1 | 13 |
| 87 | Summary of the results from the lunar orbiter laser altimeter after seven years in lunar orbit. Icarus, 2017, 283, 70-91. | 1.1 | 116 |
| 88 | Insights into surface runoff on early Mars from paleolake basin morphology and stratigraphy. Geology, 2016, 44, 419-422. | 2.0 | 72 |
| 89 | Impact ejecta-induced melting of surface ice deposits on Mars. Icarus, 2016, 280, 205-233. | 1.1 | 15 |
| 90 | Thicknesses of mare basalts on the Moon from gravity and topography. Journal of Geophysical Research E: Planets, 2016, 121, 854-870. | 1.5 | 51 |

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| 91 | 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 |
| 92 | 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 |
| 93 | Formation of the Orientale lunar multiring basin. Science, 2016, 354, 441-444. | 6.0 | 78 |
| 94 | Did the Orientale impact melt sheet undergo largeâ€scale igneous differentiation by crystal settling?. Geophysical Research Letters, 2016, 43, 11,156. | 1.5 | 16 |
| 95 | The steepest slopes on the Moon from Lunar Orbiter Laser Altimeter (LOLA) Data: Spatial Distribution and Correlation with Geologic Features. Icarus, 2016, 273, 329-336. | 1.1 | 25 |
| 96 | 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 |
| 97 | 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 |
| 98 | Active volcanism on Venus in the Ganiki Chasma rift zone. Geophysical Research Letters, 2015, 42, 4762-4769. | 1.5 | 107 |
| 99 | Lunar impact basins revealed by Gravity Recovery and Interior Laboratory measurements. Science Advances, 2015, 1, e1500852. | 4.7 | 173 |
| 100 | Lunar cryptomaria: Mineralogy and composition of ancient volcanic deposits. Planetary and Space Science, 2015, 106, 67-81. | 0.9 | 40 |
| 101 | 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 |
| 102 | Martian surface/nearâ€surface water inventory: Sources, sinks, and changes with time. Geophysical Research Letters, 2015, 42, 726-732. | 1.5 | 113 |
| 103 | Classification and analysis of candidate impact crater-hosted closed-basin lakes on Mars. Icarus, 2015, 260, 346-367. | 1.1 | 91 |
| 104 | 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 |
| 105 | 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 |
| 106 | Late Noachian fluvial erosion on Mars: Cumulative water volumes required to carve the valley networks and grain size of bed-sediment. Planetary and Space Science, 2015, 117, 429-435. | 0.9 | 21 |
| 107 | Crater degradation in the Noachian highlands of Mars: Assessing the hypothesis of regional snow and ice deposits on a cold and icy early Mars. Planetary and Space Science, 2015, 117, 401-420. | 0.9 | 19 |
| 108 | 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 |

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| 109 | Lunar cryptomaria: Physical characteristics, distribution, and implications for ancient volcanism. Icarus, 2015, 247, 150-171. | 1.1 | 94 |
| 110 | Timeâ€Lapse Imaging in Polar Environments. Eos, 2014, 95, 417-418. | 0.1 | 2 |
| 111 | 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 |
| 112 | The global albedo of the Moon at 1064 nm from LOLA. Journal of Geophysical Research E: Planets, 2014, 119, 1665-1679. | 1.5 | 96 |
| 113 | The geologic evolution of Venus: Insights into Earth history. Geology, 2014, 42, 95-96. | 2.0 | 12 |
| 114 | Episodic warming of early Mars by punctuatedÂvolcanism. Nature Geoscience, 2014, 7, 865-868. | 5.4 | 147 |
| 115 | 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 |
| 116 | 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 |
| 117 | Images of surface volatiles in Mercuryâ€™s polar craters acquired by the MESSENGER spacecraft. Geology, 2014, 42, 1051-1054. | 2.0 | 67 |
| 118 | Structure and evolution of the lunar Procellarum region as revealed by GRAIL gravity data. Nature, 2014, 514, 68-71. | 13.7 | 85 |
| 119 | Impact melt differentiation in the South Pole-Aitken basin: Some observations and speculations. Planetary and Space Science, 2014, 91, 101-106. | 0.9 | 92 |
| 120 | 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 |
| 121 | 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 |
| 122 | The climate history of early Mars: insights from the Antarctic McMurdo Dry Valleys hydrologic system. Antarctic Science, 2014, 26, 774-800. | 0.5 | 84 |
| 123 | Formation of doubleâ€layered ejecta craters on Mars: A glacial substrate model. Geophysical Research Letters, 2013, 40, 3819-3824. | 1.5 | 44 |
| 124 | Lunar sinuous rilles: Distribution, characteristics, and implications for their origin. Planetary and Space Science, 2013, 79-80, 1-38. | 0.9 | 109 |
| 125 | Detecting volcanic resurfacing of heavily cratered terrain: Flooding simulations on the Moon using Lunar Orbiter Laser Altimeter (LOLA) data. Planetary and Space Science, 2013, 85, 24-37. | 0.9 | 23 |
| 126 | Large mineralogically distinct impact melt feature at Copernicus crater â€“ Evidence for retention of compositional heterogeneity. Geophysical Research Letters, 2013, 40, 1043-1048. | 1.5 | 25 |

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| 127 | 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 |
| 128 | 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 |
| 129 | A review of geomorphic processes and landforms in the Dry Valleys of southern Victoria Land: implications for evaluating climate change and ice-sheet stability. Geological Society Special Publication, 2013, 381, 319-352. | 0.8 | 14 |
| 130 | Constraints on the volatile distribution within Shackleton crater at the lunar south pole. Nature, 2012, 486, 378-381. | 13.7 | 159 |
| 131 | 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 |
| 132 | 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 |
| 133 | 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 |
| 134 | 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 |
| 135 | Lunar floorâ€fractured craters: Classification, distribution, origin and implications for magmatism and shallow crustal structure. Journal of Geophysical Research, 2012, 117, . | 3.3 | 99 |
| 136 | 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 |
| 137 | Patterns of accumulation and flow of ice in the mid-latitudes of Mars during the Amazonian. Icarus, 2012, 219, 723-732. | 1.1 | 57 |
| 138 | The dispersal of pyroclasts from ancient explosive volcanoes on Mars: Implications for the friable layered deposits. Icarus, 2012, 219, 358-381. | 1.1 | 82 |
| 139 | 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 |
| 140 | Global surface slopes and roughness of the Moon from the Lunar Orbiter Laser Altimeter. Journal of Geophysical Research, 2011, 116, . | 3.3 | 149 |
| 141 | New insights into lunar petrology: Distribution and composition of prominent low-Ca pyroxene exposures as observed by the Moon Mineralogy Mapper (M<sup>3</sup>). Journal of Geophysical Research, 2011, 116, . | 3.3 | 80 |
| 142 | Compositional variability of the Marius Hills volcanic complex from the Moon Mineralogy Mapper (M<sup>3</sup>). Journal of Geophysical Research, 2011, 116, . | 3.3 | 52 |
| 143 | Compositional diversity and geologic insights of the Aristarchus crater from Moon Mineralogy Mapper data. Journal of Geophysical Research, 2011, 116, . | 3.3 | 83 |
| 144 | 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 |

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| 145 | 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 (M<sup>3</sup>) data from Chandrayaan-1. Journal of Geophysical Research, 2011, 116, . | 3.3 | 92 |
| 146 | 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 |
| 147 | The Moon Mineralogy Mapper (M<sup>3</sup>) 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 |
| 148 | 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 |
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