

D L Buczkowski

List of Publications by Year in descending order

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Version: 2024-02-01

62
papers

3,160
citations

201674

27
h-index

149698

56
g-index

62
all docs

62
docs citations

62
times ranked

2172
citing authors

#	ARTICLE	IF	CITATIONS
1	A synthesis of Martian aqueous mineralogy after 1 Mars year of observations from the Mars Reconnaissance Orbiter. <i>Journal of Geophysical Research</i> , 2009, 114, .	3.3	445
2	Vesta's Shape and Morphology. <i>Science</i> , 2012, 336, 687-690.	12.6	222
3	The Geologically Recent Giant Impact Basins at Vesta's South Pole. <i>Science</i> , 2012, 336, 694-697.	12.6	194
4	Compact Reconnaissance Imaging Spectrometer for Mars investigation and data set from the Mars Reconnaissance Orbiter's primary science phase. <i>Journal of Geophysical Research</i> , 2009, 114, .	3.3	178
5	Dawn arrives at Ceres: Exploration of a small, volatile-rich world. <i>Science</i> , 2016, 353, 1008-1010.	12.6	178
6	Cryovolcanism on Ceres. <i>Science</i> , 2016, 353, .	12.6	164
7	Delivery of dark material to Vesta via carbonaceous chondritic impacts. <i>Icarus</i> , 2012, 221, 544-559.	2.5	152
8	Cratering on Ceres: Implications for its crust and evolution. <i>Science</i> , 2016, 353, .	12.6	135
9	Sublimation in bright spots on (1) Ceres. <i>Nature</i> , 2015, 528, 237-240.	27.8	116
10	The geomorphology of Ceres. <i>Science</i> , 2016, 353, .	12.6	109
11	Pitted Terrain on Vesta and Implications for the Presence of Volatiles. <i>Science</i> , 2012, 338, 246-249.	12.6	91
12	The missing large impact craters on Ceres. <i>Nature Communications</i> , 2016, 7, 12257.	12.8	84
13	433 Eros lineaments: Global mapping and analysis. <i>Icarus</i> , 2008, 193, 39-52.	2.5	68
14	Large-scale troughs on Vesta: A signature of planetary tectonics. <i>Geophysical Research Letters</i> , 2012, 39, .	4.0	63
15	A Possible Brine Reservoir Beneath Occator Crater: Thermal and Compositional Evolution and Formation of the Cerealia Dome and Vinalia Faculae. <i>Icarus</i> , 2019, 320, 119-135.	2.5	55
16	Dawn completes its mission at 4 Vesta. <i>Meteoritics and Planetary Science</i> , 2013, 48, 2076-2089.	1.6	54
17	Impact-driven mobilization of deep crustal brines on dwarf planet Ceres. <i>Nature Astronomy</i> , 2020, 4, 741-747.	10.1	50
18	Cryogenic flow features on Ceres: Implications for crater-related cryovolcanism. <i>Geophysical Research Letters</i> , 2016, 43, 11,994.	4.0	48

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19	Introduction: The geologic mapping of Ceres. <i>Icarus</i> , 2018, 316, 1-13.	2.5	45
20	The varied sources of faculae-forming brines in Ceres's Occator crater emplaced via hydrothermal brine effusion. <i>Nature Communications</i> , 2020, 11, 3680.	12.8	41
21	Formation of double-ring circular grabens due to volumetric compaction over buried impact craters: Implications for thickness and nature of cover material in Utopia Planitia, Mars. <i>Journal of Geophysical Research</i> , 2004, 109, n/a-n/a.	3.3	40
22	The geology of the Marcia quadrangle of asteroid Vesta: Assessing the effects of large, young craters. <i>Icarus</i> , 2014, 244, 74-88.	2.5	36
23	The unique geomorphology and physical properties of the Vestalia Terra plateau. <i>Icarus</i> , 2014, 244, 89-103.	2.5	33
24	A Global Inventory of Ice-Related Morphological Features on Dwarf Planet Ceres: Implications for the Evolution and Current State of the Cryosphere. <i>Journal of Geophysical Research E: Planets</i> , 2019, 124, 1650-1689.	3.6	33
25	Evidence for the Interior Evolution of Ceres from Geologic Analysis of Fractures. <i>Geophysical Research Letters</i> , 2017, 44, 9564-9572.	4.0	31
26	Topography within circular grabens: Implications for polygon origin, Utopia Planitia, Mars. <i>Geophysical Research Letters</i> , 2002, 29, 59-1.	4.0	29
27	Geologic map of the northern hemisphere of Vesta based on Dawn Framing Camera (FC) images. <i>Icarus</i> , 2014, 244, 41-59.	2.5	29
28	The central pit and dome at Cerealia Facula bright deposit and floor deposits in Occator crater, Ceres: Morphology, comparisons and formation. <i>Icarus</i> , 2019, 320, 159-187.	2.5	28
29	Buried impact craters: A topographic analysis of quasi-circular depressions, Utopia Basin, Mars. <i>Journal of Geophysical Research</i> , 2005, 110, n/a-n/a.	3.3	27
30	The geology of the occator quadrangle of dwarf planet Ceres: Floor-fractured craters and other geomorphic evidence of cryomagmatism. <i>Icarus</i> , 2018, 316, 128-139.	2.5	26
31	Investigation of an Argyre basin ring structure using Mars Reconnaissance Orbiter/Compact Reconnaissance Imaging Spectrometer for Mars. <i>Journal of Geophysical Research</i> , 2010, 115, .	3.3	25
32	Giant polygons and circular graben in western Utopia basin, Mars: Exploring possible formation mechanisms. <i>Journal of Geophysical Research</i> , 2012, 117, .	3.3	25
33	Ceres's Occator crater and its faculae explored through geologic mapping. <i>Icarus</i> , 2019, 320, 7-23.	2.5	25
34	Geologic mapping of the Urvara and Yalode Quadrangles of Ceres. <i>Icarus</i> , 2018, 316, 167-190.	2.5	23
35	New insights into gully formation on Mars: Constraints from composition as seen by MRO/CRISM. <i>Geophysical Research Letters</i> , 2016, 43, 8893-8902.	4.0	21
36	Tectonic analysis of fracturing associated with occator crater. <i>Icarus</i> , 2019, 320, 49-59.	2.5	21

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37	A roadmap for planetary caves science and exploration. <i>Nature Astronomy</i> , 2021, 5, 524-525.	10.1	19
38	Synthesis of the special issue: The formation and evolution of Ceres's Occator crater. <i>Icarus</i> , 2019, 320, 213-225.	2.5	17
39	Dome formation on Ceres by solid-state flow analogous to terrestrial salt tectonics. <i>Nature Geoscience</i> , 2019, 12, 797-801.	12.9	16
40	Stealth quasi-circular depressions (sQCDs) in the northern lowlands of Mars. <i>Journal of Geophysical Research</i> , 2007, 112, .	3.3	15
41	Imprint of the Rheasilvia impact on Vesta – Geologic mapping of quadrangles Gegania and Lucaria. <i>Icarus</i> , 2014, 244, 60-73.	2.5	15
42	Post-impact cryo-hydrologic formation of small mounds and hills in Ceres's Occator crater. <i>Nature Geoscience</i> , 2020, 13, 605-610.	12.9	15
43	Vesta's north pole quadrangle Av-1 (Albana): Geologic map and the nature of the south polar basin antipodes. <i>Icarus</i> , 2014, 244, 13-22.	2.5	14
44	Geologic mapping of ejecta deposits in Oppia Quadrangle, Asteroid (4) Vesta. <i>Icarus</i> , 2014, 244, 104-119.	2.5	13
45	Floor-Fractured Craters on Ceres and Implications for Interior Processes. <i>Journal of Geophysical Research E: Planets</i> , 2018, 123, 3188-3204.	3.6	13
46	Compositional evidence of magmatic activity on Vesta. <i>Geophysical Research Letters</i> , 2014, 41, 3038-3044.	4.0	12
47	Concepts for the Future Exploration of Dwarf Planet Ceres's Habitability. <i>Planetary Science Journal</i> , 2022, 3, 41.	3.6	9
48	Long-lived volcanism within Argyre basin, Mars. <i>Icarus</i> , 2017, 293, 8-26.	2.5	8
49	Identification of Potential Mantle Rocks Around the Lunar Imbrium Basin. <i>Geophysical Research Letters</i> , 2020, 47, e2020GL090334.	4.0	8
50	Normal Faults on Ceres: Insights Into the Mechanical Properties and Thermal History of Nar Sulcus. <i>Geophysical Research Letters</i> , 2019, 46, 80-88.	4.0	7
51	The geology of the Nawish quadrangle of Ceres: The rim of an ancient basin. <i>Icarus</i> , 2018, 316, 114-127.	2.5	6
52	How Much of the Sediment in Gale Crater's Central Mound Was Fluvially Transported?. <i>Geophysical Research Letters</i> , 2019, 46, 5092-5099.	4.0	6
53	Tectonism and magmatism identified on asteroids. <i>Geological Society Special Publication</i> , 2015, 401, 423-441.	1.3	5
54	Anomalous Phyllosilicate-Bearing Outcrops South of Coprates Chasma: A Study of Possible Emplacement Mechanisms. <i>Journal of Geophysical Research E: Planets</i> , 2020, 125, e2019JE006043.	3.6	5

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55	Knob heights within circum-Caloris geologic units on Mercury: Interpretations of the geologic history of the region. <i>Earth and Planetary Science Letters</i> , 2015, 430, 542-550.	4.4	4
56	The Nature and Origin of Deposits in Uzboi Vallis on Mars. <i>Journal of Geophysical Research E: Planets</i> , 2018, 123, 1842-1862.	3.6	4
57	Kinematic analysis of radial structures around Irnini Mons, Venus. <i>Journal of Structural Geology</i> , 2006, 28, 2156-2168.	2.3	2
58	The In Situ Exploration of a Relict Ocean World: An Assessment of Potential Landing and Sampling Sites for a Future Mission to the Surface of Ceres. <i>Planetary Science Journal</i> , 2021, 2, 94.	3.6	2
59	Mars-Moons Exploration, Reconnaissance, and Landed Investigation (MERLIN). , 2016, , .		1
60	What are the main geological processes that determined the evolution and current state of small bodies and are they similar to those on larger bodies?. , 2021, 53, .		0
61	The Importance of Further Studies and Missions to Understand Cryovolcanism. , 2021, 53, .		0
62	Geomorphology of Vesta. , 2022, , 67-80.		0