William B Mckinnon

List of Publications by Year
in descending order

61	3,211	159525	149623
papers	citations	30 h-index	56 g-index

65	65	65	2028
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Anomalous Flux in the Cosmic Optical Background Detected with New Horizons Observations. Astrophysical Journal Letters, 2022, 927, L8.	3.0	32
2	Large-scale cryovolcanic resurfacing on Pluto. Nature Communications, 2022, 13, 1542.	5.8	15
3	A Near-surface Temperature Model of Arrokoth. Planetary Science Journal, 2022, 3, 110.	1.5	9
4	A Predicted Dearth of Majority Hypervolatile Ices in Oort Cloud Comets. Planetary Science Journal, 2022, 3, 112.	1.5	15
5	The Geophysical Environment of (486958) Arrokothâ€"A Small Kuiper Belt Object Explored by New Horizons. Journal of Geophysical Research E: Planets, 2022, 127, .	1.5	18
6	Snow Crash: Compaction Craters on (486958) Arrokoth and Other Small KBOs, With Implications. Geophysical Research Letters, 2022, 49, .	1.5	3
7	Origins of pits and troughs and degradation on a small primitive planetesimal in the Kuiper Belt: high-resolution topography of (486958) Arrokoth (aka 2014 MU69) from New Horizons. Icarus, 2021, 356, 113834.	1.1	5
8	Geologically Diverse Pluto and Charon: Implications for the Dwarf Planets of the Kuiper Belt. Annual Review of Earth and Planetary Sciences, 2021, 49, 173-200.	4.6	10
9	Persephone: A Pluto-system Orbiter and Kuiper Belt Explorer. Planetary Science Journal, 2021, 2, 75.	1.5	7
10	Triton: Topography and Geology of a Probable Ocean World with Comparison to Pluto and Charon. Remote Sensing, 2021, 13, 3476.	1.8	7
11	New Horizons Observations of the Cosmic Optical Background. Astrophysical Journal, 2021, 906, 77.	1.6	42
12	The Dark Side of Pluto. Planetary Science Journal, 2021, 2, 214.	1.5	2
13	Collisions of Small Kuiper Belt Objects With (486958) Arrokoth: Implications for Its Spin Evolution and Bulk Density. Journal of Geophysical Research E: Planets, 2021, 126, e2021JE006961.	1.5	3
14	Spin evolution of Ceres and Vesta due to impacts. Meteoritics and Planetary Science, 2020, 55, 2493-2518.	0.7	7
15	Lunar Secondary Craters and Estimated Ejecta Block Sizes Reveal a Scaleâ€Dependent Fragmentation Trend. Journal of Geophysical Research E: Planets, 2020, 125, e2019JE006313.	1.5	12
16	Color, composition, and thermal environment of Kuiper Belt object (486958) Arrokoth. Science, 2020, 367, .	6.0	64
17	The geology and geophysics of Kuiper Belt object (486958) Arrokoth. Science, 2020, 367, .	6.0	76
18	The solar nebula origin of (486958) Arrokoth, a primordial contact binary in the Kuiper Belt. Science, 2020, 367, .	6.0	79

#	Article	IF	Citations
19	Formation, Composition, and History of the Pluto System: A Post-New Horizons Synthesis. , 2020, , 1-1.		4
20	Detection of ammonia on Plutoâ€™s surface in a region of geologically recent tectonism. Science Advances, 2019, 5, eaav5731.	4.7	49
21	Initial results from the New Horizons exploration of 2014 MU ₆₉ , a small Kuiper Belt object. Science, 2019, 364, .	6.0	113
22	Recent cryovolcanism in Virgil Fossae on Pluto. Icarus, 2019, 330, 155-168.	1.1	45
23	Impact craters on Pluto and Charon indicate a deficit of small Kuiper belt objects. Science, 2019, 363, 955-959.	6.0	116
24	Crater Density Predictions for New Horizons Flyby Target 2014 MU69. Astrophysical Journal Letters, 2019, 872, L5.	3.0	26
25	Washboard and fluted terrains on Pluto as evidence for ancient glaciation. Nature Astronomy, 2019, 3, 62-68.	4.2	10
26	Relaxed impact craters on Ganymede: Regional variation and high heat flows. Icarus, 2018, 306, 214-224.	1.1	11
27	Faster paleospin and deep-seated uncompensated mass as possible explanations for Ceresâ€™ present-day shape and gravity. Icarus, 2018, 299, 430-442.	1.1	18
28	Bladed Terrain on Pluto: Possible origins and evolution. Icarus, 2018, 300, 129-144.	1.1	47
29	Investigation of Charon's Craters With Abrupt Terminus Ejecta, Comparisons With Other Icy Bodies, and Formation Implications. Journal of Geophysical Research E: Planets, 2018, 123, 20-36.	1.5	9
30	The Pluto System After New Horizons. Annual Review of Astronomy and Astrophysics, 2018, 56, 357-392.	8.1	72
31	Breaking up is hard to do: Global cartography and topography of Pluto's mid-sized icy Moon Charon from New Horizons. Icarus, 2018, 315, 124-145.	1.1	29
32	Great Expectations: Plans and Predictions for New Horizons Encounter With Kuiper Belt Object 2014 MU₆₉ (â€œUltima Thuleâ€). Geophysical Research Letters, 2018, 45, 8111-8120.	1.5	14
33	Basins, fractures and volcanoes: Global cartography and topography of Pluto from New Horizons. Icarus, 2018, 314, 400-433.	1.1	75
34	Geological mapping of Sputnik Planitia on Pluto. Icarus, 2017, 287, 261-286.	1.1	52
35	Viscous relaxation of Ganymedeâ€™s impact craters: Constraints on heat flux. Icarus, 2017, 296, 275-288.	1.1	22
36	Pluto: Pits and mantles on uplands north and east of Sputnik Planitia. Icarus, 2017, 293, 218-230.	1.1	24

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37	Charon tectonics. Icarus, 2017, 287, 161-174.	1.1	30
38	Sublimation as a landform-shaping process on Pluto. Icarus, 2017, 287, 320-333.	1.1	51
39	Mean radius and shape of Pluto and Charon from New Horizons images. Icarus, 2017, 287, 12-29.	1.1	105
40	Present and past glaciation on Pluto. Icarus, 2017, 287, 287-300.	1.1	43
41	Craters of the Pluto-Charon system. Icarus, 2017, 287, 187-206.	1.1	59
42	Origin of the Plutoâ€“Charon system: Constraints from the New Horizons flyby. Icarus, 2017, 287, 2-11.	1.1	99
43	Reorientation of Sputnik Planitia implies a subsurface ocean on Pluto. Nature, 2016, 540, 94-96.	13.7	108
44	Convection in a volatile nitrogen-ice-rich layer drives Plutoâ€™s geological vigour. Nature, 2016, 534, 82-85.	13.7	102
45	The atmosphere of Pluto as observed by New Horizons. Science, 2016, 351, aad8866.	6.0	201
46	The geology of Pluto and Charon through the eyes of New Horizons. Science, 2016, 351, 1284-1293.	6.0	219
47	Constraining the heat flux between Enceladusâ€™ tiger stripes: Numerical modeling of funiscular plains formation. Icarus, 2015, 260, 232-245.	1.1	27
48	Impact and cratering rates onto Pluto. Icarus, 2015, 258, 267-288.	1.1	70
49	Effect of Enceladus's rapid synchronous spin on interpretation of Cassini gravity. Geophysical Research Letters, 2015, 42, 2137-2143.	1.5	105
50	The Pluto system: Initial results from its exploration by New Horizons. Science, 2015, 350, aad1815.	6.0	407
51	Secondary craters from large impacts on Europa and Ganymede: Ejecta sizeâ€“velocity distributions on icy worlds, and the scaling of ejected blocks. Icarus, 2013, 226, 865-884.	1.1	37
52	The shape of Enceladus as explained by an irregular core: Implications for gravity, libration, and survival of its subsurface ocean. Journal of Geophysical Research E: Planets, 2013, 118, 1775-1788.	1.5	19
53	The Strangest Terrestrial Planet. Science, 2012, 336, 162-163.	6.0	2
54	Evolution of Icy Satellites. Space Science Reviews, 2010, 153, 447-484.	3.7	49

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55	Icy Satellites of Saturn: Impact Cratering and Age Determination. , 2009, , 613-635.		29
56	Elastoviscoplastic relaxation of impact crater topography with application to Ganymede and Callisto. Journal of Geophysical Research, 2006, 111, .	3.3	64
57	On convection in ice I shells of outer Solar System bodies, with detailed application to Callisto. Icarus, 2006, 183, 435-450.	1.1	69
58	Sulfate Content of Europa's Ocean and Shell: Evolutionary Considerations and Some Geological and Astrobiological Implications. Astrobiology, 2003, 3, 879-897.	1.5	95
59	Impact Cratering. , 2003, , 693-702.		2
60	Orbital Behavior of Captured Satellites: The Effect of Solar Gravity on Triton's Post-Capture Orbit. Icarus, 1995, 114, 1-20.	1.1	20
61	Estimates of comet fragment masses from impact crater chains on Callisto and Ganymede. Geophysical Research Letters, 1995, 22, 1829-1832.	1.5	46