Dana Hurley

List of Publications by Year
in descending order

91 papers	4,702 citations	81900 39 h-index	98798 67 g-index
93 all docs	93 docs citations	93 times ranked	2259 citing authors

#	Article	IF	Citations
1	Direct evidence of surface exposed water ice in the lunar polar regions. Proceedings of the National Academy of Sciences of the United States of America, 2018, 115, 8907-8912.	7.1	324
2	The solar wind interaction with Mars: Locations and shapes of the bow shock and the magnetic pile-up boundary from the observations of the MAG/ER Experiment onboard Mars Global Surveyor. Geophysical Research Letters, 2000, 27, 49-52.	4.0	300
3	The plasma Environment of Mars. Space Science Reviews, 2004, 111, 33-114.	8.1	261
4	Magmatic volatiles (H, C, N, F, S, Cl) in the lunar mantle, crust, and regolith: Abundances, distributions, processes, and reservoirs. American Mineralogist, 2015, 100, 1668-1707.	1.9	160
5	LRO-LAMP Observations of the LCROSS Impact Plume. Science, 2010, 330, 472-476.	12.6	141
6	The solar wind as a possible source of lunar polar hydrogen deposits. Journal of Geophysical Research, 2000, 105, 26773-26782.	3.3	129
7	Variability of the altitude of the Martian sheath. Geophysical Research Letters, 2005, 32, n/a-n/a.	4.0	121
8	Farâ€ultraviolet reflectance properties of the Moon's permanently shadowed regions. Journal of Geophysical Research, 2012, 117, .	3.3	115
9	Venus-like interaction of the solar wind with Mars. Geophysical Research Letters, 1999, 26, 2685-2688.	4.0	114
10	A comparison of global models for the solar wind interaction with Mars. Icarus, 2010, 206, 139-151.	2.5	108
11	Observations of low-frequency electromagnetic plasma waves upstream from the Martian shock. Journal of Geophysical Research, 2002, 107, SMP 9-1.	3.3	107
12	Molecular water detected on the sunlit Moon by SOFIA. Nature Astronomy, 2021, 5, 121-127.	10.1	104
13	Observations of the latitude dependence of the location of the martian magnetic pileup boundary. Geophysical Research Letters, 2002, 29, 11-1-11-4.	4.0	100
14	Hydrogen migration to the lunar poles by solar wind bombardment of the moon. Advances in Space Research, 2002, 30, 1869-1874.	2.6	94
15	A proxy for determining solar wind dynamic pressure at Mars using Mars Global Surveyor data. Journal of Geophysical Research, 2003, 108, .	3.3	92
16	Magnetic field draping enhancement at the Martian magnetic pileup boundary from Mars global surveyor observations. Geophysical Research Letters, 2003, 30, .	4.0	89
17	Oxygen auger electrons observed in Mars' ionosphere. Geophysical Research Letters, 2000, 27, 1871-1874.	4.0	88
18	Space weathering effects on lunar cold trap deposits. Journal of Geophysical Research, 2003, 108, .	3.3	87

#	Article	IF	Citations
19	Observations of low-frequency magnetic oscillations in the Martian magnetosheath, magnetic pileup region, and tail. Journal of Geophysical Research, 2004, 109, .	3.3	85
20	LAMP: The Lyman Alpha Mapping Project on NASAâ€™s Lunar Reconnaissance Orbiter Mission. Space Science Reviews, 2010, 150, 161-181.	8.1	83
21	Lunar soil hydration constrained by exospheric water liberated by meteoroid impacts. Nature Geoscience, 2019, 12, 333-338.	12.9	81
22	Structure of the magnetic field fluxes connected with crustal magnetization and topside ionosphere at Mars. Journal of Geophysical Research, 2002, 107, SIA 2-1.	3.3	77
23	Factors controlling the location of the Bow Shock at Mars. Geophysical Research Letters, 2002, 29, 42-1-42-4.	4.0	71
24	Evidence of electron impact ionization in the magnetic pileup boundary of Mars. Geophysical Research Letters, 2000, 27, 45-48.	4.0	67
25	Mars Global Surveyor Observations of Solar Wind Magnetic Field Draping Around Mars. Space Science Reviews, 2004, 111, 203-221.	8.1	67
26	The lunar farâ€UV albedo: Indicator of hydration and weathering. Journal of Geophysical Research, 2012, 117, .	3.3	66
27	Effect of the solar radiation in the topside atmosphere/ionosphere of Mars: Mars Global Surveyor observations. Journal of Geophysical Research, 2004, 109, .	3.3	65
28	Solar wind implantation into lunar regolith: Hydrogen retention in a surface with defects. Icarus, 2015, 255, 116-126.	2.5	64
29	Twoâ€dimensional distribution of volatiles in the lunar regolith from space weathering simulations. Geophysical Research Letters, 2012, 39, .	4.0	61
30	Mars Global Surveyor observations of the Halloween 2003 solar superstorm's encounter with Mars. Journal of Geophysical Research, 2005, 110, .	3.3	60
31	Solar Wind Implantation Into the Lunar Regolith: Monte Carlo Simulations of H Retention in a Surface With Defects and the H₂ Exosphere. Journal of Geophysical Research E: Planets, 2019, 124, 278-293.	3.6	51
32	MGS MAG/ER observations at the magnetic pileup boundary of Mars: draping enhancement and low frequency waves. Advances in Space Research, 2004, 33, 1938-1944.	2.6	50
33	Diurnally Migrating Lunar Water: Evidence From Ultraviolet Data. Geophysical Research Letters, 2019, 46, 2417-2424.	4.0	49
34	Grainâ€scale supercharging and breakdown on airless regoliths. Journal of Geophysical Research E: Planets, 2016, 121, 2150-2165.	3.6	47
35	Burial rate of Mercury's polar volatile deposits. Geophysical Research Letters, 2005, 32, n/a-n/a.	4.0	46
36	Magnetic Flux Ropes in the Martian Atmosphere: Global Characteristics. Space Science Reviews, 2004, 111, 223-231.	8.1	45

#	Article	IF	Citations
37	The Young Age of the LAMPâ€observed Frost in Lunar Polar Cold Traps. Geophysical Research Letters, 2019, 46, 8680-8688.	4.0	41
38	Solar wind interaction with the ionosphere/atmosphere and crustal magnetic fields at Mars: Mars Global Surveyor Magnetometer/Electron Reflectometer, radio science, and accelerometer data. Journal of Geophysical Research, 2004, 109, .	3.3	40
39	The effect on the lunar exosphere of a coronal mass ejection passage. Journal of Geophysical Research, 2012, 117, .	3.3	40
40	An analytic function of lunar surface temperature for exospheric modeling. Icarus, 2015, 255, 159-163.	2.5	40
41	The statistical mechanics of solar wind hydroxylation at the Moon, within lunar magnetic anomalies, and at Phobos. Journal of Geophysical Research E: Planets, 2017, 122, 269-289.	3.6	39
42	The Morphology of the Solar Wind Magnetic Field Draping on the Dayside of Mars and Its Variability. Geophysical Research Letters, 2018, 45, 3356-3365.	4.0	39
43	External fields on the nightside of Mars at Mars Global Surveyor mapping altitudes. Geophysical Research Letters, 2005, 32, .	4.0	38
44	Temporal variability of lunar exospheric helium during January 2012 from LRO/LAMP. Icarus, 2012, 221, 854-858.	2.5	33
45	Low-frequency plasma oscillations at Mars during the October 2003 solar storm. Journal of Geophysical Research, 2005, 110, .	3.3	31
46	Contributions of solar wind and micrometeoroids to molecular hydrogen in the lunar exosphere. Icarus, 2017, 283, 31-37.	2.5	30
47	Lunar swirls: Far-UV characteristics. Icarus, 2016, 273, 68-74.	2.5	29
48	Lunar exospheric argon modeling. Icarus, 2015, 255, 135-147.	2.5	28
49	Widespread hematite at high latitudes of the Moon. Science Advances, 2020, 6, .	10.3	28
50	Observations of the lunar impact plume from the LCROSS event. Geophysical Research Letters, 2010, 37, .	4.0	27
51	Identification of surface hydrogen enhancements within the Moonâ€™s Shackleton crater. Icarus, 2014, 233, 229-232.	2.5	27
52	Volatile interactions with the lunar surface. Chemie Der Erde, 2022, 82, 125858.	2.0	26
53	Understanding temporal and spatial variability of the lunar helium atmosphere using simultaneous observations from LRO, LADEE, and ARTEMIS. Icarus, 2016, 273, 45-52.	2.5	25
54	Analysis of Solar Wind Events Using Interplanetary Scintillation Remote Sensing 3D Reconstructions and Their Comparison at Mars. Solar Physics, 2007, 241, 385-396.	2.5	24

#	Article	IF	Citations
55	Sensitivity of orbital neutron measurements to the thickness and abundance of surficial lunar water. Journal of Geophysical Research, 2011, 116, .	3.3	24
56	Solarâ€Storm/Lunar Atmosphere Model (SSLAM): An overview of the effort and description of the driving storm environment. Journal of Geophysical Research, 2012, 117, .	3.3	24
57	Cassini INMS measurements of Enceladus plume density. Icarus, 2015, 257, 139-162.	2.5	24
58	Collecting amino acids in the Enceladus plume. International Journal of Astrobiology, 2019, 18, 47-59.	1.6	24
59	Ice at the Lunar Poles. American Scientist, 2003, 91, 322.	0.1	24
60	Modeling of the vapor release from the LCROSS impact: 2. Observations from LAMP. Journal of Geophysical Research, 2012, 117, .	3.3	23
61	Space weathering of ice layers in lunar cold traps. Advances in Space Research, 2003, 31, 2293-2298.	2.6	22
62	The influence of crustal magnetism on the solar wind interaction with Mars: recent observations. Advances in Space Research, 2004, 33, 152-160.	2.6	22
63	Magnetic field draping around Mars: Mars Global Surveyor results. Advances in Space Research, 2001, 27, 1831-1836.	2.6	21
64	The Magnetic Field Pile-up and Density Depletion in the Martian Magnetosheath: A Comparison with the Plasma Depletion Layer Upstream of the Earth's Magnetopause. Space Science Reviews, 2004, 111, 185-202.	8.1	20
65	Redistribution of lunar polar water to mid-latitudes and its role in forming an OH veneer. Planetary and Space Science, 2013, 89, 15-20.	1.7	18
66	Spillage of lunar polar crater volatiles onto adjacent terrains: The case for dynamic processes. Geophysical Research Letters, 2015, 42, 3160-3165.	4.0	17
67	Lunar exospheric helium observations of LRO/LAMP coordinated with ARTEMIS. Icarus, 2016, 273, 36-44.	2.5	17
68	Magnetic Field in the Martian Magnetosheath and the Application as an IMF Clock Angle Proxy. Journal of Geophysical Research: Space Physics, 2019, 124, 4295-4313.	2.4	16
69	LRO-LAMP detection of geologically young craters within lunar permanently shaded regions. Icarus, 2016, 273, 114-120.	2.5	15
70	Martian obstacle and bow shock: origins of boundaries anisotropy. Advances in Space Research, 2004, 33, 2222-2227.	2.6	14
71	On the role of charge exchange in the formation of the Martian magnetic pileup boundary. Journal of Geophysical Research, 2001, 106, 29387-29399.	3.3	13
72	The Evolution of a Spacecraftâ€Generated Lunar Exosphere. Journal of Geophysical Research E: Planets, 2020, 125, e2020JE006464.	3.6	13

#	Article	IF	Citations
73	Modeling of the vapor release from the LCROSS impact: Parametric dependencies. Journal of Geophysical Research, 2011, 116, .	3.3	12
74	Simulations of lunar exospheric water events from meteoroid impacts. Planetary and Space Science, 2018, 162, 148-156.	1.7	9
75	Using proton radiation from the moon to search for diurnal variation of regolith hydrogenation. Planetary and Space Science, 2018, 162, 113-132.	1.7	9
76	The effects of crustal magnetic fields and the pressure balance in the high latitude ionosphere/atmosphere at Mars. Advances in Space Research, 2005, 36, 2043-2048.	2.6	8
77	Prominent volcanic source of volatiles in the south polar region of the Moon. Advances in Space Research, 2021, 68, 4691-4701.	2.6	8
78	Venus/Mars pickup ions and ionosheath wave structures. Advances in Space Research, 2004, 33, 176-181.	2.6	7
79	Solar Wind Access to Grains in the Upper Layer of Regolith. Journal of Geophysical Research E: Planets, 2018, 123, 972-981.	3.6	7
80	A Proxy for the Upstream IMF Clock Angle Using MAVEN Magnetic Field Data. Journal of Geophysical Research: Space Physics, 2018, 123, 9612-9618.	2.4	6
81	SELMA mission: How do airless bodies interact with space environment? The Moon as an accessible laboratory. Planetary and Space Science, 2018, 156, 23-40.	1.7	5
82	An Examination of Several Discrete Lunar Nearside Photometric Anomalies Observed in Lymanâ€Î± Maps. Journal of Geophysical Research E: Planets, 2019, 124, 294-315.	3.6	5
83	LRO/LAMP observations of the lunar helium exosphere: constraints on thermal accommodation and outgassing rate. Monthly Notices of the Royal Astronomical Society, 2021, 501, 4438-4451.	4.4	5
84	Women Count. Eos, 2014, 95, 402-403.	0.1	3
85	Modeling insights into the locations of density enhancements from the Enceladus water vapor jets. Journal of Geophysical Research E: Planets, 2015, 120, 1763-1773.	3.6	3
86	The gas-surface interaction of a human-occupied spacecraft with a near-Earth object. Advances in Space Research, 2016, 58, 1648-1653.	2.6	2
87	Lunar Volatiles and Solar System Science. , 2021, 53, .		1
88	Overview of Phobos/Deimos Regolith Ion Sample Mission (PRISM) concept. , 2018, , .		1
89	Lunar Volatiles: Introduction to the Special issue. Icarus, 2015, 255, 1-2.	2.5	0
90	Sampling the Moon's atmosphere. Science, 2016, 351, 230-231.	12.6	0

#	Article	IF	Citations
91	Mission to Characterize Volatiles in Old, Cold, Permanently Shadowed Regions on the Moon. , 2021, 53, .		0