## **Andrew Poppe**

List of Publications by Year in descending order

Source: https://exaly.com/author-pdf/1503325/publications.pdf

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100 2,349
papers citations l

28 40
h-index g-index

101 101 all docs citations

101 times ranked 1786 citing authors

#	Article	IF	CITATIONS
1	An improved model for interplanetary dust fluxes in the outer Solar System. Icarus, 2016, 264, 369-386.	2.5	121
2	Simulations of the photoelectron sheath and dust levitation on the lunar surface. Journal of Geophysical Research, 2010, $115$ , .	3.3	114
3	The effect of surface topography on the lunar photoelectron sheath and electrostatic dust transport. Icarus, 2012, 221, 135-146.	2.5	85
4	Dust ablation on the giant planets: Consequences for stratospheric photochemistry. Icarus, 2017, 297, 33-58.	2.5	82
5	Lunar Dust Levitation. Journal of Aerospace Engineering, 2009, 22, 2-9.	1.4	69
6	Pluto's interaction with its space environment: Solar wind, energetic particles, and dust. Science, 2016, 351, aad9045.	12.6	60
7	Negative potentials above the day-side lunar surface in the terrestrial plasma sheet: Evidence of non-monotonic potentials. Geophysical Research Letters, 2011, 38, n/a-n/a.	4.0	50
8	Interplanetary Dust, Meteoroids, Meteors and Meteorites. Space Science Reviews, 2019, 215, 1.	8.1	49
9	Thermal and Energetic Ion Dynamics in Ganymede's Magnetosphere. Journal of Geophysical Research: Space Physics, 2018, 123, 4614-4637.	2.4	46
10	Lunar pickup ions observed by ARTEMIS: Spatial and temporal distribution and constraints on species and source locations. Journal of Geophysical Research, 2012, 117, .	3.3	45
11	Impacts of Cosmic Dust on Planetary Atmospheres and Surfaces. Space Science Reviews, 2018, 214, 1.	8.1	43
12	Detections of lunar exospheric ions by the LADEE neutral mass spectrometer. Geophysical Research Letters, 2015, 42, 5162-5169.	4.0	42
13	New Horizons Observations of the Cosmic Optical Background. Astrophysical Journal, 2021, 906, 77.	4.5	42
14	ARTEMIS observations of lunar pickâ€up ions in the terrestrial magnetotail lobes. Geophysical Research Letters, 2012, 39, .	4.0	40
15	First results from the Venetia Burney Student Dust Counter on the New Horizons mission. Geophysical Research Letters, 2010, 37, .	4.0	38
16	On the formation of Ganymede's surface brightness asymmetries: Kinetic simulations of Ganymede's magnetosphere. Geophysical Research Letters, 2016, 43, 4745-4754.	4.0	38
17	Measurement of the cosmic optical background using the long range reconnaissance imager on New Horizons. Nature Communications, 2017, 8, 15003.	12.8	38
18	Particleâ€nâ€cell simulations of the solar wind interaction with lunar crustal magnetic anomalies: Magnetic cusp regions. Journal of Geophysical Research, 2012, 117, .	3.3	34

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19	ARTEMIS observations of extreme diamagnetic fields in the lunar wake. Geophysical Research Letters, 2014, 41, 3766-3773.	4.0	34
20	Interplanetary dust influx to the Pluto–Charon system. Icarus, 2015, 246, 352-359.	2.5	34
21	AMITIS: A 3D GPU-Based Hybrid-PIC Model for Space and Plasma Physics. Journal of Physics: Conference Series, 2017, 837, 012017.	0.4	34
22	Formation Timescales of Amorphous Rims on Lunar Grains Derived From ARTEMIS Observations. Journal of Geophysical Research E: Planets, 2018, 123, 37-46.	3.6	34
23	Evidence for smallâ€scale collisionless shocks at the Moon from ARTEMIS. Geophysical Research Letters, 2014, 41, 7436-7443.	4.0	33
24	Using ARTEMIS pickup ion observations to place constraints on the lunar atmosphere. Journal of Geophysical Research E: Planets, 2013, 118, 81-88.	3.6	32
25	Solar wind interaction with the Reiner Gamma crustal magnetic anomaly: Connecting source magnetization to surface weathering. Icarus, 2016, 266, 261-266.	2.5	32
26	Lunar precursor effects in the solar wind and terrestrial magnetosphere. Journal of Geophysical Research, 2012, 117, .	3.3	31
27	Kinetic simulations of kilometer-scale mini-magnetosphere formation on the Moon. Journal of Geophysical Research E: Planets, 2015, 120, 1893-1903.	3.6	30
28	The effects of reflected protons on the plasma environment of the moon for parallel interplanetary magnetic fields. Geophysical Research Letters, 2013, 40, 4544-4548.	4.0	29
29	Solar wind plasma interaction with Gerasimovich lunar magnetic anomaly. Journal of Geophysical Research: Space Physics, 2015, 120, 4719-4735.	2.4	29
30	Statistical characterization of the foremoon particle and wave morphology: ARTEMIS observations. Journal of Geophysical Research: Space Physics, 2015, 120, 4907-4921.	2.4	29
31	Constraining the Solar System's Debris Disk with In Situ New Horizons Measurements from the Edgeworth–Kuiper Belt. Astrophysical Journal Letters, 2019, 881, L12.	8.3	29
32	Widespread hematite at high latitudes of the Moon. Science Advances, 2020, 6, .	10.3	28
33	The effects of solar wind velocity distributions on the refilling of the lunar wake: ARTEMIS observations and comparisons to oneâ€dimensional theory. Journal of Geophysical Research: Space Physics, 2014, 119, 5133-5149.	2.4	27
34	ARTEMIS observations of terrestrial ionospheric molecular ion outflow at the Moon. Geophysical Research Letters, 2016, 43, 6749-6758.	4.0	26
35	Hybrid Simulations of Solar Wind Proton Precipitation to the Surface of Mercury. Journal of Geophysical Research: Space Physics, 2020, 125, e2019JA027706.	2.4	26
36	A comparison of ARTEMIS observations and particleâ€inâ€cell modeling of the lunar photoelectron sheath in the terrestrial magnetotail. Geophysical Research Letters, 2012, 39, .	4.0	24

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37	Modelâ€based constraints on the lunar exosphere derived from ARTEMIS pickup ion observations in the terrestrial magnetotail. Journal of Geophysical Research E: Planets, 2013, 118, 1135-1147.	3 <b>.</b> 6	24
38	ARTEMIS observations of lunar dayside plasma in the terrestrial magnetotail lobe. Journal of Geophysical Research: Space Physics, 2013, 118, 3042-3054.	2.4	23
39	Anisotropic solar wind sputtering of the lunar surface induced by crustal magnetic anomalies. Geophysical Research Letters, 2014, 41, 4865-4872.	4.0	23
40	Solar Wind Plasma Interaction with Asteroid 16 Psyche: Implication for Formation Theories. Geophysical Research Letters, 2018, 45, 39-48.	4.0	22
41	Variability in the Energetic Electron Bombardment of Ganymede. Journal of Geophysical Research: Space Physics, 2020, 125, e2020JA028347.	2.4	22
42	The effect of Nix and Hydra on the putative Pluto–Charon dust cloud. Planetary and Space Science, 2011, 59, 1647-1653.	1.7	21
43	ARTEMIS observations of the solar wind proton scattering function from lunar crustal magnetic anomalies. Journal of Geophysical Research E: Planets, 2017, 122, 771-783.	3.6	21
44	Dust Phenomena Relating to Airless Bodies. Space Science Reviews, 2018, 214, 1.	8.1	21
45	ARTEMIS observations of lunar pickup ions: Mass constraints on ion species. Journal of Geophysical Research E: Planets, 2013, 118, 1766-1774.	3.6	20
46	Experimental study of a photoelectron sheath. Physics of Plasmas, 2012, 19, .	1.9	19
47	The lunar photoelectron sheath: A change in trapping efficiency during a solar storm. Journal of Geophysical Research E: Planets, 2013, 118, 1114-1122.	3.6	19
48	The Lunar Paleoâ€Magnetosphere: Implications for the Accumulation of Polar Volatile Deposits. Geophysical Research Letters, 2019, 46, 5778-5787.	4.0	19
49	Impact Ejecta and Gardening in the Lunar Polar Regions. Journal of Geophysical Research E: Planets, 2019, 124, 143-154.	3.6	19
50	Constraints on dust production in the Edgeworth-Kuiper Belt from Pioneer 10 and New Horizons measurements. Geophysical Research Letters, 2011, 38, n/a-n/a.	4.0	18
51	On the Edgeworthâ€Kuiper Belt dust flux to Saturn. Geophysical Research Letters, 2012, 39, .	4.0	18
52	LADEE/LDEX observations of lunar pickup ion distribution and variability. Geophysical Research Letters, 2016, 43, 3069-3077.	4.0	18
53	ARTEMIS Observations of Solar Wind Proton Scattering off the Lunar Surface. Journal of Geophysical Research: Space Physics, 2018, 123, 5289-5299.	2.4	18
54	Measurements of the terrestrial dust influx variability by the Cosmic Dust Experiment. Planetary and Space Science, 2011, 59, 319-326.	1.7	17

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55	On the Effect of Magnetospheric Shielding on the Lunar Hydrogen Cycle. Journal of Geophysical Research E: Planets, 2021, 126, e2020JE006552.	3.6	17
56	The selfâ€sputtered contribution to the lunar exosphere. Journal of Geophysical Research E: Planets, 2013, 118, 1934-1944.	3.6	16
57	Waterâ€Group Pickup Ions From Europaâ€Genic Neutrals Orbiting Jupiter. Geophysical Research Letters, 2022, 49, .	4.0	16
58	Martian planetary heavy ion sputtering of Phobos. Geophysical Research Letters, 2014, 41, 6335-6341.	4.0	15
59	Extended lunar precursor regions: Electronâ€wave interaction. Journal of Geophysical Research: Space Physics, 2014, 119, 9160-9173.	2.4	15
60	Mapping the Lunar Wake Potential Structure With ARTEMIS Data. Journal of Geophysical Research: Space Physics, 2019, 124, 3360-3377.	2.4	15
61	Simulating the Reiner Gamma Swirl: The Longâ€√erm Effect of Solar Wind Standoff. Journal of Geophysical Research E: Planets, 2020, 125, e2019JE006219.	3.6	15
62	Uptake of acetylene on cosmic dust and production of benzene in Titan's atmosphere. Icarus, 2016, 278, 88-99.	2.5	14
63	Fieldâ€Aligned Electrostatic Potentials Above the Martian Exobase From MGS Electron Reflectometry: Structure and Variability. Journal of Geophysical Research E: Planets, 2018, 123, 67-92.	3.6	14
64	Photoemission and electrostatic potentials on the dayside lunar surface in the terrestrial magnetotail lobes. Geophysical Research Letters, 2017, 44, 5276-5282.	4.0	13
65	Timeâ€Dependent Hybrid Plasma Simulations of Lunar Electromagnetic Induction in the Solar Wind. Geophysical Research Letters, 2019, 46, 4151-4160.	4.0	13
66	3D Monte-Carlo simulation of Ganymede's water exosphere. Icarus, 2022, 375, 114810.	2.5	13
67	A Tenuous Lunar Ionosphere in the Geomagnetic Tail. Geophysical Research Letters, 2018, 45, 9450-9459.	4.0	12
68	Phobos Surface Sputtering as Inferred From MAVEN Ion Observations. Journal of Geophysical Research E: Planets, 2019, 124, 3385-3401.	3.6	12
69	Coronagraphic observations of the lunar sodium exosphere 2018–2019. Icarus, 2021, 355, 114155.	2.5	12
70	Simulation of polyvinylidene fluoride detector response to hypervelocity particle impact. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 2010, 622, 583-587.	1.6	11
71	Astrophysics with New Horizons: Making the Most of a Generational Opportunity. Publications of the Astronomical Society of the Pacific, 2018, 130, 115001.	3.1	10
72	Comment on "The Dominant Role of Energetic Ions in Solar Wind Interaction With the Moon―by Omidi et al Journal of Geophysical Research: Space Physics, 2019, 124, 6927-6932.	2.4	10

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73	Student Dust Counter Status Report: The First 50 au. Planetary Science Journal, 2022, 3, 69.	3.6	10
74	On the confinement of lunar induced magnetic fields. Geophysical Research Letters, 2015, 42, 6931-6938.	4.0	9
75	The Phobos neutral and ionized torus. Journal of Geophysical Research E: Planets, 2016, 121, 770-783.	3.6	9
76	Distribution and solar wind control of compressional solar windâ€magnetic anomaly interactions observed at the Moon by ARTEMIS. Journal of Geophysical Research: Space Physics, 2017, 122, 6240-6254.	2.4	9
77	Implantation of Martian atmospheric ions within the regolith of Phobos. Nature Geoscience, 2021, 14, 61-66.	12.9	9
78	Triton's Variable Interaction With Neptune's Magnetospheric Plasma. Journal of Geophysical Research: Space Physics, 2021, 126, e2021JA029740.	2.4	9
79	The Acceleration of Lunar lons by Magnetic Forces in the Terrestrial Magnetotail Lobes. Journal of Geophysical Research: Space Physics, 2020, 125, e2020JA027829.	2.4	8
80	Ion Dynamics at the Magnetopause of Ganymede. Journal of Geophysical Research: Space Physics, 2022, $127$ , .	2.4	8
81	Reflected Protons in the Lunar Wake and Their Effects on Wake Potentials. Journal of Geophysical Research: Space Physics, 2020, 125, e2020JA028154.	2.4	7
82	Particleâ€Inâ€Cell Modeling of Martian Magnetic Cusps and Their Role in Enhancing Nightside Ionospheric Ion Escape. Geophysical Research Letters, 2021, 48, .	4.0	7
83	Investigating the Moon's Interaction With the Terrestrial Magnetotail Lobe Plasma. Geophysical Research Letters, 2021, 48, e2021GL093566.	4.0	7
84	Bombardment of Lunar Polar Crater Interiors by Out-of-ecliptic Ions: ARTEMIS Observations. Planetary Science Journal, 2021, 2, 116.	3.6	7
85	On the Long-term Weathering of Airless Body Surfaces by the Heavy Minor Ions of the Solar Wind: Inputs from Ion Observations and SRIM Simulations. Planetary Science Journal, 2020, 1, 69.	3.6	7
86	The contribution of Centaur-emitted dust to the interplanetary dust distribution. Monthly Notices of the Royal Astronomical Society, 2019, 490, 2421-2429.	4.4	6
87	Plasma Convection in the Terrestrial Magnetotail Lobes Measured Near the Moon's Orbit. Geophysical Research Letters, 2020, 47, e2020GL090217.	4.0	6
88	Structure and composition of the distant lunar exosphere: Constraints from ARTEMIS observations of ion acceleration in time-varying fields. Journal of Geophysical Research E: Planets, 2016, 121, 1102-1115.	3.6	5
89	Interplanetary dust delivery of water to the atmospheres of Pluto and Triton. Astronomy and Astrophysics, 2018, 617, L5.	5.1	5
90	Fractionation of Solar Wind Minor Ion Precipitation by the Lunar Paleomagnetosphere. Planetary Science Journal, 2021, 2, 60.	3.6	5

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91	A Double Disturbed Lunar Plasma Wake. Journal of Geophysical Research: Space Physics, 2021, 126, e2020JA028789.	2.4	5
92	A Statistical Study of the Moon's Magnetotail Plasma Environment. Journal of Geophysical Research: Space Physics, 2022, 127, .	2.4	5
93	Stairâ€step particle flux spectra on the lunar surface: Evidence for nonmonotonic potentials?. Geophysical Research Letters, 2017, 44, 79-87.	4.0	4
94	Lunar Photoemission Yields Inferred From ARTEMIS Measurements. Journal of Geophysical Research E: Planets, 2021, 126, e2020JE006790.	3.6	4
95	The Plasma Environment Surrounding the Reiner Gamma Magnetic Anomaly. Journal of Geophysical Research: Space Physics, 2021, 126, e2021JA029180.	2.4	4
96	Simulations of Energetic Neutral Atom Sputtering From Ganymede in Preparation for the JUICE Mission. Journal of Geophysical Research: Space Physics, 2022, 127, .	2.4	4
97	The electrostatic plasma environment of a small airless body under non-aligned plasma flow and UV conditions. Planetary and Space Science, 2015, 119, 111-120.	1.7	3
98	The Effects of Solar Wind Structure on Nanodust Dynamics in the Inner Heliosphere. Journal of Geophysical Research: Space Physics, 2020, 125, e2020JA028463.	2.4	3
99	ARTEMIS Observations of Lunar Nightside Surface Potentials in the Magnetotail Lobes: Evidence for Micrometeoroid Impact Charging. Geophysical Research Letters, 2021, 48, e2021GL094585.	4.0	1
100	The Effects of Solar Cycle Variability on Nanodust Dynamics in the Inner Heliosphere: Predictions for Future STEREO A/WAVES Measurements. Journal of Geophysical Research: Space Physics, 2022, 127, .	2.4	0