

# David J Lawrence

## List of Publications by Year in descending order

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165  
papers

10,190  
citations

38742

50  
h-index

42399

92  
g-index

169  
all docs

169  
docs citations

169  
times ranked

4611  
citing authors

#	ARTICLE	IF	CITATIONS
1	Fluxes of Fast and Epithermal Neutrons from Lunar Prospector: Evidence for Water Ice at the Lunar Poles. , 1998, 281, 1496-1500.		518
2	Global Distribution of Neutrons from Mars: Results from Mars Odyssey. Science, 2002, 297, 75-78.	12.6	468
3	Global distribution of near-surface hydrogen on Mars. Journal of Geophysical Research, 2004, 109, .	3.3	423
4	Dawn at Vesta: Testing the Protoplanetary Paradigm. Science, 2012, 336, 684-686.	12.6	422
5	The Major-Element Composition of Mercury's Surface from MESSENGER X-ray Spectrometry. Science, 2011, 333, 1847-1850.	12.6	386
6	Elemental composition of the lunar surface: Analysis of gamma ray spectroscopy data from Lunar Prospector. Journal of Geophysical Research, 2006, 111, n/a-n/a.	3.3	342
7	Evidence for water ice near the lunar poles. Journal of Geophysical Research, 2001, 106, 23231-23251.	3.3	296
8	Global Elemental Maps of the Moon: The Lunar Prospector Gamma-Ray Spectrometer. , 1998, 281, 1484-1489.		286
9	Radioactive Elements on Mercury's Surface from MESSENGER: Implications for the Planet's Formation and Evolution. Science, 2011, 333, 1850-1852.	12.6	233
10	Iron abundances on the lunar surface as measured by the Lunar Prospector gamma-ray and neutron spectrometers. Journal of Geophysical Research, 2002, 107, 13-1-13-26.	3.3	220
11	Polar hydrogen deposits on the Moon. Journal of Geophysical Research, 2000, 105, 4175-4195.	3.3	212
12	Elemental Mapping by Dawn Reveals Exogenic H in Vesta's Regolith. Science, 2012, 338, 242-246.	12.6	201
13	Thorium abundances on the lunar surface. Journal of Geophysical Research, 2000, 105, 20307-20331.	3.3	190
14	Dawn arrives at Ceres: Exploration of a small, volatile-rich world. Science, 2016, 353, 1008-1010.	12.6	178
15	The MESSENGER Gamma-Ray and Neutron Spectrometer. Space Science Reviews, 2007, 131, 339-391.	8.1	175
16	Evidence for Water Ice Near Mercury's North Pole from MESSENGER Neutron Spectrometer Measurements. Science, 2013, 339, 292-296.	12.6	173
17	Small-area thorium features on the lunar surface. Journal of Geophysical Research, 2003, 108, .	3.3	171
18	Return to Mercury: A Global Perspective on MESSENGER's First Mercury Flyby. Science, 2008, 321, 59-62.	12.6	170

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19	Extensive water ice within Ceres's aqueously altered regolith: Evidence from nuclear spectroscopy. <i>Science</i> , 2017, 355, 55-59.	12.6	169
20	Magmatic volatiles (H, C, N, F, S, Cl) in the lunar mantle, crust, and regolith: Abundances, distributions, processes, and reservoirs. <i>American Mineralogist</i> , 2015, 100, 1668-1707.	1.9	160
21	Major element abundances on the surface of Mercury: Results from the MESSENGER Gamma-Ray Spectrometer. <i>Journal of Geophysical Research</i> , 2012, 117, .	3.3	146
22	Improved modeling of Lunar Prospector neutron spectrometer data: Implications for hydrogen deposits at the lunar poles. <i>Journal of Geophysical Research</i> , 2006, 111, .	3.3	136
23	Remote sensing evidence for an ancient carbon-bearing crust on Mercury. <i>Nature Geoscience</i> , 2016, 9, 273-276.	12.9	134
24	Lunar rare earth element distribution and ramifications for FeO and TiO <sub>2</sub> : Lunar Prospector neutron spectrometer observations. <i>Journal of Geophysical Research</i> , 2000, 105, 20333-20345.	3.3	131
25	Gamma-Ray, Neutron, and Alpha-Particle Spectrometers for the Lunar Prospector mission. <i>Journal of Geophysical Research</i> , 2004, 109, .	3.3	109
26	Mercury's Weather-Beaten Surface: Understanding Mercury in the Context of Lunar and Asteroidal Space Weathering Studies. <i>Space Science Reviews</i> , 2014, 181, 121-214.	8.1	108
27	Composition and structure of the Martian surface at high southern latitudes from neutron spectroscopy. <i>Journal of Geophysical Research</i> , 2004, 109, .	3.3	101
28	Major Compositional Units of the Moon: Lunar Prospector Thermal and Fast Neutrons. , 1998, 281, 1489-1493.		92
29	MCNPX benchmark for cosmic ray interactions with the Moon. <i>Journal of Geophysical Research</i> , 2006, 111, .	3.3	92
30	Lunar true polar wander inferred from polar hydrogen. <i>Nature</i> , 2016, 531, 480-484.	27.8	90
31	Refined thorium abundances for lunar red spots: Implications for evolved, nonmare volcanism on the Moon. <i>Journal of Geophysical Research</i> , 2006, 111, .	3.3	86
32	Chemical information content of lunar thermal and epithermal neutrons. <i>Journal of Geophysical Research</i> , 2000, 105, 20347-20363.	3.3	85
33	Variations in the abundances of potassium and thorium on the surface of Mercury: Results from the MESSENGER Gamma-Ray Spectrometer. <i>Journal of Geophysical Research</i> , 2012, 117, .	3.3	85
34	Enhanced sodium abundance in Mercury's north polar region revealed by the MESSENGER Gamma-Ray Spectrometer. <i>Icarus</i> , 2014, 228, 86-95.	2.5	85
35	Lunar Fe and Ti Abundances: Comparison of Lunar Prospector and Clementine Data. , 1998, 281, 1493-1496.		83
36	High resolution measurements of absolute thorium abundances on the lunar surface. <i>Geophysical Research Letters</i> , 1999, 26, 2681-2684.	4.0	83

#	ARTICLE	IF	CITATIONS
37	Science Goals and Objectives for the Dragonfly Titan Rotorcraft Relocatable Lander. <i>Planetary Science Journal</i> , 2021, 2, 130.	3.6	80
38	Reduction of neutron data from Lunar Prospector. <i>Journal of Geophysical Research</i> , 2004, 109, .	3.3	76
39	Lunar Prospector neutron spectrometer constraints on TiO <sub>2</sub> . <i>Journal of Geophysical Research</i> , 2002, 107, 8-1.	3.3	74
40	Geochemical terranes of Mercury's northern hemisphere as revealed by MESSENGER neutron measurements. <i>Icarus</i> , 2015, 253, 346-363.	2.5	74
41	Gamma-ray measurements from Lunar Prospector: Time series data reduction for the Gamma-Ray Spectrometer. <i>Journal of Geophysical Research</i> , 2004, 109, .	3.3	70
42	A tale of two poles: Toward understanding the presence, distribution, and origin of volatiles at the polar regions of the Moon and Mercury. <i>Journal of Geophysical Research E: Planets</i> , 2017, 122, 21-52.	3.6	69
43	Models of the distribution and abundance of hydrogen at the lunar south pole. <i>Geophysical Research Letters</i> , 2007, 34, .	4.0	66
44	Chlorine on the surface of Mercury: MESSENGER gamma-ray measurements and implications for the planet's formation and evolution. <i>Icarus</i> , 2015, 257, 417-427.	2.5	66
45	Hydrated states of MgSO <sub>4</sub> at equatorial latitudes on Mars. <i>Geophysical Research Letters</i> , 2004, 31, .	4.0	65
46	Global spatial deconvolution of Lunar Prospector Th abundances. <i>Geophysical Research Letters</i> , 2007, 34, .	4.0	64
47	Measurements of early and late time plasmasphere refilling as observed from geosynchronous orbit. <i>Journal of Geophysical Research</i> , 1999, 104, 14691-14704.	3.3	61
48	Two-dimensional distribution of volatiles in the lunar regolith from space weathering simulations. <i>Geophysical Research Letters</i> , 2012, 39, .	4.0	61
49	Observations, Meteorites, and Models: A Preflight Assessment of the Composition and Formation of (16) Psyche. <i>Journal of Geophysical Research E: Planets</i> , 2020, 125, e2019JE006296.	3.6	61
50	Constraints on the abundance of carbon in near-surface materials on Mercury: Results from the MESSENGER Gamma-Ray Spectrometer. <i>Planetary and Space Science</i> , 2015, 108, 98-107.	1.7	57
51	Mars Odyssey neutron data: 1. Data processing and models of water-equivalent-hydrogen distribution. <i>Journal of Geophysical Research</i> , 2011, 116, .	3.3	54
52	Compositional variability on the surface of 4 Vesta revealed through <sup>GR</sup> a <sup>ND</sup> measurements of high-energy gamma rays. <i>Meteoritics and Planetary Science</i> , 2013, 48, 2252-2270.	1.6	53
53	Identification and measurement of neutron-absorbing elements on Mercury's surface. <i>Icarus</i> , 2010, 209, 195-209.	2.5	52
54	Farside explorer: unique science from a mission to the farside of the moon. <i>Experimental Astronomy</i> , 2012, 33, 529-585.	3.7	52

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55	Mars Odyssey neutron data: 2. Search for buried excess water ice deposits at nonpolar latitudes on Mars. <i>Journal of Geophysical Research</i> , 2011, 116, .	3.3	51
56	Martian moons exploration MMX: sample return mission to Phobos elucidating formation processes of habitable planets. <i>Earth, Planets and Space</i> , 2022, 74, .	2.5	51
57	Hansteen Alpha: A volcanic construct in the lunar highlands. <i>Journal of Geophysical Research</i> , 2003, 108, .	3.3	50
58	High-energy neutrons from the Moon. <i>Journal of Geophysical Research</i> , 2000, 105, 20365-20375.	3.3	48
59	Neutron absorption constraints on the composition of 4 Vesta. <i>Meteoritics and Planetary Science</i> , 2013, 48, 2211-2236.	1.6	47
60	2. Understanding the Lunar Surface and Space-Moon Interactions. , 2006, , 83-220.		44
61	Deep Space One Investigations of Ion Propulsion Plasma Environment. <i>Journal of Spacecraft and Rockets</i> , 2000, 37, 545-555.	1.9	43
62	TARANISâ€”A Satellite Project Dedicated to the Physics of TLEs and TGFs. <i>Space Science Reviews</i> , 2008, 137, 301-315.	8.1	41
63	Ice concentration and distribution near the south pole of Mars: Synthesis of odyssey and global surveyor analyses. <i>Geophysical Research Letters</i> , 2002, 29, 10-1-10-4.	4.0	38
64	Integration of the Clementine UV-VIS spectral reflectance data and the Lunar Prospector gamma-ray spectrometer data: A global-scale multielement analysis of the lunar surface using iron, titanium, and thorium abundances. <i>Journal of Geophysical Research</i> , 2002, 107, 15-1-15-14.	3.3	38
65	A comprehensive survey of plasmasphere refilling at geosynchronous orbit. <i>Journal of Geophysical Research</i> , 2001, 106, 25615-25629.	3.3	37
66	Comprehensive survey of energetic electron events in Mercury's magnetosphere with data from the MESSENGER Gammaâ€”Ray and Neutron Spectrometer. <i>Journal of Geophysical Research: Space Physics</i> , 2015, 120, 2851-2876.	2.4	36
67	Energetic Electron Acceleration and Injection During Dipolarization Events in Mercury's Magnetotail. <i>Journal of Geophysical Research: Space Physics</i> , 2017, 122, 12,170.	2.4	36
68	Recent outgassing from the lunar surface: The Lunar Prospector Alpha Particle Spectrometer. <i>Journal of Geophysical Research</i> , 2005, 110, .	3.3	35
69	Vertical distribution of hydrogen at high northern latitudes on Mars: The Mars Odyssey Neutron Spectrometer. <i>Geophysical Research Letters</i> , 2007, 34, .	4.0	35
70	MESSENGER Observations of Transient Bursts of Energetic Electrons in Mercuryâ€™s Magnetosphere. <i>Science</i> , 2011, 333, 1865-1868.	12.6	35
71	Distribution of iron on Vesta. <i>Meteoritics and Planetary Science</i> , 2013, 48, 2237-2251.	1.6	35
72	Overview of the spacecraft design for the Psyche mission concept. , 2018, , .		35

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73	Topographic control of hydrogen deposits at low latitudes to midlatitudes of Mars. <i>Journal of Geophysical Research</i> , 2005, 110, .	3.3	34
74	Remote sensing and geologic studies of the Balmer-Kapteyn region of the Moon. <i>Journal of Geophysical Research</i> , 2005, 110, .	3.3	33
75	Reflection of solar wind hydrogen from the lunar surface. <i>Journal of Geophysical Research E: Planets</i> , 2013, 118, 292-305.	3.6	31
76	Intense energetic electron flux enhancements in Mercury's magnetosphere: An integrated view with high-resolution observations from MESSENGER. <i>Journal of Geophysical Research: Space Physics</i> , 2016, 121, 2171-2184.	2.4	31
77	Evidence for a high-Th, evolved lithology on the Moon at Hansteen Alpha. <i>Geophysical Research Letters</i> , 2005, 32, n/a-n/a.	4.0	30
78	Evidence for explosive silicic volcanism on the Moon from the extended distribution of thorium near the Compton-Belkovich Volcanic Complex. <i>Journal of Geophysical Research E: Planets</i> , 2015, 120, 92-108.	3.6	30
79	Hydrogen and major element concentrations on 433 Eros: Evidence for an L-chondrite-like surface composition. <i>Meteoritics and Planetary Science</i> , 2015, 50, 353-367.	1.6	30
80	Compositional terranes on Mercury: Information from fast neutrons. <i>Icarus</i> , 2017, 281, 32-45.	2.5	30
81	Global distribution of lunar composition: New results from Lunar Prospector. <i>Journal of Geophysical Research</i> , 2002, 107, 5-1.	3.3	28
82	Constraints on Vesta's elemental composition: Fast neutron measurements by Dawn's gamma ray and neutron detector. <i>Meteoritics and Planetary Science</i> , 2013, 48, 2271-2288.	1.6	28
83	Identification of surface hydrogen enhancements within the Moon's Shackleton crater. <i>Icarus</i> , 2014, 233, 229-232.	2.5	27
84	How well do we know the polar hydrogen distribution on the Moon?. <i>Journal of Geophysical Research E: Planets</i> , 2014, 119, 574-593.	3.6	27
85	Opening a Window on ICME-driven GCR Modulation in the Inner Solar System. <i>Astrophysical Journal</i> , 2018, 856, 139.	4.5	27
86	Thorium abundances on the Aristarchus plateau: Insights into the composition of the Aristarchus pyroclastic glass deposits. <i>Journal of Geophysical Research</i> , 2009, 114, .	3.3	26
87	Evidence for extended acceleration of solar flare ions from 1-8 MeV solar neutrons detected with the MESSENGER Neutron Spectrometer. <i>Journal of Geophysical Research</i> , 2010, 115, .	3.3	26
88	Measuring the Elemental Composition of Phobos: The Mars Moon Exploration with Gamma rays and Neutrons (MEGANE) Investigation for the Martian Moons eXploration (MMX) Mission. <i>Earth and Space Science</i> , 2019, 6, 2605-2623.	2.6	26
89	Technical Comment on "Hydrogen Mapping of the Lunar South Pole Using the LRO Neutron Detector Experiment LEND". <i>Science</i> , 2011, 334, 1058-1058.	12.6	25
90	Sensitivity of orbital neutron measurements to the thickness and abundance of surficial lunar water. <i>Journal of Geophysical Research</i> , 2011, 116, .	3.3	24

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91	Using $\text{HED}$ meteorites to interpret neutron and gamma-ray data from asteroid 4 Vesta. <i>Meteoritics and Planetary Science</i> , 2015, 50, 1311-1337.	1.6	24
92	Deep Space 1 encounter with Comet 19P/Borrelly: Ion composition measurements by the PEPE mass spectrometer. <i>Geophysical Research Letters</i> , 2003, 30, .	4.0	23
93	Plasma Experiment for Planetary Exploration (PEPE). <i>Space Science Reviews</i> , 2007, 129, 327-357.	8.1	23
94	Performance of Orbital Neutron Instruments for Spatially Resolved Hydrogen Measurements of Airless Planetary Bodies. <i>Astrobiology</i> , 2010, 10, 183-200.	3.0	23
95	Aluminum abundance on the surface of Mercury: Application of a new background reduction technique for the analysis of gamma-ray spectroscopy data. <i>Journal of Geophysical Research</i> , 2012, 117, .	3.3	23
96	Science operation plan of Phobos and Deimos from the MMX spacecraft. <i>Earth, Planets and Space</i> , 2021, 73, .	2.5	22
97	Thorium abundances of basalt ponds in South Pole-Aitken basin: Insights into the composition and evolution of the far side lunar mantle. <i>Journal of Geophysical Research</i> , 2011, 116, .	3.3	21
98	Bulk hydrogen abundances in the lunar highlands: Measurements from orbital neutron data. <i>Icarus</i> , 2015, 255, 127-134.	2.5	21
99	Galactic cosmic ray variations in the inner heliosphere from solar distances less than 0.5 AU: Measurements from the MESSENGER Neutron Spectrometer. <i>Journal of Geophysical Research: Space Physics</i> , 2016, 121, 7398-7406.	2.4	21
100	How thick are Mercury's polar water ice deposits?. <i>Icarus</i> , 2017, 284, 407-415.	2.5	21
101	Latitude variation of the subsurface lunar temperature: Lunar Prospector thermal neutrons. <i>Journal of Geophysical Research</i> , 2003, 108, .	3.3	19
102	Ion Mobility Spectrometry - High Resolution LTQ-Orbitrap Mass Spectrometry for Analysis of Homemade Explosives. <i>Journal of the American Society for Mass Spectrometry</i> , 2017, 28, 1531-1539.	2.8	19
103	New views of the Moon: Improved understanding through data integration. <i>Eos</i> , 2000, 81, 349.	0.1	18
104	Analysis of MESSENGER Gamma-Ray Spectrometer data from the Mercury flybys. <i>Planetary and Space Science</i> , 2011, 59, 1829-1841.	1.7	18
105	A QUANTITATIVE COMPARISON OF LUNAR ORBITAL NEUTRON DATA. <i>Astrophysical Journal</i> , 2012, 747, 6.	4.5	18
106	DePhine – The Deimos and Phobos Interior Explorer. <i>Advances in Space Research</i> , 2018, 62, 2220-2238.	2.6	17
107	Space-based measurement of the neutron lifetime using data from the neutron spectrometer on NASA's MESSENGER mission. <i>Physical Review Research</i> , 2020, 2, .	3.6	17
108	Recharge mechanism of near-equatorial hydrogen on Mars: Atmospheric redistribution or sub-surface aquifer. <i>Geophysical Research Letters</i> , 2004, 31, .	4.0	16

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109	Enhanced hydrogen at the lunar poles: New insights from the detection of epithermal and fast neutron signatures. <i>Journal of Geophysical Research</i> , 2012, 117, .	3.3	16
110	Multi-spacecraft observations and transport simulations of solar energetic particles for the May 17th 2012 event. <i>Astronomy and Astrophysics</i> , 2018, 612, A116.	5.1	16
111	Geochemistry of the lunar highlands as revealed by measurements of thermal neutrons. <i>Journal of Geophysical Research E: Planets</i> , 2016, 121, 388-401.	3.6	15
112	Lunar Prospector epithermal neutrons from impact craters and landing sites: Implications for surface maturity and hydrogen distribution. <i>Journal of Geophysical Research</i> , 2002, 107, 3-1.	3.3	14
113	Surface and Downhole Prospecting Tools for Planetary Exploration: Tests of Neutron and Gamma Ray Probes. <i>Astrobiology</i> , 2008, 8, 639-652.	3.0	14
114	Chemically distinct regions of Venus's atmosphere revealed by measured N <sub>2</sub> concentrations. <i>Nature Astronomy</i> , 2020, 4, 947-950.	10.1	14
115	Distinguishing the Origin of Asteroid (16) Psyche. <i>Space Science Reviews</i> , 2022, 218, 17.	8.1	13
116	Composition and origin of the Dewar geochemical anomaly. <i>Journal of Geophysical Research</i> , 2008, 113, .	3.3	12
117	Detection and characterization of 0.5 MeV neutrons near Mercury: Evidence for a solar origin. <i>Journal of Geophysical Research: Space Physics</i> , 2014, 119, 5150-5171.	2.4	12
118	New insights into the global composition of the lunar surface from high-energy gamma rays measured by Lunar Prospector. <i>Journal of Geophysical Research E: Planets</i> , 2013, 118, 671-688.	3.6	11
119	Igneous lithologies on asteroid (4) Vesta mapped using gamma-ray and neutron data. <i>Icarus</i> , 2017, 286, 35-45.	2.5	11
120	The Scientific Value of a Sustained Exploration Program at the Aristarchus Plateau. <i>Planetary Science Journal</i> , 2021, 2, 136.	3.6	11
121	Mapping iron abundances on the surface of Mercury: Predicted spatial resolution of the MESSENGER Gamma-Ray Spectrometer. <i>Planetary and Space Science</i> , 2011, 59, 1654-1658.	1.7	10
122	Near-space operation of compact CsI, CLYC, and CeBr <sub>3</sub> sensors: Results from two high-altitude balloon flights. <i>Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment</i> , 2018, 905, 33-46.	1.6	10
123	Plasmaspheric observations at geosynchronous orbit. <i>Journal of Atmospheric and Solar-Terrestrial Physics</i> , 2001, 63, 1185-1197.	1.6	9
124	High-resolution mapping of lunar polar hydrogen with a low-resource orbital mission. <i>Acta Astronautica</i> , 2015, 115, 452-462.	3.2	9
125	Mercury's Polar Deposits. , 2018, , 346-370.		9
126	Compositional variability on the surface of 1 Ceres revealed through GROUND measurements of high-energy gamma rays. <i>Meteoritics and Planetary Science</i> , 2018, 53, 1805-1819.	1.6	9

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127	Image Reconstruction Techniques in Neutron and Gamma Ray Spectroscopy: Improving Lunar Prospector Data. <i>Journal of Geophysical Research E: Planets</i> , 2018, 123, 1804-1822.	3.6	9
128	Cosmogenic radionuclide production modeling with Geant4: Experimental benchmarking and application to nuclear spectroscopy of asteroid (16) Psyche. <i>Nuclear Instruments &amp; Methods in Physics Research B</i> , 2019, 446, 43-57.	1.4	9
129	Solar influence on nuclear decay rates: constraints from the MESSENGER mission. <i>Astrophysics and Space Science</i> , 2012, 337, 39-45.	1.4	8
130	Radiation damage and annealing of three coaxial n-type germanium detectors: Preparation for spaceflight missions to asteroid 16 Psyche and Marsâ€™ moon Phobos. <i>Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment</i> , 2019, 942, 162409.	1.6	8
131	Measurement of the free neutron lifetime using the neutron spectrometer on NASA's Lunar Prospector mission. <i>Physical Review C</i> , 2021, 104, .	2.9	8
132	Mapping the elemental composition of Ceres and Vesta: Dawn's gamma ray and neutron detector. , 2004, , .		7
133	The effect of craters on the lunar neutron flux. <i>Journal of Geophysical Research E: Planets</i> , 2015, 120, 1377-1395.	3.6	7
134	Predictions of MESSENGER Neutron Spectrometer measurements for Mercury's north polar region. <i>Planetary and Space Science</i> , 2011, 59, 1665-1669.	1.7	6
135	Water on the Moon. <i>Nature Geoscience</i> , 2011, 4, 586-588.	12.9	6
136	Neutrons and energetic charged particles in the inner heliosphere: Measurements of the MESSENGER Neutron Spectrometer from 0.3 to 0.85â€™AU. <i>Journal of Geophysical Research: Space Physics</i> , 2015, 120, 841-854.	2.4	6
137	GeMini: A High-Resolution, Low-Resource, Gamma-Ray Spectrometer for Planetary Science Applications. <i>Space Science Reviews</i> , 2020, 216, 1.	8.1	6
138	Position-dependent neutron detection efficiency loss in 3He gas proportional counters. <i>Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment</i> , 2020, 982, 164574.	1.6	6
139	Space-based measurements of neutron lifetime: Approaches to resolving the neutron lifetime anomaly. <i>Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment</i> , 2021, 988, 164919.	1.6	6
140	Statistical analysis of thorium and fast neutron data at the lunar surface. <i>Journal of Geophysical Research</i> , 2002, 107, 2-1.	3.3	5
141	The neutron, gamma-ray, X-ray spectrometer (NGXS): A compact instrument for making combined measurements of neutrons, gamma-rays, and X-rays. <i>Acta Astronautica</i> , 2014, 93, 524-529.	3.2	5
142	FIRST LIGHT: MeV ASTROPHYSICS FROM THE MOON. <i>Astrophysical Journal Letters</i> , 2016, 823, L31.	8.3	5
143	Psyche Science Operations Concept: Maximize Reuse to Minimize Risk. , 2018, , .		5
144	Global Hydrogen Abundances on the Lunar Surface. <i>Journal of Geophysical Research E: Planets</i> , 2022, 127, .	3.6	5

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145	TESTING THE UNITARITY OF THE CKM MATRIX WITH A SPACE-BASED NEUTRON DECAY EXPERIMENT. Modern Physics Letters A, 2008, 23, 1735-1743.	1.2	4
146	The 4 June 2011 neutron event at Mercury: A defense of the solar origin hypothesis. Journal of Geophysical Research: Space Physics, 2015, 120, 5284-5289.	2.4	4
147	Gamma rays and cosmic rays at Venus: The Pioneer Venus gamma ray detector and considerations for future measurements. Planetary and Space Science, 2015, 109-110, 129-134.	1.7	4
148	Statistical Study of Mercury's Energetic Electron Events as Observed by the Gamma-Ray and Neutron Spectrometer Instrument Onboard MESSENGER. Journal of Geophysical Research: Space Physics, 2018, 123, 4961-4978.	2.4	4
149	MESSENGER Gamma Ray Spectrometer and Epithermal Neutron Hydrogen Data Reveal Compositional Differences Between Mercury's Hot and Cold Poles. Journal of Geophysical Research E: Planets, 2019, 124, 721-733.	3.6	4
150	The MESSENGER Gamma-Ray and Neutron Spectrometer. , 2007, , 339-391.		4
151	Deciphering Redox State for a Metal-Rich World. Space Science Reviews, 2022, 218, 6.	8.1	4
152	MEGANE investigations of Phobos and the Small Body Mapping Tool. Earth, Planets and Space, 2021, 73, 217.	2.5	4
153	Surveying the South Pole-Aitken basin magnetic anomaly for remnant impactor metallic iron. Icarus, 2014, 243, 27-30.	2.5	3
154	Characterizing near-surface elemental layering on Mars using gamma-ray spectroscopy: A proof-of-principle experiment. Nuclear Instruments & Methods in Physics Research B, 2018, 415, 89-99.	1.4	3
155	Maximum Energies of Trapped Particles Around Magnetized Planets and Small Bodies. Geophysical Research Letters, 2022, 49, .	4.0	3
156	Operation of a <sup>3</sup> He proportional counter in the Ganymede radiation environment. Planetary and Space Science, 2012, 61, 46-52.	1.7	2
157	Long-duration neutron production by nonflaring transients in the solar corona. Journal of Geophysical Research: Space Physics, 2015, 120, 8247-8266.	2.4	2
158	Volatiles on the Lunar Surface and Subsurface. , 2018, , 1-6.		1
159	Calibration of a two-photon coincidence experiment using <sup>133</sup> Ba. Nuclear Instruments & Methods in Physics Research B, 1991, 56-57, 334-336.	1.4	0
160	<title>Combined gamma-ray and neutron detector for measuring the chemical composition of airless planetary bodies</title>. , 2001, , .		0
161	Neutron Probes for the Construction and Resource Utilization eXplorer (CRUX). , 2006, , 1.		0
162	Pulsed neutron generator " gamma ray spectrometer measurements of venus elemental composition. , 2016, , .		0

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163	Ex luna, scientia: lunar occultation as a paradigm for nuclear astrophysics. , 2016, , .		0
164	Measuring Surface Bulk Elemental Composition on Venus. Physics Procedia, 2017, 90, 180-186.	1.2	0
165	Science Opportunities offered by Mercury's Ice-Bearing Polar Deposits. , 2021, 53, .		0