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List of Publications by Year
in descending order

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51 papers	2,638 citations	361413 20 h-index	223800 46 g-index
53 all docs	53 docs citations	53 times ranked	2543 citing authors

#	Article	IF	Citations
1	A Habitable Fluvio-Lacustrine Environment at Yellowknife Bay, Gale Crater, Mars. Science, 2014, 343, 1242777.	12.6	687
2	Mineralogy of a Mudstone at Yellowknife Bay, Gale Crater, Mars. Science, 2014, 343, 1243480.	12.6	508
3	Martian Fluvial Conglomerates at Gale Crater. Science, 2013, 340, 1068-1072.	12.6	326
4	Proton nonionizing energy loss (NIEL) for device applications. IEEE Transactions on Nuclear Science, 2003, 50, 1924-1928.	2.0	212
5	Anthology of the Development of Radiation Transport Tools as Applied to Single Event Effects. IEEE Transactions on Nuclear Science, 2013, 60, 1876-1911.	2.0	119
6	Diagenetic silica enrichment and lateâ€stage groundwater activity in Gale crater, Mars. Geophysical Research Letters, 2017, 44, 4716-4724.	4.0	87
7	Water and chlorine content in the Martian soil along the first 1900 m of the Curiosity rover traverse as estimated by the DAN instrument. Journal of Geophysical Research E: Planets, 2014, 119, 1579-1596.	3.6	52
8	Europa's nearâ€surface radiation environment. Geophysical Research Letters, 2007, 34, .	4.0	44
9	Solar particle event storm shelter requirements for missions beyond low Earth orbit. Life Sciences in Space Research, 2018, 17, 32-39.	2.3	42
10	Review of an Internal Charging Code, NUMIT. IEEE Transactions on Plasma Science, 2008, 36, 2467-2472.	1.3	40
11	Statistics of the variations of the high-energy electron population between 7 and 28 jovian radii as measured by the Galileo spacecraft. Icarus, 2005, 178, 386-394.	2.5	35
12	Monte Carlo simulations of the Galileo energetic particle detector. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 2002, 490, 465-475.	1.6	33
13	Local variations of bulk hydrogen and chlorineâ€equivalent neutron absorption content measured at the contact between the Sheepbed and Gillespie Lake units in Yellowknife Bay, Gale Crater, using the DAN instrument onboard Curiosity. Journal of Geophysical Research E: Planets, 2014, 119, 1259-1275.	3.6	33
14	Space Radiation and Plasma Effects on Satellites and Aviation: Quantities and Metrics for Tracking Performance of Space Weather Environment Models. Space Weather, 2019, 17, 1384-1403.	3.7	32
15	An empirical model of the highâ€energy electron environment at Jupiter. Journal of Geophysical Research: Space Physics, 2016, 121, 9732-9743.	2.4	31
16	Neutron background environment measured by the Mars Science Laboratory's Dynamic Albedo of Neutrons instrument during the first 100 sols. Journal of Geophysical Research E: Planets, 2013, 118, 2400-2412.	3.6	28
17	Data processing of the active neutron experiment DAN for a Martian regolith investigation. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 2015, 789, 114-127.	1.6	24
18	Return to Europa: Overview of the Jupiter Europa orbiter mission. Advances in Space Research, 2011, 48, 629-650.	2.6	22

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19	High-energy trapped particle environments at Jupiter: an update. IEEE Transactions on Nuclear Science, 2005, 52, 2281-2286.	2.0	21
20	Long-term observations of the trapped high-energy proton population (L<4) by the NOAA Polar Orbiting Environmental Satellites (POES). Advances in Space Research, 2008, 41, 1261-1268.	2.6	20
21	Comparison of high-energy trapped particle environments at the earth and jupiter. Radiation Protection Dosimetry, 2005, 116, 50-54.	0.8	18
22	A study of Venus surface elemental composition from 14MeV neutron induced gamma ray spectroscopy: Activation analysis. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 2011, 629, 140-144.	1.6	18
23	The ADRON-RM Instrument Onboard the ExoMars Rover. Astrobiology, 2017, 17, 585-594.	3.0	17
24	Water equivalent hydrogen estimates from the first 200 sols of Curiosityâ€™s traverse (Bradbury) Tj ETQq0 0 0 rgBT /Overlock 10 Tf 50 experiment. Icarus, 2015, 262, 102-123.	2.5	16
25	Modeling of the Jovian Auroral Environment and Its Effects on Spacecraft Charging. IEEE Transactions on Plasma Science, 2008, 36, 2440-2449.	1.3	14
26	The Latest Jovian-Trapped Proton and Heavy Ion Models. IEEE Transactions on Nuclear Science, 2017, 64, 2802-2813.	2.0	14
27	Distinguishing the Origin of Asteroid (16) Psyche. Space Science Reviews, 2022, 218, 17.	8.1	13
28	Ground tests with active neutron instrumentation for the planetary science missions. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 2015, 788, 194-202.	1.6	12
29	Trapped Particle Environments of the Outer Planets. IEEE Transactions on Plasma Science, 2019, 47, 3923-3930.	1.3	11
30	Benchmark study for energy deposition by energetic electrons in thick elemental slabs: Monte Carlo results and experiments. IEEE Transactions on Nuclear Science, 2003, 50, 1732-1739.	2.0	10
31	Implementation of gamma-ray instrumentation for solid solar system bodies using neutron activation method. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 2016, 822, 112-124.	1.6	9
32	Updating the Jovian Electron Plasma Environment. IEEE Transactions on Plasma Science, 2019, 47, 3915-3922.	1.3	9
33	Mars neutron radiation environment from HEND/Odyssey and DAN/MSL observations. Planetary and Space Science, 2020, 184, 104866.	1.7	9
34	Empirical radiation belt models: Comparison with in situ data and implications for environment definition. Space Weather, 2017, 15, 1165-1176.	3.7	8
35	Results from the dynamic albedo of neutrons (DAN) passive mode experiment: Yellowknife Bay to Amargosa Valley (Sols 201â€“753). Icarus, 2018, 299, 513-537.	2.5	7
36	Assessment of water content in martian subsurface along the traverse of the Curiosity rover based on passive measurements of the DAN instrument. Icarus, 2020, 346, 113818.	2.5	7

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37	First Adiabatic Invariants and Phase Space Densities for the Jovian Electron and Proton Radiation Beltsâ€"Galileo and GIRE3 Estimates. Journal of Geophysical Research: Space Physics, 2021, 126, e2020JA028593.	2.4	7
38	Using the Galileo Solid-State Imaging Instrument as a Sensor of Jovian Energetic Electrons. IEEE Transactions on Nuclear Science, 2019, 66, 255-261.	2.0	6
39	Return to Europa: Overview of the Jupiter Europa Orbiter mission. , 2009, , .		5
40	Ground tests with prototype of CeBr 3 active gamma ray spectrometer proposed for future venus surface missions. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 2017, 848, 9-18.	1.6	5
41	Mars Science Laboratory Dynamic Albedo of Neutrons passive mode data and results from sols 753 to 1292: Pahrump Hills to Naukluft Plateau. Icarus, 2019, 330, 75-90.	2.5	4
42	Radiation environments and shielding approach for Jupiter Europa Orbiter (JEO). , 2009, , .		3
43	The Europa Charging Environment. IEEE Transactions on Plasma Science, 2017, 45, 2040-2047.	1.3	3
44	Maximum Energies of Trapped Particles Around Magnetized Planets and Small Bodies. Geophysical Research Letters, 2022, 49, .	4.0	3
45	Approach for Defining Internal Electrostatic Discharge Design Environment of a Jovian Mission. , 2019, , .		3
46	Radiation Environment Model of Protons and Heavier Ions at Jupiter. , 2015, , .		2
47	Monte Carlo Evaluation of the Europa Clipper TID Margin Based on the Variability of the Jovian Radiation Environment With Application for Mission Design. Space Weather, 2020, 18, e2019SW002340.	3.7	2
48	Intercomparison of Ionizing Doses From Space Shielding Analyses Using MCNP, Geant4, FASTRAD, and NOVICE. IEEE Transactions on Nuclear Science, 2020, 67, 1629-1636.	2.0	2
49	Jupiter high-energy/high-latitude electron environment from Junoâ€™s JEDI and UVS science instrument background noise. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 2021, 1002, 165244.	1.6	2
50	A Study on the Performance of a Silicon Photodiode Sensor for a Particle Dosimeter and Spectrometer. Sensors, 2021, 21, 8029.	3.8	2
51	Observed diurnal variations in Mars Science Laboratory Dynamic Albedo of Neutrons passive mode data. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 2018, 892, 70-83.	1.6	0