Jingnan Guo

List of Publications by Year
in descending order

86 papers	4,491 citations	186265 28 h-index	106344 65 g-index
91 all docs	91 docs citations	91 times ranked	3990 citing authors

#	Article	IF	Citations
1	The Martian surface radiation environment at solar minimum measured with MSL/RAD. Icarus, 2023, 393, 115035.	2.5	2
2	Marsâ€™ plasma system. Scientific potential of coordinated multipoint missions: â€œThe next generationâ€. Experimental Astronomy, 2022, 54, 641-676.	3.7	9
3	From the Top of Martian Olympus to Deep Craters and Beneath: Mars Radiation Environment Under Different Atmospheric and Regolith Depths. Journal of Geophysical Research E: Planets, 2022, 127, .	3.6	15
4	How the area of solar coronal holes affects the properties of high-speed solar wind streams near Earth: An analytical model. Astronomy and Astrophysics, 2022, 659, A190.	5.1	10
5	Solar Energetic Particles Produced during Two Fast Coronal Mass Ejections. Astrophysical Journal Letters, 2022, 928, L6.	8.3	15
6	Variation in Cosmic-Ray Intensity Lags Sunspot Number: Implications of Late Opening of Solar Magnetic Field. Astrophysical Journal, 2022, 928, 157.	4.5	10
7	Radiation Environment and Doses on Mars at Oxia Planum and Mawrth Vallis: Support for Exploration at Sites With High Biosignature Preservation Potential. Journal of Geophysical Research E: Planets, 2021, 126, e2020JE006488.	3.6	14
8	Radial evolution of the April 2020 stealth coronal mass ejection between 0.8 and 1 AU. Astronomy and Astrophysics, 2021, 656, A1.	5.1	15
9	Three-dimensional Reconstruction of Coronal Mass Ejections by the Correlation-aided Reconstruction Technique through Different Stereoscopic Angles of the Solar Terrestrial Relations Observatory Twin Spacecraft. Astrophysical Journal, 2021, 909, 182.	4.5	6
10	CME Magnetic Structure and IMF Preconditioning Affecting SEP Transport. Space Weather, 2021, 19, e2020SW002654.	3.7	18
11	Properties of stream interaction regions at Earth and Mars during the declining phase of SC 24. Astronomy and Astrophysics, 2021, 649, A80.	5.1	12
12	Radial velocity map of solar wind transients in the field of view of STEREO/HI1 on 3 and 4 April 2010. Astronomy and Astrophysics, 2021, 649, A58.	5.1	8
13	An easy-to-use function to assess deep space radiation in human brains. Scientific Reports, 2021, 11, 11687.	3.3	5
14	Directionality of the Martian Surface Radiation and Derivation of the Upward Albedo Radiation. Geophysical Research Letters, 2021, 48, e2021GL093912.	4.0	6
15	2019 International Womenâ€™s Day event. Astronomy and Astrophysics, 2021, 652, A159.	5.1	8
16	Natural Radiation Shielding on Mars Measured With the MSL/RAD Instrument. Journal of Geophysical Research E: Planets, 2021, 126, e2021JE006851.	3.6	4
17	Radiation environment for future human exploration on the surface of Mars: the current understanding based on MSL/RAD dose measurements. Astronomy and Astrophysics Review, 2021, 29, 1.	25.5	27
18	Radiation Environment at the Surface and Subsurface of the Moon: Model Development and Validation. Journal of Geophysical Research E: Planets, 2021, 126, .	3.6	9

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19	The Two-step Forbush Decrease: A Tale of Two Substructures Modulating Galactic Cosmic Rays within Coronal Mass Ejections. Astrophysical Journal, 2021, 922, 216.	4.5	10
20	Evolution of Coronal Mass Ejections and the Corresponding Forbush Decreases: Modeling vs. Multi-Spacecraft Observations. Solar Physics, 2020, 295, 1.	2.5	18
21	Calculation of dose distribution in a realistic brain structure and the indication of space radiation influence on human brains. Life Sciences in Space Research, 2020, 27, 33-48.	2.3	5
22	First measurements of the radiation dose on the lunar surface. Science Advances, 2020, 6, .	10.3	84
23	The Lunar Lander Neutron and Dosimetry (LND) Experiment on Changâ€™E 4. Space Science Reviews, 2020, 216, 1.	8.1	23
24	Concept of the solar ring mission: An overview. Science China Technological Sciences, 2020, 63, 1699-1713.	4.0	23
25	Comparing the Properties of ICMEâ€Induced Forbush Decreases at Earth and Mars. Journal of Geophysical Research: Space Physics, 2020, 125, e2019JA027662.	2.4	14
26	CMEâ€“CME Interactions as Sources of CME Geoeffectiveness: The Formation of the Complex Ejecta and Intense Geomagnetic Storm in 2017 Early September. Astrophysical Journal, Supplement Series, 2020, 247, 21.	7.7	78
27	Subsurface Radiation Environment of Mars and Its Implication for Shielding Protection of Future Habitats. Journal of Geophysical Research E: Planets, 2020, 125, e2019JE006246.	3.6	26
28	A new model describing Forbush Decreases at Mars: combining the heliospheric modulation and the atmospheric influence. Earth and Planetary Physics, 2020, 4, 1-11.	1.1	4
29	First Solar Energetic Particles Measured on the Lunar Far-side. Astrophysical Journal Letters, 2020, 902, L30.	8.3	11
30	Unusual Plasma and Particle Signatures at Mars and STEREO-A Related to CMEâ€“CME Interaction. Astrophysical Journal, 2019, 880, 18.	4.5	22
31	Measurements of radiation quality factor on Mars with the Mars Science Laboratory Radiation Assessment Detector. Life Sciences in Space Research, 2019, 22, 89-97.	2.3	13
32	The Pivot Energy of Solar Energetic Particles Affecting the Martian Surface Radiation Environment. Astrophysical Journal Letters, 2019, 883, L12.	8.3	6
33	A Catalogue of Forbush Decreases Recorded on the Surface of Mars from 2012 Until 2016: Comparison with Terrestrial FDs. Solar Physics, 2019, 294, 1.	2.5	15
34	Galactic Cosmic Ray induced absorbed dose rate in deep space â€“ Accounting for detector size, shape, material, as well as for the solar modulation. Journal of Space Weather and Space Climate, 2019, 9, A14.	3.3	12
35	Implementation and validation of the GEANT4/AtRIS code to model the radiation environment at Mars. Journal of Space Weather and Space Climate, 2019, 9, A2.	3.3	25
36	Ready functions for calculating the Martian radiation environment. Journal of Space Weather and Space Climate, 2019, 9, A7.	3.3	12

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37	Tracking and Validating ICMEs Propagating Toward Mars Using STEREO Heliospheric Imagers Combined With Forbush Decreases Detected by MSL/RAD. Space Weather, 2019, 17, 586-598.	3.7	9
38	Comparisons of Highâ€Linear Energy Transfer Spectra on the ISS and in Deep Space. Space Weather, 2019, 17, 396-418.	3.7	13
39	Multi-point galactic cosmic ray measurements between 1 and 4.5â€‰AU over a full solar cycle. Annales Geophysicae, 2019, 37, 903-918.	1.6	24
40	A Generalized Approach to Model the Spectra and Radiation Dose Rate of Solar Particle Events on the Surface of Mars. Astronomical Journal, 2018, 155, 49.	4.7	32
41	Understanding the Twist Distribution Inside Magnetic Flux Ropes by Anatomizing an Interplanetary Magnetic Cloud. Journal of Geophysical Research: Space Physics, 2018, 123, 3238-3261.	2.4	54
42	Opening a Window on ICME-driven GCR Modulation in the Inner Solar System. Astrophysical Journal, 2018, 856, 139.	4.5	27
43	Using Forbush Decreases to Derive the Transit Time of ICMEs Propagating from 1 AU to Mars. Journal of Geophysical Research: Space Physics, 2018, 123, 39-56.	2.4	17
44	Detecting Upward Directed Charged Particle Fluxes in the Mars Science Laboratory Radiation Assessment Detector. Earth and Space Science, 2018, 5, 2-18.	2.6	6
45	Measurements of Forbush decreases at Mars: both by MSL on ground and by MAVEN in orbit. Astronomy and Astrophysics, 2018, 611, A79.	5.1	29
46	Coronal Hard X-Ray Sources Revisited. Astrophysical Journal, 2018, 867, 82.	4.5	14
47	Genesis and Impulsive Evolution of the 2017 September 10 Coronal Mass Ejection. Astrophysical Journal, 2018, 868, 107.	4.5	79
48	Space Weather on the Surface of Mars: Impact of the September 2017 Events. Space Weather, 2018, 16, 1702-1708.	3.7	22
49	Space Weather Prediction to Enhance the Reliability of the More Electric Aircraft. , 2018, , .		1
50	Analysis of the Radiation Hazard Observed by RAD on the Surface of Mars During the September 2017 Solar Particle Event. Geophysical Research Letters, 2018, 45, 5845-5851.	4.0	29
51	Energetic Particle Radiation Environment Observed by RAD on the Surface of Mars During the September 2017 Event. Geophysical Research Letters, 2018, 45, 5305-5311.	4.0	29
52	Multi-spacecraft observations and transport simulations of solar energetic particles for the May 17th 2012 event. Astronomy and Astrophysics, 2018, 612, A116.	5.1	16
53	Modeling the Evolution and Propagation of 10 September 2017 CMEs and SEPs Arriving at Mars Constrained by Remote Sensing and In Situ Measurement. Space Weather, 2018, 16, 1156-1169.	3.7	61
54	Dependence of the Martian radiation environment on atmospheric depth: Modeling and measurement. Journal of Geophysical Research E: Planets, 2017, 122, 329-341.	3.6	26

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55	Measurements of the neutral particle spectra on Mars by MSL/RAD from 2015-11-15 to 2016-01-15. Life Sciences in Space Research, 2017, 14, 12-17.	2.3	21
56	The radiation environment on the surface of Mars - Summary of model calculations and comparison to RAD data. Life Sciences in Space Research, 2017, 14, 18-28.	2.3	57
57	Interplanetary coronal mass ejection observed at STEREOâ€A, Mars, comet 67P/Churyumovâ€Gerasimenko, Saturn, and New Horizons en route to Pluto: Comparison of its Forbush decreases at 1.4, 3.1, and 9.9ÂAU. Journal of Geophysical Research: Space Physics, 2017, 122, 7865-7890.	2.4	87
58	The charged particle radiation environment on Mars measured by MSL/RAD from November 15, 2015 to January 15, 2016. Life Sciences in Space Research, 2017, 14, 3-11.	2.3	29
59	Electron/positron measurements obtained with the Mars Science Laboratory Radiation Assessment Detector on the surface of Mars. Annales Geophysicae, 2016, 34, 133-141.	1.6	4
60	Suprathermal helium associated with corotating interaction regions: A case study. AIP Conference Proceedings, 2016, , .	0.4	0
61	The Martian surface radiation environment â€" a comparison of models and MSL/RAD measurements. Journal of Space Weather and Space Climate, 2016, 6, A13.	3.3	70
62	Charged particle spectra measured during the transit to Mars with the Mars Science Laboratory Radiation Assessment Detector (MSL/RAD). Life Sciences in Space Research, 2016, 10, 29-37.	2.3	23
63	Calibration and Characterization of the Radiation Assessment Detector (RAD) on Curiosity. Space Science Reviews, 2016, 201, 201-233.	8.1	30
64	MODELING THE VARIATIONS OF DOSE RATE MEASURED BY RAD DURING THE FIRST<i>MSL</i>MARTIAN YEAR: 2012â€"2014. Astrophysical Journal, 2015, 810, 24.	4.5	43
65	On determining the zenith angle dependence of the Martian radiation environment at Gale Crater altitudes. Geophysical Research Letters, 2015, 42, 10,557.	4.0	21
66	Variations of dose rate observed by MSL/RAD in transit to Mars. Astronomy and Astrophysics, 2015, 577, A58.	5.1	35
67	MSL-RAD radiation environment measurements. Radiation Protection Dosimetry, 2015, 166, 290-294.	0.8	18
68	Measurements of the neutron spectrum in transit to Mars on the Mars Science Laboratory. Life Sciences in Space Research, 2015, 5, 6-12.	2.3	34
69	Measurements of the neutron spectrum on the Martian surface with MSL/RAD. Journal of Geophysical Research E: Planets, 2014, 119, 594-603.	3.6	58
70	Comparison of Martian surface ionizing radiation measurements from MSLâ€RAD with Badhwarâ€O'Neill 2011/HZETRN model calculations. Journal of Geophysical Research E: Planets, 2014, 119, 1311-1321.	3.6	42
71	Diurnal variations of energetic particle radiation at the surface of Mars as observed by the Mars Science Laboratory Radiation Assessment Detector. Journal of Geophysical Research E: Planets, 2014, 119, 1345-1358.	3.6	44
72	Volatile and Organic Compositions of Sedimentary Rocks in Yellowknife Bay, Gale Crater, Mars. Science, 2014, 343, 1245267.	12.6	323

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73	Marsâ€™ Surface Radiation Environment Measured with the Mars Science Laboratoryâ€™s Curiosity Rover. Science, 2014, 343, 1244797.	12.6	475
74	Charged particle spectra obtained with the Mars Science Laboratory Radiation Assessment Detector (MSL/RAD) on the surface of Mars. Journal of Geophysical Research E: Planets, 2014, 119, 468-479.	3.6	64
75	The Hohmannâ€"Parker effect measured by the Mars Science Laboratory on the transfer from Earth to Mars: Consequences and opportunities. Planetary and Space Science, 2013, 89, 127-139.	1.7	20
76	Abundance and Isotopic Composition of Gases in the Martian Atmosphere from the Curiosity Rover. Science, 2013, 341, 263-266.	12.6	327
77	Volatile, Isotope, and Organic Analysis of Martian Fines with the Mars Curiosity Rover. Science, 2013, 341, 1238937.	12.6	367
78	Isotope Ratios of H, C, and O in CO ₂ and H ₂ O of the Martian Atmosphere. Science, 2013, 341, 260-263.	12.6	241
79	Measurements of Energetic Particle Radiation in Transit to Mars on the Mars Science Laboratory. Science, 2013, 340, 1080-1084.	12.6	503
80	Martian Fluvial Conglomerates at Gale Crater. Science, 2013, 340, 1068-1072.	12.6	326
81	THE SPECIFIC ACCELERATION RATE IN LOOP-STRUCTURED SOLAR FLARESâ€"IMPLICATIONS FOR ELECTRON ACCELERATION MODELS. Astrophysical Journal, 2013, 766, 28.	4.5	25
82	EMPIRICAL DETERMINATION OF THE ENERGY LOSS RATE OF ACCELERATED ELECTRONS IN A WELL-OBSERVED SOLAR FLARE. Astrophysical Journal, 2012, 751, 129.	4.5	9
83	PROPERTIES OF THE ACCELERATION REGIONS IN SEVERAL LOOP-STRUCTURED SOLAR FLARES. Astrophysical Journal, 2012, 755, 32.	4.5	43
84	Determination of the acceleration region size in a loop-structured solar flare. Astronomy and Astrophysics, 2012, 543, A53.	5.1	31
85	RELATIONSHIP BETWEEN HARD AND SOFT X-RAY EMISSION COMPONENTS OF A SOLAR FLARE. Astrophysical Journal, 2011, 728, 4.	4.5	15
86	Is the 3-D magnetic null point with a convective electric field an efficient particle accelerator?. Astronomy and Astrophysics, 2010, 513, A73.	5.1	24