Cary J Zeitlin

List of Publications by Year
in descending order

58 papers	2,841 citations	218677 26 h-index	175258 52 g-index
58 all docs	58 docs citations	58 times ranked	2382 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	Directionality of the Martian Surface Radiation and Derivation of the Upward Albedo Radiation. Geophysical Research Letters, 2021, 48, e2021GL093912.	4.0	6
3	Natural Radiation Shielding on Mars Measured With the MSL/RAD Instrument. Journal of Geophysical Research E: Planets, 2021, 126, e2021JE006851.	3.6	4
4	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
5	Longâ€Term Observations of Galactic Cosmic Ray LET Spectra in Lunar Orbit by LRO/CRaTER. Space Weather, 2020, 18, e2020SW002543.	3.7	3
6	Comparing the Properties of ICMEâ€Induced Forbush Decreases at Earth and Mars. Journal of Geophysical Research: Space Physics, 2020, 125, e2019JA027662.	2.4	14
7	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
8	The Pivot Energy of Solar Energetic Particles Affecting the Martian Surface Radiation Environment. Astrophysical Journal Letters, 2019, 883, L12.	8.3	6
9	5.2.5â€ƒCalibration of Detectors that Have Flown on Mir, ISS, Lunar Reconnaissance Orbiter, the Orion Spacecraft and the Mars Science Laboratory. Radioisotopes, 2019, 68, 433-441.	0.2	0
10	Update on Galactic Cosmic Ray Integral Flux Measurements in Lunar Orbit With CRaTER. Space Weather, 2019, 17, 1011.	3.7	8
11	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
12	Comparisons of Highâ€Linear Energy Transfer Spectra on the ISS and in Deep Space. Space Weather, 2019, 17, 396-418.	3.7	13
13	Mars Science Laboratory Observations of the 2018/Mars Year 34 Global Dust Storm. Geophysical Research Letters, 2019, 46, 71-79.	4.0	138
14	Update on the Worsening Particle Radiation Environment Observed by CRaTER and Implications for Future Human Deepâ€Space Exploration. Space Weather, 2018, 16, 289-303.	3.7	44
15	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
16	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
17	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
18	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

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19	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
20	Space Weather on the Surface of Mars: Impact of the September 2017 Events. Space Weather, 2018, 16, 1702-1708.	3.7	22
21	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
22	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
23	The Solar Particle Event on 10 September 2017 as observed onboard the International Space Station (ISS). Space Weather, 2018, 16, 1173-1189.	3.7	26
24	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
25	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
26	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
27	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
28	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
29	Solar modulation of the deep space galactic cosmic ray lineal energy spectrum measured by CRaTER, 2009â€“2014. Space Weather, 2016, 14, 247-258.	3.7	7
30	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
31	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
32	Calibration and Characterization of the Radiation Assessment Detector (RAD) on Curiosity. Space Science Reviews, 2016, 201, 201-233.	8.1	30
33	MODELING THE VARIATIONS OF DOSE RATE MEASURED BY RAD DURING THE FIRSTMSLMARTIAN YEAR: 2012â€“2014. Astrophysical Journal, 2015, 810, 24.	4.5	43
34	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
35	Variations of dose rate observed by MSL/RAD in transit to Mars. Astronomy and Astrophysics, 2015, 577, A58.	5.1	35
36	Update on Radiation Dose From Galactic and Solar Protons at the Moon Using the LRO/CRaTER Microdosimeter. Space Weather, 2015, 13, 363-364.	3.7	16

#	Article	IF	Citations
37	MSL-RAD radiation environment measurements. Radiation Protection Dosimetry, 2015, 166, 290-294.	0.8	18
38	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
39	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
40	Does the worsening galactic cosmic radiation environment observed by CRaTER preclude future manned deep space exploration?. Space Weather, 2014, 12, 622-632.	3.7	55
41	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
42	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
43	Marsâ€™ Surface Radiation Environment Measured with the Mars Science Laboratoryâ€™s Curiosity Rover. Science, 2014, 343, 1244797.	12.6	475
44	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
45	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
46	Measurements of Energetic Particle Radiation in Transit to Mars on the Mars Science Laboratory. Science, 2013, 340, 1080-1084.	12.6	503
47	Measurements of galactic cosmic ray shielding with the CRaTER instrument. Space Weather, 2013, 11, 284-296.	3.7	19
48	Relative contributions of galactic cosmic rays and lunar proton â€œalbedoâ€•to dose and dose rates near the Moon. Space Weather, 2013, 11, 643-650.	3.7	26
49	The Radiation Assessment Detector (RAD) Investigation. Space Science Reviews, 2012, 170, 503-558.	8.1	155
50	The first cosmic ray albedo proton map of the Moon. Journal of Geophysical Research, 2012, 117, .	3.3	12
51	Lunar radiation environment and space weathering from the Cosmic Ray Telescope for the Effects of Radiation (CRaTER). Journal of Geophysical Research, 2012, 117, .	3.3	67
52	Inversion of neutron/gamma spectra from scintillator measurements. Nuclear Instruments & Methods in Physics Research B, 2011, 269, 2641-2648.	1.4	23
53	CRaTER: The Cosmic Ray Telescope for the Effects ofÂRadiation Experiment on the Lunar Reconnaissance Orbiter Mission. Space Science Reviews, 2010, 150, 243-284.	8.1	123
54	Comparisons of fragmentation spectra using 1GeV/amu 56Fe data and the PHITS model. Radiation Measurements, 2008, 43, 1242-1253.	1.4	15

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55	Fragmentation cross sections of medium-energy<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:mmultiscripts><mml:mi mathvariant="normal">Cl</mml:mi><mml:mprescripts /><mml:none /><mml:mrow><mml:mn>35</mml:mn></mml:mrow></mml:mmultiscripts></mml:math>,<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:mmultiscripts><mml:mi	2.9	38
56	Fragmentation cross sections of 290 and 400 MeV/nucleon<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:mmultiscripts><mml:mi mathvariant="normal">C</mml:mi><mml:mprescripts /><mml:none /><mml:mrow><mml:mn>12</mml:mn></mml:mrow></mml:mmultiscripts></mml:math>beams on elemental targets. Physical Review C, 2007, 76, .	2.9	44
57	PHITS â€“ benchmark of partial charge-changing cross sections for intermediate-mass systems. Nuclear Instruments & Methods in Physics Research B, 2007, 254, 30-38.	1.4	17
58	Radiation climate map for analyzing risks to astronauts on the mars surface from galactic cosmic rays. Space Science Reviews, 2004, 110, 143-156.	8.1	64