Bent Ehresmann

List of Publications by Year
in descending order

56 papers	6,428 citations	172207 29 h-index	149479 56 g-index
56 all docs	56 docs citations	56 times ranked	4458 citing authors

#	Article	IF	Citations
1	A Habitable Fluvio-Lacustrine Environment at Yellowknife Bay, Gale Crater, Mars. Science, 2014, 343, 1242777.	6.0	687
2	Mineralogy of a Mudstone at Yellowknife Bay, Gale Crater, Mars. Science, 2014, 343, 1243480.	6.0	508
3	Measurements of Energetic Particle Radiation in Transit to Mars on the Mars Science Laboratory. Science, 2013, 340, 1080-1084.	6.0	503
4	Marsâ€™ Surface Radiation Environment Measured with the Mars Science Laboratoryâ€™s Curiosity Rover. Science, 2014, 343, 1244797.	6.0	475
5	Volatile, Isotope, and Organic Analysis of Martian Fines with the Mars Curiosity Rover. Science, 2013, 341, 1238937.	6.0	367
6	X-ray Diffraction Results from Mars Science Laboratory: Mineralogy of Rocknest at Gale Crater. Science, 2013, 341, 1238932.	6.0	327
7	Abundance and Isotopic Composition of Gases in the Martian Atmosphere from the Curiosity Rover. Science, 2013, 341, 263-266.	6.0	327
8	Martian Fluvial Conglomerates at Gale Crater. Science, 2013, 340, 1068-1072.	6.0	326
9	Volatile and Organic Compositions of Sedimentary Rocks in Yellowknife Bay, Gale Crater, Mars. Science, 2014, 343, 1245267.	6.0	323
10	Curiosity at Gale Crater, Mars: Characterization and Analysis of the Rocknest Sand Shadow. Science, 2013, 341, 1239505.	6.0	280
11	Elemental Geochemistry of Sedimentary Rocks at Yellowknife Bay, Gale Crater, Mars. Science, 2014, 343, 1244734.	6.0	246
12	Isotope Ratios of H, C, and O in CO ₂ and H ₂ O of the Martian Atmosphere. Science, 2013, 341, 260-263.	6.0	241
13	In Situ Radiometric and Exposure Age Dating of the Martian Surface. Science, 2014, 343, 1247166.	6.0	224
14	Soil Diversity and Hydration as Observed by ChemCam at Gale Crater, Mars. Science, 2013, 341, 1238670.	6.0	215
15	The Radiation Assessment Detector (RAD) Investigation. Space Science Reviews, 2012, 170, 503-558.	3.7	155
16	The Petrochemistry of Jake_M: A Martian Mugearite. Science, 2013, 341, 1239463.	6.0	134
17	Low Upper Limit to Methane Abundance on Mars. Science, 2013, 342, 355-357.	6.0	103
18	The Martian surface radiation environment â€“ a comparison of models and MSL/RAD measurements. Journal of Space Weather and Space Climate, 2016, 6, A13.	1.1	70

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19	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.	1.5	64
20	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.	1.3	61
21	Measurements of the neutron spectrum on the Martian surface with MSL/RAD. Journal of Geophysical Research E: Planets, 2014, 119, 594-603.	1.5	58
22	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.	1.2	57
23	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.	1.5	44
24	MODELING THE VARIATIONS OF DOSE RATE MEASURED BY RAD DURING THE FIRSTMSLMARTIAN YEAR: 2012â€“2014. Astrophysical Journal, 2015, 810, 24.	1.6	43
25	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.	1.5	42
26	Variations of dose rate observed by MSL/RAD in transit to Mars. Astronomy and Astrophysics, 2015, 577, A58.	2.1	35
27	Measurements of the neutron spectrum in transit to Mars on the Mars Science Laboratory. Life Sciences in Space Research, 2015, 5, 6-12.	1.2	34
28	Calibration and Characterization of the Radiation Assessment Detector (RAD) on Curiosity. Space Science Reviews, 2016, 201, 201-233.	3.7	30
29	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.	1.2	29
30	Measurements of Forbush decreases at Mars: both by MSL on ground and by MAVEN in orbit. Astronomy and Astrophysics, 2018, 611, A79.	2.1	29
31	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.	1.5	29
32	Energetic Particle Radiation Environment Observed by RAD on the Surface of Mars During the September 2017 Event. Geophysical Research Letters, 2018, 45, 5305-5311.	1.5	29
33	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.	9.1	27
34	Dependence of the Martian radiation environment on atmospheric depth: Modeling and measurement. Journal of Geophysical Research E: Planets, 2017, 122, 329-341.	1.5	26
35	Inversion of neutron/gamma spectra from scintillator measurements. Nuclear Instruments & Methods in Physics Research B, 2011, 269, 2641-2648.	0.6	23
36	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.	1.2	23

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37	Space Weather on the Surface of Mars: Impact of the September 2017 Events. Space Weather, 2018, 16, 1702-1708.	1.3	22
38	On determining the zenith angle dependence of the Martian radiation environment at Gale Crater altitudes. Geophysical Research Letters, 2015, 42, 10,557.	1.5	21
39	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.	1.2	21
40	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.	0.9	20
41	Influence of higher atmospheric pressure on the Martian radiation environment: Implications for possible habitability in the Noachian epoch. Journal of Geophysical Research, 2011, 116, n/a-n/a.	3.3	19
42	MSL-RAD radiation environment measurements. Radiation Protection Dosimetry, 2015, 166, 290-294.	0.4	18
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.	0.8	17
44	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.	1.1	16
45	Measurements of radiation quality factor on Mars with the Mars Science Laboratory Radiation Assessment Detector. Life Sciences in Space Research, 2019, 22, 89-97.	1.2	13
46	Comparisons of Highâ€Linear Energy Transfer Spectra on the ISS and in Deep Space. Space Weather, 2019, 17, 396-418.	1.3	13
47	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.	1.3	9
48	Results from the dynamic albedo of neutrons (DAN) passive mode experiment: Yellowknife Bay to Amargosa Valley (Sols 201â€“753). Icarus, 2018, 299, 513-537.	1.1	7
49	Detecting Upward Directed Charged Particle Fluxes in the Mars Science Laboratory Radiation Assessment Detector. Earth and Space Science, 2018, 5, 2-18.	1.1	6
50	The Pivot Energy of Solar Energetic Particles Affecting the Martian Surface Radiation Environment. Astrophysical Journal Letters, 2019, 883, L12.	3.0	6
51	A semiconductor-based neutron detection system for planetary exploration. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 2020, 966, 163852.	0.7	6
52	Directionality of the Martian Surface Radiation and Derivation of the Upward Albedo Radiation. Geophysical Research Letters, 2021, 48, e2021GL093912.	1.5	6
53	Electron/positron measurements obtained with the Mars Science Laboratory Radiation Assessment Detector on the surface of Mars. Annales Geophysicae, 2016, 34, 133-141.	0.6	4
54	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.	1.1	4

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55	Natural Radiation Shielding on Mars Measured With the MSL/RAD Instrument. Journal of Geophysical Research E: Planets, 2021, 126, e2021JE006851.	1.5	4
56	The Martian surface radiation environment at solar minimum measured with MSL/RAD. Icarus, 2023, 393, 115035.	1.1	2