

R A Mewaldt

List of Publications by Year in descending order

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103
papers

4,936
citations

87723

38
h-index

95083

68
g-index

104
all docs

104
docs citations

104
times ranked

2383
citing authors

#	ARTICLE	IF	CITATIONS
1	Shock Geometry, Seed Populations, and the Origin of Variable Elemental Composition at High Energies in Large Gradual Solar Particle Events. <i>Astrophysical Journal</i> , 2005, 625, 474-495.	1.6	356
2	STEREO IMPACT Investigation Goals, Measurements, and Data Products Overview. <i>Space Science Reviews</i> , 2008, 136, 117-184.	3.7	257
3	>25 MeV Proton Events Observed by the High Energy Telescopes on the STEREO A and B Spacecraft and/or at Earth During the First 1/4 Seven Years of the STEREO Mission. <i>Solar Physics</i> , 2014, 289, 3059-3107.	1.0	195
4	Measurement of the Secondary Radionuclides ^{10}Be , ^{26}Al , ^{36}Cl , ^{54}Mn , and ^{14}C and Implications for the Galactic Cosmic-Ray Age. <i>Astrophysical Journal</i> , 2001, 563, 768-792.	1.6	187
5	Proton, helium, and electron spectra during the large solar particle events of October-November 2003. <i>Journal of Geophysical Research</i> , 2005, 110, .	3.3	187
6	Energy Spectra, Composition, and Other Properties of Ground-Level Events During Solar Cycle 23. <i>Space Science Reviews</i> , 2012, 171, 97-120.	3.7	139
7	Integrated Science Investigation of the Sun (ISIS): Design of the Energetic Particle Investigation. <i>Space Science Reviews</i> , 2016, 204, 187-256.	3.7	139
8	Two components in major solar particle events. <i>Geophysical Research Letters</i> , 2003, 30, .	1.5	133
9	Heavy-ion Elemental Abundances in Large Solar Energetic Particle Events and Their Implications for the Seed Population. <i>Astrophysical Journal</i> , 2006, 649, 470-489.	1.6	128
10	Role of flares and shocks in determining solar energetic particle abundances. <i>Journal of Geophysical Research</i> , 2006, 111, .	3.3	114
11	Are energetic electrons in the solar wind the source of the outer radiation belt?. <i>Geophysical Research Letters</i> , 1997, 24, 923-926.	1.5	110
12	Spectral Properties of He and Heavy Ions in ^3He -rich Solar Flares. <i>Astrophysical Journal</i> , 2002, 574, 1039-1058.	1.6	107
13	Shock Acceleration of Ions in the Heliosphere. <i>Space Science Reviews</i> , 2012, 173, 247-281.	3.7	103
14	Measurement of the Abundance of Radioactive ^{10}Be and Other Light Isotopes in Cosmic Radiation up to 2 GeV Nucleon $^{-1}$ with the Balloon-borne Instrument ISOMAX. <i>Astrophysical Journal</i> , 2004, 611, 892-905.	1.6	101
15	The Low-Energy Telescope (LET) and SEP Central Electronics for the STEREO Mission. <i>Space Science Reviews</i> , 2008, 136, 285-362.	3.7	101
16	Cosmic-Ray Neon, Wolf-Rayet Stars, and the Superbubble Origin of Galactic Cosmic Rays. <i>Astrophysical Journal</i> , 2005, 634, 351-364.	1.6	99
17	The High Energy Telescope for STEREO. <i>Space Science Reviews</i> , 2008, 136, 391-435.	3.7	96
18	Constraints on the Time Delay between Nucleosynthesis and Cosmic-Ray Acceleration from Observations of ^{59}Ni and ^{59}Co . <i>Astrophysical Journal</i> , 1999, 523, L61-L64.	1.6	91

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19	Charge states of solar energetic particles using the geomagnetic cutoff technique: SAMPEX measurements in the 6 November 1997 solar particle event. <i>Geophysical Research Letters</i> , 1999, 26, 173-176.	1.5	89
20	New observations of heavy-ion-rich solar particle events from ACE. <i>Geophysical Research Letters</i> , 1999, 26, 2697-2700.	1.5	89
21	The Ionic Charge of Solar Energetic Particles with Energies of 0.3–70 MeV per Nucleon. <i>Astrophysical Journal</i> , 1997, 477, 495-501.	1.6	87
22	Measurements of the Ionic Charge States of Solar Energetic Particles Using the Geomagnetic Field. <i>Astrophysical Journal</i> , 1995, 452, .	1.6	85
23	Evidence for Multiply Charged Anomalous Cosmic Rays. <i>Astrophysical Journal</i> , 1996, 466, L43-L46.	1.6	82
24	Particle acceleration and sources in the November 1997 solar energetic particle events. <i>Geophysical Research Letters</i> , 1999, 26, 141-144.	1.5	72
25	Heavy ion abundances and spectra from the large solar energetic particle events of October-November 2003. <i>Journal of Geophysical Research</i> , 2005, 110, .	3.3	71
26	COSMIC RAY ORIGIN IN OB ASSOCIATIONS AND PREFERENTIAL ACCELERATION OF REFRACTORY ELEMENTS: EVIDENCE FROM ABUNDANCES OF ELEMENTS ^{26}Fe THROUGH ^{34}Se . <i>Astrophysical Journal</i> , 2009, 697, 2083-2088.	1.6	64
27	Charge State Measurements of Solar Energetic Particles Observed with SAMPEX. <i>Astrophysical Journal</i> , 1995, 452, 901.	1.6	64
28	SHOCK GEOMETRY AND SPECTRAL BREAKS IN LARGE SEP EVENTS. <i>Astrophysical Journal</i> , 2009, 702, 998-1004.	1.6	61
29	Galactic cosmic ray composition and energy spectra. <i>Advances in Space Research</i> , 1994, 14, 737-747.	1.2	59
30	On the Differences in Composition between Solar Energetic Particles and Solar Wind. <i>Space Science Reviews</i> , 2007, 130, 207-219.	3.7	55
31	Inferred charge states of high energy solar particles from the solar isotope spectrometer on ACE. <i>Geophysical Research Letters</i> , 1999, 26, 149-152.	1.5	53
32	Understanding large SEP events with the PATH code: Modeling of the 13 December 2006 SEP event. <i>Journal of Geophysical Research</i> , 2010, 115, .	3.3	49
33	INTERPLANETARY PROPAGATION OF SOLAR ENERGETIC PARTICLE HEAVY IONS OBSERVED AT 1 AU AND THE ROLE OF ENERGY SCALING. <i>Astrophysical Journal</i> , 2012, 761, 104.	1.6	45
34	USING THE PATH CODE FOR MODELING GRADUAL SEP EVENTS IN THE INNER HELIOSPHERE. <i>Astrophysical Journal</i> , 2009, 693, 894-900.	1.6	44
35	Magnetospheric response to magnetic cloud (coronal mass ejection) events: Relativistic electron observations from SAMPEX and Polar. <i>Journal of Geophysical Research</i> , 1999, 104, 24885-24894.	3.3	43
36	Long-Term Fluences of Solar Energetic Particles from H to Fe. <i>Space Science Reviews</i> , 2007, 130, 323-328.	3.7	43

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37	The Role of Interplanetary Scattering in Western Hemisphere Large Solar Energetic Particle Events. <i>Astrophysical Journal</i> , 2006, 647, L65-L68.	1.6	41
38	<i>STEREO</i> OBSERVATIONS OF ENERGETIC NEUTRAL HYDROGEN ATOMS DURING THE 2006 DECEMBER 5 SOLAR FLARE. <i>Astrophysical Journal</i> , 2009, 693, L11-L15.	1.6	40
39	The Cosmicâ€Ray ³ He/ ⁴ He Ratio from 200 MeV per Nucleon [~] 1 to 3.7 GeV per Nucleon [~] 1. <i>Astrophysical Journal</i> , 1998, 496, 490-502.	1.6	38
40	THE LONGITUDINAL DEPENDENCE OF HEAVY-ION COMPOSITION IN THE 2013 APRIL 11 SOLAR ENERGETIC PARTICLE EVENT. <i>Astrophysical Journal</i> , 2014, 793, 35.	1.6	37
41	Validation of the effect of crossâ€calibrated GOES solar proton effective energies on derived integral fluxes by comparison with STEREO observations. <i>Space Weather</i> , 2017, 15, 290-309.	1.3	36
42	Observations of Jovian electrons at 1 AU. <i>Journal of Geophysical Research</i> , 1976, 81, 2397-2400.	3.3	34
43	SPECTRAL PROPERTIES OF LARGE GRADUAL SOLAR ENERGETIC PARTICLE EVENTS. II. SYSTEMATIC Q/M DEPENDENCE OF HEAVY ION SPECTRAL BREAKS. <i>Astrophysical Journal</i> , 2016, 828, 106.	1.6	34
44	Shock Connectivity and the Late Cycle 24 Solar Energetic Particle Events in July and September 2017. <i>Space Weather</i> , 2018, 16, 557-568.	1.3	34
45	Long-term fluences of energetic particles in the heliosphere. <i>AIP Conference Proceedings</i> , 2001, , .	0.3	33
46	The Solar Energetic Particle Event of 14 December 2006. <i>Solar Physics</i> , 2009, 256, 443-462.	1.0	32
47	Solar Elemental Composition Based on Studies of Solar Energetic Particles. <i>Space Science Reviews</i> , 2007, 130, 183-194.	3.7	31
48	ENERGETIC PARTICLE OBSERVATIONS AND PROPAGATION IN THE THREE-DIMENSIONAL HELIOSPHERE DURING THE 2006 DECEMBER EVENTS. <i>Astrophysical Journal</i> , 2009, 704, 469-476.	1.6	30
49	GALACTIC COSMIC RAY ORIGINS AND OB ASSOCIATIONS: EVIDENCE FROM SuperTIGER OBSERVATIONS OF ELEMENTS ₂₆ Fe THROUGH ₄₀ Zr. <i>Astrophysical Journal</i> , 2016, 831, 148.	1.6	30
50	Isotope abundances of solar coronal material derived from solar energetic particle measurements. <i>Astrophysical Journal</i> , 1989, 337, 959.	1.6	30
51	An Overview of the Origin of Galactic Cosmic Rays as Inferred from Observations of Heavy Ion Composition and Spectra. <i>Space Science Reviews</i> , 2007, 130, 415-429.	3.7	29
52	Properties of Suprathermal-through-energetic He Ions Associated with Stream Interaction Regions Observed over the Parker Solar Probeâ€™s First Two Orbits. <i>Astrophysical Journal, Supplement Series</i> , 2020, 246, 56.	3.0	29
53	Atmospheric production of radiation belt light isotopes. <i>Journal of Geophysical Research</i> , 1996, 101, 19745-19757.	3.3	27
54	³ He-rich Solar Energetic Particle Observations at the Parker Solar Probe and near Earth. <i>Astrophysical Journal, Supplement Series</i> , 2020, 246, 42.	3.0	27

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55	OB Associations, Wolfâ€“Rayet Stars, and the Origin of Galactic Cosmic Rays. <i>Space Science Reviews</i> , 2007, 130, 439-449.	3.7	26
56	Sampex observations of energetic hydrogen isotopes in the inner zone. <i>Radiation Measurements</i> , 1996, 26, 967-978.	0.7	25
57	Solar Isotopic Composition as Determined Using Solar Energetic Particles. <i>Space Science Reviews</i> , 2007, 130, 195-205.	3.7	25
58	The radial diffusion coefficient of 1.3×10^{23} MeV protons in recurrent proton streams. <i>Geophysical Research Letters</i> , 1978, 5, 965-968.	1.5	24
59	The elemental and isotopic composition of galactic cosmic ray nuclei. <i>Reviews of Geophysics</i> , 1983, 21, 295-305.	9.0	22
60	Latitudinal Gradients of Galactic Cosmic Rays during the 2007 Solar Minimum. <i>Astrophysical Journal</i> , 2008, 689, 1443-1447.	1.6	22
61	Event-to-event variations in the isotopic composition of neon in solar energetic particle events. <i>Geophysical Research Letters</i> , 1999, 26, 2693-2696.	1.5	21
62	Solar minimum spectra of galactic cosmic rays and their implications for models of the near-Earth radiation environment. <i>Journal of Geophysical Research</i> , 2001, 106, 29979-29987.	3.3	21
63	The isotopic composition of galactic cosmic-ray iron nuclei. <i>Astrophysical Journal</i> , 1980, 236, L121.	1.6	19
64	Charge States of Energetic Particles from Corotating Interaction Regions as Constraints on Their Source. <i>Astrophysical Journal</i> , 2002, 566, 555-561.	1.6	19
65	Elemental Fractionation in Small Solar Energetic Particle Events. <i>Astrophysical Journal</i> , 2003, 594, 592-604.	1.6	18
66	Characteristics of the spectra of protons and alpha particles in recurrent events at 1 Au. <i>Geophysical Research Letters</i> , 1979, 6, 589-592.	1.5	17
67	The Source Material for Large Solar Energetic Particle Events. , 2006, , 115.		17
68	Isotopic and elemental composition of the anomalous low-energy cosmic-ray fluxes. <i>Astrophysical Journal</i> , 1976, 205, 931.	1.6	17
69	The isotopic composition of cosmic ray B, C, N, and O nuclei. <i>Astrophysical Journal</i> , 1981, 251, L27.	1.6	17
70	Simulation of charge-equilibration and acceleration of solar energetic ions. <i>AIP Conference Proceedings</i> , 2000, , .	0.3	16
71	Maps of hydrogen isotopes at low altitudes in the inner zone from sampex observations. <i>Advances in Space Research</i> , 1998, 21, 1679-1682.	1.2	15
72	Unusual isotopic composition of solar energetic particles observed in the November 6, 1997 event. <i>Geophysical Research Letters</i> , 1999, 26, 153-156.	1.5	15

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73	A new view of energetic particles from stream interaction regions observed by Parker Solar Probe. <i>Astronomy and Astrophysics</i> , 2021, 650, A24.	2.1	15
74	Elemental Composition at the Cosmic-Ray Source Derived from the ACE-CRIS Instrument. I. ^{6}C to ^{28}Ni . <i>Astrophysical Journal</i> , 2018, 865, 69.	1.6	14
75	The Energy Spectrum of 0.16 to 2 MeV Electrons during Solar Quiet Times. <i>Astrophysical Journal</i> , 1974, 192, 541.	1.6	14
76	Modes of energy transfer from the solar wind to the inner magnetosphere. <i>Physics of Plasmas</i> , 2003, 10, 463-473.	0.7	12
77	HEAVY-ION FRACTIONATION IN THE IMPULSIVE SOLAR ENERGETIC PARTICLE EVENT OF 2002 AUGUST 20: ELEMENTS, ISOTOPES, AND INFERRED CHARGE STATES. <i>Astrophysical Journal</i> , 2010, 719, 1212-1229.	1.6	12
78	The ionic charge state composition at high energies in large solar energetic particle events in solar cycle 23. <i>AIP Conference Proceedings</i> , 2001, , .	0.3	11
79	Radial and latitudinal gradients of anomalous cosmic ray oxygen in the inner heliosphere. <i>Geophysical Research Letters</i> , 2009, 36, .	1.5	11
80	He-3 in galactic cosmic rays. <i>Astrophysical Journal</i> , 1986, 311, 979.	1.6	11
81	The isotopic composition of solar energetic particles. <i>AIP Conference Proceedings</i> , 2000, , .	0.3	9
82	Multipoint connectivity analysis of the May 2007 solar energetic particle events. <i>Journal of Geophysical Research</i> , 2010, 115, .	3.3	8
83	Variable fractionation of solar energetic particles according to first ionization potential. <i>AIP Conference Proceedings</i> , 2000, , .	0.3	6
84	Modulation of Jovian electrons at 1 AU during solar cycles 22-23. <i>Geophysical Research Letters</i> , 2003, 30, .	1.5	6
85	A Novel Technique to Infer Ionic Charge States of Solar Energetic Particles. <i>Astrophysical Journal</i> , 2008, 679, 910-919.	1.6	6
86	THE PHOSPHORUS, SULFUR, ARGON, AND CALCIUM ISOTOPIC COMPOSITION OF THE GALACTIC COSMIC RAY SOURCE. <i>Astrophysical Journal</i> , 2009, 695, 666-678.	1.6	6
87	Jovian, Solar, and other Possible Sources of Radiation Belt Particles. <i>Geophysical Monograph Series</i> , 0, , 49-55.	0.1	6
88	TIME EVOLUTION OF ELEMENTAL RATIOS IN SOLAR ENERGETIC PARTICLE EVENTS. <i>Astrophysical Journal</i> , 2017, 835, 71.	1.6	6
89	Isotopic abundances in the solar corona as inferred from ACE measurements of solar energetic particles. <i>AIP Conference Proceedings</i> , 2001, , .	0.3	5
90	A model of the secondary radiation belt. <i>Journal of Geophysical Research</i> , 2008, 113, .	3.3	5

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91	The Coronal Isotopic Composition as Determined Using Solar Energetic Particles. AIP Conference Proceedings, 2003, , .	0.3	4
92	Long-Term Fluences of Solar Energetic Particles from H to Fe. Space Sciences Series of ISSI, 2007, , 323-328.	0.0	4
93	Evidence for Energetic Neutral Hydrogen Emission from Solar Particle Events. Astrophysical Journal, 2021, 923, 195.	1.6	4
94	Suprathermal Ion Energy Spectra and Anisotropies near the Heliospheric Current Sheet Crossing Observed by the Parker Solar Probe during Encounter 7. Astrophysical Journal, 2022, 927, 62.	1.6	3
95	Heliospheric Transport of Neutron-Decay Protons. Solar Physics, 2012, 281, 449.	1.0	2
96	On the Differences in Composition between Solar Energetic Particles and Solar Wind. Space Sciences Series of ISSI, 2007, , 207-219.	0.0	2
97	First Measurements of Jovian Electrons by Parker Solar Probe/ISÅ™IS within 0.5 au of the Sun. Astrophysical Journal, 2022, 933, 171.	1.6	2
98	Unusual Observations during the December 2006 Solar Energetic Particle Events within an Interplanetary Coronal Mass Ejection at 1 AU. AIP Conference Proceedings, 2008, , .	0.3	1
99	The Low-Energy Telescope (LET) and SEP Central Electronics for the STEREO Mission. , 2008, , 285-362.		1
100	Shock Acceleration of Ions in the Heliosphere. Space Sciences Series of ISSI, 2012, , 247-281.	0.0	1
101	OB Associations, Wolfâ€™Rayet Stars, and the Origin of Galactic Cosmic Rays. Space Sciences Series of ISSI, 2007, , 439-449.	0.0	0
102	Solar Isotopic Composition as Determined Using Solar Energetic Particles. Space Sciences Series of ISSI, 2007, , 195-205.	0.0	0
103	Solar Elemental Composition Based on Studies of Solar Energetic Particles. Space Sciences Series of ISSI, 2007, , 183-194.	0.0	0