Gary P Zank

List of Publications by Year
in descending order

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401 papers	17,320 citations	10984 71 h-index	20358 116 g-index
408 all docs	408 docs citations	408 times ranked	3670 citing authors

#	Article	IF	Citations
1	Global Observations of the Interstellar Interaction from the Interstellar Boundary Explorer (IBEX). Science, 2009, 326, 959-962.	12.6	461
2	Solar Wind Electrons Alphas and Protons (SWEAP) Investigation: Design of the Solar Wind and Coronal Plasma Instrument Suite for Solar Probe Plus. Space Science Reviews, 2016, 204, 131-186.	8.1	439
3	Nonlinear Collisionless Perpendicular Diffusion of Charged Particles. Astrophysical Journal, 2003, 590, L53-L56.	4.5	430
4	Interstellar pickup ions and quasi-perpendicular shocks: Implications for the termination shock and interplanetary shocks. Journal of Geophysical Research, 1996, 101, 457-477.	3.3	346
5	Evolution of turbulent magnetic fluctuation power with heliospheric distance. Journal of Geophysical Research, 1996, 101, 17093-17107.	3.3	315
6	Nearly incompressible fluids. II: Magnetohydrodynamics, turbulence, and waves. Physics of Fluids A, Fluid Dynamics, 1993, 5, 257-273.	1.6	312
7	AlfvÃ©nic velocity spikes and rotational flows in the near-Sun solar wind. Nature, 2019, 576, 228-231.	27.8	311
8	Particle acceleration and coronal mass ejection driven shocks: A theoretical model. Journal of Geophysical Research, 2000, 105, 25079-25095.	3.3	300
9	Coronal Heating by Magnetohydrodynamic Turbulence Driven by Reflected Low-Frequency Waves. Astrophysical Journal, 1999, 523, L93-L96.	4.5	297
10	Heating of the low-latitude solar wind by dissipation of turbulent magnetic fluctuations. Journal of Geophysical Research, 2001, 106, 8253-8272.	3.3	256
11	Theory and Transport of Nearly Incompressible Magnetohydrodynamic Turbulence. Astrophysical Journal, 2017, 835, 147.	4.5	229
12	The Heliosphereâ€™s Interstellar Interaction: No Bow Shock. Science, 2012, 336, 1291-1293.	12.6	226
13	MHDâ€driven Kinetic Dissipation in the Solar Wind and Corona. Astrophysical Journal, 2000, 537, 1054-1062.	4.5	224
14	Comparison of Interstellar Boundary Explorer Observations with 3D Global Heliospheric Models. Science, 2009, 326, 966-968.	12.6	221
15	Turbulence, Spatial Transport, and Heating of the Solar Wind. Physical Review Letters, 1999, 82, 3444-3447.	7.8	212
16	PICK-UP IONS IN THE OUTER HELIOSHEATH: A POSSIBLE MECHANISM FOR THE INTERSTELLAR BOUNDARY EXplorer RIBBON. Astrophysical Journal Letters, 2010, 708, L126-L130.	8.3	212
17	Interaction of the solar wind with the local interstellar medium. Journal of Geophysical Research, 1995, 100, 21595-21604.	3.3	206
18	Interaction of the solar wind with the local interstellar medium: A multifluid approach. Journal of Geophysical Research, 1996, 101, 21639-21655.	3.3	191

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19	PARTICLE ACCELERATION VIA RECONNECTION PROCESSES IN THE SUPERSONIC SOLAR WIND. Astrophysical Journal, 2014, 797, 28.	4.5	185
20	The equations of reduced magnetohydrodynamics. Journal of Plasma Physics, 1992, 48, 85-100.	2.1	182
21	Particle acceleration at perpendicular shock waves: Model and observations. Journal of Geophysical Research, 2006, 111, .	3.3	182
22	Waves and turbulence in the solar wind. Journal of Geophysical Research, 1992, 97, 17189-17194.	3.3	163
23	The dynamical heliosphere. Journal of Geophysical Research, 2003, 108, .	3.3	163
24	MICROSTRUCTURE OF THE HELIOSPHERIC TERMINATION SHOCK: IMPLICATIONS FOR ENERGETIC NEUTRAL ATOM OBSERVATIONS. Astrophysical Journal, 2010, 708, 1092-1106.	4.5	161
25	Energetic particle acceleration and transport at coronal mass ejection-driven shocks. Journal of Geophysical Research, 2003, 108, .	3.3	159
26	The Effects of a Î°â€Distribution in the Heliosheath on the Global Heliosphere and ENA Flux at 1 AU. Astrophysical Journal, 2008, 682, 679-689.	4.5	156
27	DIFFUSIVE SHOCK ACCELERATION AND RECONNECTION ACCELERATION PROCESSES. Astrophysical Journal, 2015, 814, 137.	4.5	156
28	HELIOSPHERIC STRUCTURE: THE BOW WAVE AND THE HYDROGEN WALL. Astrophysical Journal, 2013, 763, 20.	4.5	154
29	The equations of nearly incompressible fluids. I. Hydrodynamics, turbulence, and waves. Physics of Fluids A, Fluid Dynamics, 1991, 3, 69-82.	1.6	148
30	Coronal Heating Distribution Due to Lowâ€Frequency, Waveâ€driven Turbulence. Astrophysical Journal, 2002, 575, 571-577.	4.5	145
31	The radial and latitudinal dependence of the cosmic ray diffusion tensor in the heliosphere. Journal of Geophysical Research, 1998, 103, 2085-2097.	3.3	140
32	A brief review of â€œsolar flare effectsâ€•on the ionosphere. Radio Science, 2009, 44, .	1.6	138
33	THE TRANSPORT OF LOW-FREQUENCY TURBULENCE IN ASTROPHYSICAL FLOWS. I. GOVERNING EQUATIONS. Astrophysical Journal, 2012, 745, 35.	4.5	133
34	Interstellar Mapping and Acceleration Probe (IMAP): A New NASA Mission. Space Science Reviews, 2018, 214, 1.	8.1	129
35	Threeâ€dimensional Features of the Outer Heliosphere due to Coupling between the Interstellar and Interplanetary Magnetic Fields. II. The Presence of Neutral Hydrogen Atoms. Astrophysical Journal, 2006, 644, 1299-1316.	4.5	126
36	Perpendicular diffusion coefficient for charged particles of arbitrary energy. Journal of Geophysical Research, 2004, 109, .	3.3	125

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37	Impact of space weather on climate and habitability of terrestrial-type exoplanets. International Journal of Astrobiology, 2020, 19, 136-194.	1.6	125
38	A KINETIC TRANSPORT THEORY FOR PARTICLE ACCELERATION AND TRANSPORT IN REGIONS OF MULTIPLE CONTRACTING AND RECONNECTING INERTIAL-SCALE FLUX ROPES. Astrophysical Journal, 2015, 801, 112.	4.5	124
39	Transport Processes in Space Physics and Astrophysics. Lecture Notes in Physics, 2014, , .	0.7	116
40	THREE-DIMENSIONAL FEATURES OF THE OUTER HELIOSPHERE DUE TO COUPLING BETWEEN THE INTERSTELLAR AND INTERPLANETARY MAGNETIC FIELDS. III. THE EFFECTS OF SOLAR ROTATION AND ACTIVITY CYCLE. Astrophysical Journal, 2009, 696, 1478-1490.	4.5	110
41	Particle acceleration and coronal mass ejection driven shocks: Shocks of arbitrary strength. Journal of Geophysical Research, 2003, 108, .	3.3	107
42	Effect of magnetic field geometry on the wave signature of the pickup of interstellar neutrals. Journal of Geophysical Research, 1994, 99, 19229.	3.3	106
43	SMALL-SCALE MAGNETIC ISLANDS IN THE SOLAR WIND AND THEIR ROLE IN PARTICLE ACCELERATION. I. DYNAMICS OF MAGNETIC ISLANDS NEAR THE HELIOSPHERIC CURRENT SHEET. Astrophysical Journal, 2015, 808, 181.	4.5	106
44	Galactic cosmic ray transport in the global heliosphere. Journal of Geophysical Research, 2003, 108, .	3.3	104
45	Parker Solar Probe Enters the Magnetically Dominated Solar Corona. Physical Review Letters, 2021, 127, 255101.	7.8	104
46	Realistic and time-varying outer heliospheric modelling. Monthly Notices of the Royal Astronomical Society, 2011, 416, 1475-1485.	4.4	101
47	Termination Shock Asymmetries as Seen by theVoyagerSpacecraft: The Role of the Interstellar Magnetic Field and Neutral Hydrogen. Astrophysical Journal, 2007, 668, 611-624.	4.5	100
48	Probing Heliospheric Asymmetries with an MHD-Kinetic model. Astrophysical Journal, 2008, 675, L41-L44.	4.5	99
49	II. Transport of Nearly Incompressible Magnetohydrodynamic Turbulence from 1 to 75 au. Astrophysical Journal, 2017, 841, 85.	4.5	99
50	Dissipation of pickup-induced waves: A solar wind temperature increase in the outer heliosphere?. Journal of Geophysical Research, 1995, 100, 17059.	3.3	98
51	Global Anisotropies in TeV Cosmic Rays Related to the Sunâ€™s Local Galactic Environment from IBEX. Science, 2014, 343, 988-990.	12.6	98
52	Threeâ€dimensional Features of the Outer Heliosphere Due to Coupling between the Interstellar and Interplanetary Magnetic Fields. I. Magnetohydrodynamic Model: Interstellar Perspective. Astrophysical Journal, 2004, 614, 1007-1021.	4.5	95
53	THREE-DIMENSIONAL FEATURES OF THE OUTER HELIOSPHERE DUE TO COUPLING BETWEEN THE INTERSTELLAR AND INTERPLANETARY MAGNETIC FIELDS. IV. SOLAR CYCLE MODEL BASED ONULYSSESOBSERVATIONS. Astrophysical Journal, 2013, 772, 2.	4.5	93
54	THE TRANSPORT OF LOW-FREQUENCY TURBULENCE IN ASTROPHYSICAL FLOWS. II. SOLUTIONS FOR THE SUPER-ALFVÃ‰NIC SOLAR WIND. Astrophysical Journal, 2015, 805, 63.	4.5	92

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55	Interaction between the solar wind and interstellar gas: A comparison between Monte Carlo and fluid approaches. Journal of Geophysical Research, 2006, 111, .	3.3	90
56	Interaction of a nonuniform solar wind with the local interstellar medium. Journal of Geophysical Research, 1996, 101, 17081-17092.	3.3	87
57	Acceleration and transport of heavy ions at coronal mass ejection-driven shocks. Journal of Geophysical Research, 2005, 110, .	3.3	87
58	THE EFFECT OF NEW INTERSTELLAR MEDIUM PARAMETERS ON THE HELIOSPHERE AND ENERGETIC NEUTRAL ATOMS FROM THE INTERSTELLAR BOUNDARY. Astrophysical Journal, 2014, 784, 73.	4.5	87
59	Analytic forms of the perpendicular cosmic ray diffusion coefficient for an arbitrary turbulence spectrum and applications on transport of Galactic protons and acceleration atÂinterplanetary shocks. Astrophysics and Space Science, 2010, 325, 99-111.	1.4	86
60	The Pickup Ion-mediated Solar Wind. Astrophysical Journal, 2018, 869, 23.	4.5	86
61	INHOMOGENEOUS NEARLY INCOMPRESSIBLE DESCRIPTION OF MAGNETOHYDRODYNAMIC TURBULENCE. Astrophysical Journal, 2010, 718, 148-167.	4.5	85
62	STABILITY OF A PICKUP ION RING-BEAM POPULATION IN THE OUTER HELIOSHEATH: IMPLICATIONS FOR THEIBEXRIBBON. Astrophysical Journal, 2010, 719, 1097-1103.	4.5	84
63	Particle Acceleration at Interplanetary Shocks. Space Science Reviews, 2007, 130, 255-272.	8.1	83
64	SMALL-SCALE MAGNETIC ISLANDS IN THE SOLAR WIND AND THEIR ROLE IN PARTICLE ACCELERATION. II. PARTICLE ENERGIZATION INSIDE MAGNETICALLY CONFINED CAVITIES. Astrophysical Journal, 2016, 827, 122.	4.5	80
65	Theory and Transport of Nearly Incompressible Magnetohydrodynamic Turbulence. IV. Solar Coronal Turbulence. Astrophysical Journal, 2018, 854, 32.	4.5	80
66	The Origin of Switchbacks in the Solar Corona: Linear Theory. Astrophysical Journal, 2020, 903, 1.	4.5	78
67	HELIOSPHERIC ASYMMETRIES AND 2-3 kHz RADIO EMISSION UNDER STRONG INTERSTELLAR MAGNETIC FIELD CONDITIONS. Astrophysical Journal, 2009, 695, L31-L34.	4.5	77
68	Influence of the Solar Cycle on Turbulence Properties and Cosmic-Ray Diffusion. Astrophysical Journal, 2018, 856, 94.	4.5	75
69	Interaction of a nonuniform solar wind with the local interstellar medium: 2. A two-fluid model. Journal of Geophysical Research, 1997, 102, 19779-19787.	3.3	74
70	Mixed particle acceleration at CME-driven shocks and flares. Geophysical Research Letters, 2005, 32, .	4.0	74
71	Particle injection and the structure of energetic-particle-modified shocks. Astrophysical Journal, 1993, 406, 67.	4.5	73
72	Phenomenology of hydromagnetic turbulence in a uniformly expanding medium. Journal of Plasma Physics, 1996, 56, 659-675.	2.1	72

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73	An Unusual Energetic Particle Flux Enhancement Associated with Solar Wind Magnetic Island Dynamics. Astrophysical Journal Letters, 2018, 864, L34.	8.3	71
74	Heliospheric Response to Different Possible Interstellar Environments. Astrophysical Journal, 2006, 647, 1491-1505.	4.5	70
75	Oneâ€versus Twoâ€Shock Heliosphere: Constraining Models with Goddard High Resolution Spectrograph LyÎ± Spectra toward Î± Centauri. Astrophysical Journal, 1997, 487, 259-270.	4.5	70
76	An evaluation of perpendicular diffusion models regarding cosmic ray modulation on the basis of a hydromagnetic description for solar wind turbulence. Journal of Geophysical Research, 1999, 104, 24845-24862.	3.3	69
77	A Reduced Magnetohydrodynamic Model of Coronal Heating in Open Magnetic Regions Driven by Reflected Lowâ€Frequency Alfven Waves. Astrophysical Journal, 2001, 551, 565-575.	4.5	68
78	Heliospheric, Astrospheric, and Interstellar LyÎ± Absorption toward 36 Ophiuchi. Astrophysical Journal, 2000, 537, 304-311.	4.5	68
79	Nearly incompressible hydrodynamics and heat conduction. Physical Review Letters, 1990, 64, 1243-1246.	7.8	66
80	Heliopause stability in the presence of neutral atoms: Rayleigh-Taylor dispersion analysis and axisymmetric MHD simulations. Journal of Geophysical Research, 2005, 110, .	3.3	66
81	Turn-on of 2â€“3 kHz radiation beyond the heliopause. Geophysical Research Letters, 2002, 29, 47-1.	4.0	61
82	On the Possibility of a Strong Magnetic Field in the Local Interstellar Medium. Astrophysical Journal, 2004, 604, 700-706.	4.5	61
83	SHOCK GEOMETRY AND SPECTRAL BREAKS IN LARGE SEP EVENTS. Astrophysical Journal, 2009, 702, 998-1004.	4.5	61
84	INTERSTELLAR BOUNDARY EXPLORERMEASUREMENTS AND MAGNETIC FIELD IN THE VICINITY OF THE HELIOPAUSE. Astrophysical Journal, 2011, 742, 104.	4.5	61
85	A Forecast of the Heliospheric Termination-Shock Position by Three-dimensional MHD Simulations. Astrophysical Journal, 2007, 670, L139-L142.	4.5	60
86	Spectral Anisotropy in 2D plus Slab Magnetohydrodynamic Turbulence in the Solar Wind and Upper Corona. Astrophysical Journal, 2020, 900, 115.	4.5	60
87	PICKUP ION MEDIATED PLASMAS. I. BASIC MODEL AND LINEAR WAVES IN THE SOLAR WIND AND LOCAL INTERSTELLAR MEDIUM. Astrophysical Journal, 2014, 797, 87.	4.5	59
88	Structure of the Heliotail from Interstellar Boundary Explorer Observations: Implications for the 11-year Solar Cycle and Pickup Ions in the Heliosheath. Astrophysical Journal, 2017, 836, 238.	4.5	59
89	CHARGE-EXCHANGE COUPLING BETWEEN PICKUP IONS ACROSS THE HELIOPAUSE AND ITS EFFECT ON ENERGETIC NEUTRAL HYDROGEN FLUX. Astrophysical Journal, 2014, 783, 129.	4.5	57
90	Heliosheath Processes and the Structure of the Heliopause: Modeling Energetic Particles, Cosmic Rays, and Magnetic Fields. Space Science Reviews, 2017, 212, 193-248.	8.1	57

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91	Identification of Magnetic Flux Ropes from Parker Solar Probe Observations during the First Encounter. Astrophysical Journal, Supplement Series, 2020, 246, 26.	7.7	57
92	Pickup Ion Acceleration at Low-Î²pPerpendicular Shocks. Physical Review Letters, 1999, 82, 3609-3612.	7.8	55
93	Consequences of the Heliopause Instability Caused by Charge Exchange. Astrophysical Journal, 2008, 682, 1404-1415.	4.5	55
94	Particle Acceleration at 5 au Associated with Turbulence and Small-scale Magnetic Flux Ropes. Astrophysical Journal, 2019, 872, 4.	4.5	55
95	The Heliospheric Hydrogen Distribution: A Multifluid Model. Astrophysical Journal, 1997, 476, 366-384.	4.5	54
96	Turbulence transport in the solar corona: Theory, modeling, and Parker Solar Probe. Physics of Plasmas, 2021, 28, .	1.9	54
97	Steady state and dynamical structure of a cosmicâ€rayâ€modified termination shock. Journal of Geophysical Research, 1993, 98, 19005-19025.	3.3	53
98	Turbulence Transport Modeling and First Orbit Parker Solar Probe (PSP) Observations. Astrophysical Journal, Supplement Series, 2020, 246, 38.	7.7	53
99	Self-consistent Energetic Particle Acceleration by Contracting and Reconnecting Small-scale Flux Ropes: The Governing Equations. Astrophysical Journal, 2018, 864, 158.	4.5	51
100	COMBINING DIFFUSIVE SHOCK ACCELERATION WITH ACCELERATION BY CONTRACTING AND RECONNECTING SMALL-SCALE FLUX ROPES AT HELIOSPHERIC SHOCKS. Astrophysical Journal, 2016, 827, 47.	4.5	50
101	Understanding large SEP events with the PATH code: Modeling of the 13 December 2006 SEP event. Journal of Geophysical Research, 2010, 115, .	3.3	49
102	ENERGETIC NEUTRAL ATOMS MEASURED BY THEINTERSTELLAR BOUNDARY EXPLORER(IBEX): EVIDENCE FOR MULTIPLE HELIOSHEATH POPULATIONS. Astrophysical Journal, 2014, 780, 98.	4.5	49
103	Energetic Particles of keVâ€“MeV Energies Observed near Reconnecting Current Sheets at 1 au. Astrophysical Journal, 2017, 843, 4.	4.5	49
104	Evolution of Solar Wind Turbulence from 0.1 to 1 au during the First Parker Solar Probeâ€“Solar Orbiter Radial Alignment. Astrophysical Journal Letters, 2021, 912, L21.	8.3	49
105	A Focused Transport Approach to Pickup Ion Shock Acceleration: Implications for the Termination Shock. Astrophysical Journal, 2007, 662, 350-371.	4.5	48
106	Do Anomalous Cosmic Rays Modify the Termination Shock?. Astrophysical Journal, 2004, 610, 1169-1181.	4.5	47
107	The Role of Magnetic Reconnectionâ€“associated Processes in Local Particle Acceleration in the Solar Wind. Astrophysical Journal, 2019, 873, 72.	4.5	47
108	Temperature and density antiâ€correlations in solar wind fluctuations. Geophysical Research Letters, 1990, 17, 1239-1242.	4.0	46

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109	Unquiet on any front: Anisotropic turbulence in the solar wind. Reviews of Geophysics, 1995, 33, 609.	23.0	46
110	No Evidence for Critical Balance in Field-aligned AlfvÃ©nic Solar Wind Turbulence. Astrophysical Journal, 2019, 887, 160.	4.5	46
111	PICKUP ION DYNAMICS AT THE HELIOSPHERIC TERMINATION SHOCK OBSERVED BYVOYAGER 2. Astrophysical Journal, 2010, 715, 1109-1116.	4.5	45
112	INTERPLANETARY PROPAGATION OF SOLAR ENERGETIC PARTICLE HEAVY IONS OBSERVED AT 1 AU AND THE ROLE OF ENERGY SCALING. Astrophysical Journal, 2012, 761, 104.	4.5	45
113	Cosmic Ray Diffusion Tensor throughout the Heliosphere Derived from a Nearly Incompressible Magnetohydrodynamic Turbulence Model. Astrophysical Journal, 2017, 849, 88.	4.5	45
114	Modeling Particle Acceleration and Transport at a 2â€Ð CMEâ€Ðriven Shock. Journal of Geophysical Research: Space Physics, 2017, 122, 10,938.	2.4	44
115	USING THE PATH CODE FOR MODELING GRADUAL SEP EVENTS IN THE INNER HELIOSPHERE. Astrophysical Journal, 2009, 693, 894-900.	4.5	44
116	Spectral Features in Field-aligned Solar Wind Turbulence from Parker Solar Probe Observations. Astrophysical Journal, 2020, 898, 113.	4.5	44
117	A Solar Coronal Hole and Fast Solar Wind Turbulence Model and First-orbit Parker Solar Probe (PSP) Observations. Astrophysical Journal, 2020, 901, 102.	4.5	44
118	Solar Arcades as Possible Minimum Dissipative Relaxed States. Solar Physics, 2007, 240, 63-76.	2.5	43
119	Influence of the Interstellar Magnetic Field and Neutrals on the Shape of the Outer Heliosphere. Space Science Reviews, 2009, 143, 31-42.	8.1	43
120	An energeticâ€particleâ€mediated termination shock observed by Voyager 2. Geophysical Research Letters, 2009, 36, .	4.0	43
121	Plasma Energization in Colliding Magnetic Flux Ropes. Astrophysical Journal, 2018, 867, 16.	4.5	43
122	The interaction of turbulence with shock waves: A basic model. Physics of Fluids, 2002, 14, 3766-3774.	4.0	42
123	The Effects of Global Heliospheric Asymmetries on Energetic Neutral Atom Sky Maps. Astrophysical Journal, 2007, 655, L53-L56.	4.5	42
124	TURBULENCE TRANSPORT MODELING OF THE TEMPORAL OUTER HELIOSPHERE. Astrophysical Journal, 2014, 793, 52.	4.5	42
125	Physics of the Solar Windâ€“Local Interstellar Medium Interaction: Role of Magnetic Fields. Space Science Reviews, 2009, 146, 295-327.	8.1	41
126	ACR Proton Acceleration Associated with Reconnection Processes beyond the Heliospheric Termination Shock. Astrophysical Journal, 2019, 886, 144.	4.5	41

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127	Shock propagation in the outer heliosphere: 1. Pickup ions and gasdynamics. Journal of Geophysical Research, 1997, 102, 7037-7049.	3.3	40
128	Hydrogen LyÎ± Absorption Predictions by Boltzmann Models of the Heliosphere. Astrophysical Journal, 2000, 542, 493-503.	4.5	40
129	Turbulent Transport in a Three-dimensional Solar Wind. Astrophysical Journal, 2017, 837, 75.	4.5	39
130	THE INTERACTION OF ALFVÃ‰N WAVES WITH PERPENDICULAR SHOCKS. Astrophysical Journal, 2009, 706, 687-692.	4.5	39
131	Driven dissipative whistler wave turbulence. Physics of Plasmas, 2005, 12, 122310.	1.9	38
132	GEOMETRY AND CHARACTERISTICS OF THE HELIOSHEATH REVEALED IN THE FIRST FIVE YEARS OF INTERSTELLAR BOUNDARY EXPLORER OBSERVATIONS. Astrophysical Journal, 2016, 826, 58.	4.5	38
133	Compressible and Incompressible Magnetic Turbulence Observed in the Very Local Interstellar Medium by Voyager 1. Astrophysical Journal, 2019, 887, 116.	4.5	38
134	Highâ€Resolution Measurements of the Crossâ€Shock Potential, Ion Reflection, and Electron Heating at an Interplanetary Shock by MMS. Journal of Geophysical Research: Space Physics, 2019, 124, 3961-3978.	2.4	36
135	Turbulence in the Sub-AlfvÃ©nic Solar Wind. Astrophysical Journal Letters, 2022, 926, L16.	8.3	36
136	Particle acceleration at a dynamic termination shock. Geophysical Research Letters, 2006, 33, .	4.0	35
137	Detection of small magnetic flux ropes from the third and fourth Parker Solar Probe encounters. Astronomy and Astrophysics, 2021, 650, A12.	5.1	35
138	Heliospheric filtration of interstellar heavy atoms: Sensitivity to hydrogen background. Journal of Geophysical Research, 2004, 109, .	3.3	34
139	TRAJECTORIES AND DISTRIBUTION OF INTERSTELLAR DUST GRAINS IN THE HELIOSPHERE. Astrophysical Journal, 2012, 760, 46.	4.5	33
140	The Origin of Compressible Magnetic Turbulence in the Very Local Interstellar Medium. Astrophysical Journal, 2017, 842, 114.	4.5	33
141	The Direction of the Neutral Hydrogen Velocity in the Inner Heliosphere as a Possible Interstellar Magnetic Field Compass. Astrophysical Journal, 2006, 636, L161-L164.	4.5	32
142	Anisotropic Cascades in Interstellar Medium Turbulence. Astrophysical Journal, 2007, 656, L17-L20.	4.5	32
143	Time-varying Heliospheric Distance to the Heliopause. Astrophysical Journal Letters, 2017, 846, L9.	8.3	32
144	An introductory guide to fluid models with anisotropic temperatures. Part 1. CGL description and collisionless fluid hierarchy. Journal of Plasma Physics, 2019, 85, .	2.1	32

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145	Solitons in an ion-beam plasma. Journal of Plasma Physics, 1988, 39, 183-191.	2.1	31
146	Modelling the heliosphere. Space Science Reviews, 1996, 78, 95-106.	8.1	31
147	Theory and Transport of Nearly Incompressible Magnetohydrodynamics Turbulence. III. Evolution of Power Anistropy in Magnetic Field Fluctuations throughout the Heliosphere. Astrophysical Journal, 2017, 851, 117.	4.5	31
148	The Structure of Shocks in the Very Local Interstellar Medium. Astrophysical Journal Letters, 2018, 854, L15.	8.3	31
149	Transport of energetic charged particles in a radial magnetic field. Part 1. Large-angle scattering. Journal of Plasma Physics, 2000, 64, 507-541.	2.1	30
150	Pickup ion acceleration by turbulent field-aligned electric fields in the slow low-latitude solar wind. Journal of Geophysical Research, 2002, 107, SSH 9-1.	3.3	30
151	SPECTRAL PROPERTIES OF â^¼0.5-6 keV ENERGETIC NEUTRAL ATOMS MEASURED BY THE INTERSTELLAR BOUNDARY EXPLORER (IBEX) ALONG THE LINES OF SIGHT OF VOYAGER. Astrophysical Journal Letters, 2012, 749, L30.	8.3	30
152	A theoretical perspective on particle acceleration by interplanetary shocks and the Solar Energetic Particle problem. Physics Reports, 2015, 557, 1-23.	25.6	30
153	The response of a gasdynamic termination shock to interplanetary disturbances. Journal of Geophysical Research, 1995, 100, 9489.	3.3	29
154	The acceleration of pickup ions at shock waves: Test particle-mesh simulations. Journal of Geophysical Research, 1998, 103, 29679-29696.	3.3	29
155	Magnetohydrodynamic waves in non-uniform flows II: stress-energy tensors, conservation laws and Lie symmetries. Journal of Plasma Physics, 2005, 71, 811.	2.1	29
156	Spectral features of solar wind turbulent plasma. Monthly Notices of the Royal Astronomical Society, 2009, 400, 1881-1891.	4.4	29
157	A GENERALIZED NONLINEAR GUIDING CENTER THEORY FOR THE COLLISIONLESS ANOMALOUS PERPENDICULAR DIFFUSION OF COSMIC RAYS. Astrophysical Journal, 2010, 716, 671-692.	4.5	29
158	Current Sheets, Magnetic Islands, and Associated Particle Acceleration in the Solar Wind as Observed by Ulysses near the Ecliptic Plane. Astrophysical Journal, 2019, 881, 116.	4.5	29
159	Homotopy formulas for the magnetic vector potential and magnetic helicity: The Parker spiral interplanetary magnetic field and magnetic flux ropes. Journal of Geophysical Research, 2010, 115, .	3.3	28
160	Magnetohydrodynamic waves in non-uniform flows I: a variational approach. Journal of Plasma Physics, 2005, 71, 785.	2.1	27
161	POLARIZATION AND COMPRESSIBILITY OF OBLIQUE KINETIC ALFVÃ‰N WAVES. Astrophysical Journal, 2013, 766, 93.	4.5	27
162	Modeling a Single SEP Event from Multiple Vantage Points Using the iPATH Model. Astrophysical Journal Letters, 2018, 854, L19.	8.3	27

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163	The Solar System in a dense interstellar cloud: Implications for cosmic-ray fluxes at Earth and10Be records. Geophysical Research Letters, 2003, 30, n/a-n/a.	4.0	26
164	Ion Cyclotron Waves in Field-aligned Solar Wind Turbulence. Astrophysical Journal Letters, 2019, 885, L5.	8.3	26
165	Flux Ropes, Turbulence, and Collisionless Perpendicular Shock Waves: High Plasma Beta Case. Astrophysical Journal, 2021, 913, 127.	4.5	26
166	Transport of energetic charged particles. Part 2. Small-angle scattering. Journal of Plasma Physics, 2004, 70, 505-532.	2.1	25
167	INSTABILITY OF THE HELIOPAUSE DRIVEN BY CHARGE EXCHANGE INTERACTIONS. Astrophysical Journal, 2014, 791, 102.	4.5	25
168	Structure of Energetic Particle Mediated Shocks Revisited. Astrophysical Journal, 2017, 841, 4.	4.5	25
169	The Effect of Suprathermal Protons in the Heliosheath on the Global Structure of the Heliosphere and Heliotail. Astrophysical Journal, 2019, 874, 76.	4.5	25
170	Exploring the Solar Wind from Its Source on the Corona into the Inner Heliosphere during the First Solar Orbiterâ€“Parker Solar Probe Quadrature. Astrophysical Journal Letters, 2021, 920, L14.	8.3	25
171	The dynamical heliosphere. , 1999, , .		24
172	New Closures for More Precise Modeling of Landau Damping in the Fluid Framework. Physical Review Letters, 2018, 121, 135101.	7.8	24
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