

T I Gombosi

List of Publications by Year in descending order

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419
papers

22,992
citations

7551

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440
all docs

440
docs citations

440
times ranked

7823
citing authors

#	ARTICLE	IF	CITATIONS
1	A Solution-Adaptive Upwind Scheme for Ideal Magnetohydrodynamics. Journal of Computational Physics, 1999, 154, 284-309.	1.9	1,199
2	Space Weather Modeling Framework: A new tool for the space science community. Journal of Geophysical Research, 2005, 110, .	3.3	631
3	Adaptive numerical algorithms in space weather modeling. Journal of Computational Physics, 2012, 231, 870-903.	1.9	560
4	67P/Churyumov-Gerasimenko, a Jupiter family comet with a high D/H ratio. Science, 2015, 347, 1261952.	6.0	403
5	Prebiotic chemicalsâ€”amino acid and phosphorusâ€”in the coma of comet 67P/Churyumov-Gerasimenko. Science Advances, 2016, 2, e1600285.	4.7	393
6	ALFVÃ‰N WAVE SOLAR MODEL (AWSOM): CORONAL HEATING. Astrophysical Journal, 2014, 782, 81.	1.6	356
7	Ionospheric control of the magnetosphere: conductance. Annales Geophysicae, 2004, 22, 567-584.	0.6	342
8	Rosina â€” Rosetta Orbiter Spectrometer for Ion and Neutral Analysis. Space Science Reviews, 2007, 128, 745-801.	3.7	331
9	Inventory of the volatiles on comet 67P/Churyumov-Gerasimenko from Rosetta/ROSINA. Astronomy and Astrophysics, 2015, 583, A1.	2.1	265
10	Eruption of a Buoyantly Emerging Magnetic Flux Rope. Astrophysical Journal, 2004, 610, 588-596.	1.6	264
11	Abundant molecular oxygen in the coma of comet 67P/Churyumovâ€”Gerasimenko. Nature, 2015, 526, 678-681.	13.7	260
12	Global three-dimensional MHD simulation of a space weather event: CME formation, interplanetary propagation, and interaction with the magnetosphere. Journal of Geophysical Research, 2000, 105, 25053-25078.	3.3	245
13	Modeling a space weather event from the Sun to the Earth: CME generation and interplanetary propagation. Journal of Geophysical Research, 2004, 109, .	3.3	238
14	Time variability and heterogeneity in the coma of 67P/Churyumov-Gerasimenko. Science, 2015, 347, 226-227.	6.0	222
15	Coupling of a global MHD code and an inner magnetospheric model: Initial results. Journal of Geophysical Research, 2004, 109, .	3.3	203
16	First in situ plasma and neutral gas measurements at comet Halley. Nature, 1986, 321, 282-285.	13.7	201
17	Molecular nitrogen in comet 67P/Churyumov-Gerasimenko indicates a low formation temperature. Science, 2015, 348, 232-235.	6.0	195
18	A Three-dimensional Model of the Solar Wind Incorporating Solar Magnetogram Observations. Astrophysical Journal, 2003, 595, L57-L61.	1.6	179

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19	A Three-dimensional Flux Rope Model for Coronal Mass Ejections Based on a Loss of Equilibrium. <i>Astrophysical Journal</i> , 2003, 588, L45-L48.	1.6	175
20	Heliosphere in the magnetized local interstellar medium: Results of a three-dimensional MHD simulation. <i>Journal of Geophysical Research</i> , 1998, 103, 1889-1904.	3.3	165
21	Xenon isotopes in 67P/Churyumov-Gerasimenko show that comets contributed to Earth's atmosphere. <i>Science</i> , 2017, 356, 1069-1072.	6.0	161
22	Dust and neutral gas modeling of the inner atmospheres of comets. <i>Reviews of Geophysics</i> , 1986, 24, 667-700.	9.0	158
23	Electron impact ionization in the vicinity of comets. <i>Journal of Geophysical Research</i> , 1987, 92, 7341-7353.	3.3	158
24	Numerical Simulation of the Interaction of Two Coronal Mass Ejections from Sun to Earth. <i>Astrophysical Journal</i> , 2005, 634, 651-662.	1.6	154
25	Organics in comet 67P – a first comparative analysis of mass spectra from ROSINA’s DFMS, COSAC and Ptolemy. <i>Monthly Notices of the Royal Astronomical Society</i> , 2017, 469, S130-S141.	1.6	153
26	Three-dimensional multispecies MHD studies of the solar wind interaction with Mars in the presence of crustal fields. <i>Journal of Geophysical Research</i> , 2002, 107, SMP 6-1.	3.3	148
27	A Semiempirical Magnetohydrodynamical Model of the Solar Wind. <i>Astrophysical Journal</i> , 2007, 654, L163-L166.	1.6	148
28	Interaction of Mercury with the Solar Wind. <i>Icarus</i> , 2000, 143, 397-406.	1.1	146
29	MAGNETOHYDRODYNAMIC WAVES AND CORONAL HEATING: UNIFYING EMPIRICAL AND MHD TURBULENCE MODELS. <i>Astrophysical Journal</i> , 2013, 764, 23.	1.6	142
30	M-dwarf stellar winds: the effects of realistic magnetic geometry on rotational evolution and planets. <i>Monthly Notices of the Royal Astronomical Society</i> , 2014, 438, 1162-1175.	1.6	139
31	Three-dimensional MHD Simulation of the 2003 October 28 Coronal Mass Ejection: Comparison with LASCO Coronagraph Observations. <i>Astrophysical Journal</i> , 2008, 684, 1448-1460.	1.6	137
32	Sulphur-bearing species in the coma of comet 67P/Churyumov-Gerasimenko. <i>Monthly Notices of the Royal Astronomical Society</i> , 2016, 462, S253-S273.	1.6	137
33	Community-wide validation of geospace model ground magnetic field perturbation predictions to support model transition to operations. <i>Space Weather</i> , 2013, 11, 369-385.	1.3	136
34	Solar wind stagnation near comets. <i>Astrophysical Journal</i> , 1985, 289, 807.	1.6	136
35	Three-dimensional MHD simulation of a flux rope driven CME. <i>Journal of Geophysical Research</i> , 2004, 109, .	3.3	130
36	Modeling of Cometary X-rays Caused by Solar Wind Minor Ions. <i>Science</i> , 1997, 276, 939-942.	6.0	127

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37	Semirelativistic Magnetohydrodynamics and Physics-Based Convergence Acceleration. Journal of Computational Physics, 2002, 177, 176-205.	1.9	127
38	Three-dimensional multiscale MHD model of cometary plasma environments. Journal of Geophysical Research, 1996, 101, 15233-15253.	3.3	126
39	MAGNETOSPHERIC STRUCTURE AND ATMOSPHERIC JOULE HEATING OF HABITABLE PLANETS ORBITING M-DWARF STARS. Astrophysical Journal, 2014, 790, 57.	1.6	124
40	Physics of Mass Loaded Plasmas. Space Science Reviews, 2000, 94, 429-671.	3.7	123
41	A Numerical Model of a Coronal Mass Ejection: Shock Development with Implications for the Acceleration of GeV Protons. Astrophysical Journal, 2004, 605, L73-L76.	1.6	123
42	A DATA-DRIVEN, TWO-TEMPERATURE SOLAR WIND MODEL WITH ALFVÉN WAVES. Astrophysical Journal, 2010, 725, 1373-1383.	1.6	123
43	Two-way coupling of a global Hall magnetohydrodynamics model with a local implicit particle-in-cell model. Journal of Computational Physics, 2014, 268, 236-254.	1.9	123
44	Coronal Mass Ejection Shock and Sheath Structures Relevant to Particle Acceleration. Astrophysical Journal, 2005, 622, 1225-1239.	1.6	122
45	A strong, highly-tilted interstellar magnetic field near the Solar System. Nature, 2009, 462, 1036-1038.	13.7	122
46	Modeling ionospheric outflows and their impact on the magnetosphere, initial results. Journal of Geophysical Research, 2009, 114, .	3.3	114
47	THE DYNAMICS OF STELLAR CORONAE HARBORING HOT JUPITERS. I. A TIME-DEPENDENT MAGNETOHYDRODYNAMIC SIMULATION OF THE INTERPLANETARY ENVIRONMENT IN THE HD 189733 PLANETARY SYSTEM. Astrophysical Journal, 2011, 733, 67.	1.6	114
48	The stellar wind cycles and planetary radio emission of the β , Boo system. Monthly Notices of the Royal Astronomical Society, 2012, 423, 3285-3298.	1.6	112
49	Elemental and molecular abundances in comet 67P/Churyumov-Gerasimenko. Monthly Notices of the Royal Astronomical Society, 2019, 489, 594-607.	1.6	112
50	Multifluid Block-Adaptive Tree Solar wind Roe-Type Upwind Scheme: Magnetospheric composition and dynamics during geomagnetic storms—Initial results. Journal of Geophysical Research, 2009, 114, .	3.3	103
51	Magnetospheric configuration and dynamics of Saturn's magnetosphere: A global MHD simulation. Journal of Geophysical Research, 2012, 117, .	3.3	103
52	MAGNETIZED JETS DRIVEN BY THE SUN: THE STRUCTURE OF THE HELIOSPHERE REVISITED. Astrophysical Journal Letters, 2015, 800, L28.	3.0	103
53	Model calculations of the dayside ionosphere of Venus: Energetics. Journal of Geophysical Research, 1980, 85, 7778-7786.	3.3	102
54	The interaction of electrons in the optical umbra of Venus with the planetary atmosphere—The origin of the nighttime ionosphere. Journal of Geophysical Research, 1979, 84, 2123-2127.	3.3	100

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55	A numerical study of solar wind-magnetosphere interaction for northward interplanetary magnetic field. <i>Journal of Geophysical Research</i> , 1999, 104, 28361-28378.	3.3	98
56	Sun-to-thermosphere simulation of the 28-30 October 2003 storm with the Space Weather Modeling Framework. <i>Space Weather</i> , 2007, 5, n/a-n/a.	1.3	97
57	NUMERICAL INVESTIGATION OF A CORONAL MASS EJECTION FROM AN ANEMONE ACTIVE REGION: RECONNECTION AND DEFLECTION OF THE 2005 AUGUST 22 ERUPTION. <i>Astrophysical Journal</i> , 2011, 738, 127.	1.6	97
58	The Plasma Environment of Comet 67P/Churyumov-Gerasimenko Throughout the Rosetta Main Mission. <i>Space Science Reviews</i> , 2007, 128, 133-166.	3.7	95
59	Comparison of 3D kinetic and hydrodynamic models to ROSINA-COPS measurements of the neutral coma of 67P/Churyumov-Gerasimenko. <i>Astronomy and Astrophysics</i> , 2015, 583, A7.	2.1	93
60	Plasma near Venus from the Venera 9 and 10 wide-angle analyzer data. <i>Journal of Geophysical Research</i> , 1978, 83, 3721-3728.	3.3	91
61	Implications of Jovian X-ray emission for magnetosphere-ionosphere coupling. <i>Journal of Geophysical Research</i> , 2003, 108, .	3.3	91
62	An adaptive MHD method for global space weather simulations. <i>IEEE Transactions on Plasma Science</i> , 2000, 28, 1956-1965.	0.6	90
63	The Orientation of the Local Interstellar Magnetic Field. <i>Science</i> , 2007, 316, 875-878.	6.0	90
64	Global MHD simulations of Mercury's magnetosphere with coupled planetary interior: Induction effect of the planetary conducting core on the global interaction. <i>Journal of Geophysical Research: Space Physics</i> , 2015, 120, 4763-4775.	0.8	89
65	The Evolution of Coronal Mass Ejection Density Structures. <i>Astrophysical Journal</i> , 2005, 627, 1019-1030.	1.6	88
66	Three-dimensional direct simulation Monte-Carlo modeling of the coma of comet 67P/Churyumov-Gerasimenko observed by the VIRTIS and ROSINA instruments on board Rosetta. <i>Astronomy and Astrophysics</i> , 2016, 588, A134.	2.1	88
67	Cometary Dust. <i>Space Science Reviews</i> , 2018, 214, 1.	3.7	88
68	STUDYING EXTREME ULTRAVIOLET WAVE TRANSIENTS WITH A DIGITAL LABORATORY: DIRECT COMPARISON OF EXTREME ULTRAVIOLET WAVE OBSERVATIONS TO GLOBAL MAGNETOHYDRODYNAMIC SIMULATIONS. <i>Astrophysical Journal</i> , 2011, 728, 2.	1.6	87
69	Detection of argon in the coma of comet 67P/Churyumov-Gerasimenko. <i>Science Advances</i> , 2015, 1, e1500377.	4.7	87
70	Direct Simulation Monte Carlo modelling of the major species in the coma of comet 67P/Churyumov-Gerasimenko. <i>Monthly Notices of the Royal Astronomical Society</i> , 2016, 462, S156-S169.	1.6	87
71	The comet Halley dust and gas environment. <i>Space Science Reviews</i> , 1986, 43, 1-104.	3.7	85
72	Hall magnetohydrodynamics on block-adaptive grids. <i>Journal of Computational Physics</i> , 2008, 227, 6967-6984.	1.9	85

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73	A GLOBAL WAVE-DRIVEN MAGNETOHYDRODYNAMIC SOLAR MODEL WITH A UNIFIED TREATMENT OF OPEN AND CLOSED MAGNETIC FIELD TOPOLOGIES. <i>Astrophysical Journal</i> , 2013, 778, 176.	1.6	85
74	DATA-CONSTRAINED CORONAL MASS EJECTIONS IN A GLOBAL MAGNETOHYDRODYNAMICS MODEL. <i>Astrophysical Journal</i> , 2017, 834, 173.	1.6	83
75	A timeâ€dependent theoretical model of the polar wind: Preliminary results. <i>Geophysical Research Letters</i> , 1985, 12, 167-170.	1.5	80
76	Numerical Investigation of the Homologous Coronal Mass Ejection Events from Active Region 9236. <i>Astrophysical Journal</i> , 2007, 659, 788-800.	1.6	80
77	A twoâ€dimensional model of the ionosphere of Venus. <i>Journal of Geophysical Research</i> , 1983, 88, 5595-5606.	3.3	79
78	TOWARD A REALISTIC THERMODYNAMIC MAGNETOHYDRODYNAMIC MODEL OF THE GLOBAL SOLAR CORONA. <i>Astrophysical Journal</i> , 2010, 712, 1219-1231.	1.6	79
79	Evidence of ammonium salts in comet 67P as explanation for the nitrogen depletion in cometary comae. <i>Nature Astronomy</i> , 2020, 4, 533-540.	4.2	79
80	Extended magnetohydrodynamics with embedded particleâ€inâ€cell simulation of Ganymede's magnetosphere. <i>Journal of Geophysical Research: Space Physics</i> , 2016, 121, 1273-1293.	0.8	78
81	Initial Observations of the Nightside Ionosphere of Venus from Pioneer Venus Orbiter Radio Occultations. <i>Science</i> , 1979, 205, 99-102.	6.0	77
82	First observations of energetic particles near comet Halley. <i>Nature</i> , 1986, 321, 285-288.	13.7	77
83	THE IMPACT OF HOT JUPITERS ON THE SPIN-DOWN OF THEIR HOST STARS. <i>Astrophysical Journal Letters</i> , 2010, 723, L64-L67.	3.0	76
84	INTERACTIONS OF THE MAGNETOSPHERES OF STARS AND CLOSE-IN GIANT PLANETS. <i>Astrophysical Journal</i> , 2009, 704, L85-L88.	1.6	76
85	Powerful winds from low-mass stars: V374 Peg. <i>Monthly Notices of the Royal Astronomical Society</i> , 2011, 412, 351-362.	1.6	75
86	An upwind scheme for magnetohydrodynamics. , 1995, , .		72
87	Multiscale modeling of magnetospheric reconnection. <i>Journal of Geophysical Research</i> , 2007, 112, .	3.3	72
88	Extended MHD modeling of the steady solar corona and the solar wind. <i>Living Reviews in Solar Physics</i> , 2018, 15, 4.	7.8	72
89	Detection of a new â€chemicalâ€boundary at comet Halley. <i>Geophysical Research Letters</i> , 1986, 13, 613-616.	1.5	70
90	The friable sponge model of a cometary nucleus. <i>Astrophysical Journal</i> , 1984, 278, 449.	1.6	70

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91	Axisymmetric modeling of cometary mass loading on an adaptively refined grid: MHD results. Journal of Geophysical Research, 1994, 99, 21525.	3.3	68
92	Interchange instability in the inner magnetosphere associated with geosynchronous particle flux decreases. Geophysical Research Letters, 2002, 29, 88-1-88-4.	1.5	68
93	CHROMOSPHERE TO 1 au SIMULATION OF THE 2011 MARCH 7th EVENT: A COMPREHENSIVE STUDY OF CORONAL MASS EJECTION PROPAGATION. Astrophysical Journal, 2017, 834, 172.	1.6	68
94	A new model of cometary ionospheres. Journal of Geophysical Research, 1987, 92, 7331-7340.	3.3	67
95	Exoplanet transit variability: bow shocks and winds around HD 189733b. Monthly Notices of the Royal Astronomical Society, 2013, 436, 2179-2187.	1.6	67
96	Composition-dependent outgassing of comet 67P/Churyumov-Gerasimenko from ROSINA/DFMS. Astronomy and Astrophysics, 2015, 583, A4.	2.1	67
97	An icy-glue model of cometary nuclei. Nature, 1986, 324, 43-44.	13.7	66
98	Change of outgassing pattern of 67P/Churyumov-Gerasimenko during the March 2016 equinox as seen by ROSINA. Monthly Notices of the Royal Astronomical Society, 2017, 469, S108-S117.	1.6	66
99	Io's plasma environment during the Galileo flyby: Global three-dimensional MHD modeling with adaptive mesh refinement. Journal of Geophysical Research, 1998, 103, 9071-9081.	3.3	65
100	THE INTERACTION OF VENUS-LIKE, M-DWARF PLANETS WITH THE STELLAR WIND OF THEIR HOST STAR. Astrophysical Journal, 2015, 806, 41.	1.6	65
101	Magnetospheric configuration for Parker-spiral IMF conditions: Results of a 3D AMR MHD simulation. Advances in Space Research, 2000, 26, 139-149.	1.2	64
102	Using steady state MHD results to predict the global state of the magnetosphere-ionosphere system. Journal of Geophysical Research, 2001, 106, 30067-30076.	3.3	64
103	THE DYNAMICS OF STELLAR CORONAE HARBORING HOT JUPITERS. II. A SPACE WEATHER EVENT ON A HOT JUPITER. Astrophysical Journal, 2011, 738, 166.	1.6	64
104	The Dehydration of Water Worlds via Atmospheric Losses. Astrophysical Journal Letters, 2017, 847, L4.	3.0	64
105	The interaction between the magnetosphere of Saturn and Titan's ionosphere. Journal of Geophysical Research, 2001, 106, 6151-6160.	3.3	62
106	Solution-adaptive magnetohydrodynamics for space plasmas: sun-to-earth simulations. Computing in Science and Engineering, 2004, 6, 14-35.	1.2	62
107	Global Three-Dimensional Simulation of Earth's Dayside Reconnection Using a Two-Way Coupled Magnetohydrodynamics With Embedded Particle-in-Cell Model: Initial Results. Journal of Geophysical Research: Space Physics, 2017, 122, 10,318.	0.8	62
108	University of Michigan MHD results of the Geospace Global Circulation Model metrics challenge. Journal of Geophysical Research, 2002, 107, SMP 12-1.	3.3	61

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109	Identifying Solar Flare Precursors Using Time Series of SDO/HMI Images and SHARP Parameters. Space Weather, 2019, 17, 1404-1426.	1.3	61
110	Time-dependent dusty gasdynamical flow near cometary nuclei. Astrophysical Journal, 1985, 293, 328.	1.6	60
111	Validation of a synoptic solar wind model. Journal of Geophysical Research, 2008, 113, .	3.3	59
112	Position and structure of the comet Halley bow shock: Vegaâ€•1 and Vegaâ€•2 measurements. Geophysical Research Letters, 1986, 13, 841-844.	1.5	58
113	Preshock region acceleration of implanted cometary H⁺ and O⁺. Journal of Geophysical Research, 1988, 93, 35-47.	3.3	58
114	A New Field Line Advection Model for Solar Particle Acceleration. Astrophysical Journal, 2004, 616, L171-L174.	1.6	58
115	3D global multiâ€•species Hallâ€•MHD simulation of the Cassini T9 flyby. Geophysical Research Letters, 2007, 34, .	1.5	58
116	ALMA and ROSINA detections of phosphorus-bearing molecules: the interstellar thread between star-forming regions and comets. Monthly Notices of the Royal Astronomical Society, 2020, 492, 1180-1198.	1.6	58
117	Timeâ€•dependent modeling of fieldâ€•aligned currentâ€•generated ion transients in the polar wind. Journal of Geophysical Research, 1989, 94, 359-369.	3.3	57
118	Dust-Gas Interrelations In Comets: Observations And Theory. Earth, Moon and Planets, 1997, 79, 275-306.	0.3	57
119	Ionospheric control of the magnetospheric configuration: Thermospheric neutral winds. Journal of Geophysical Research, 2003, 108, .	3.3	57
120	Global MHD simulations of Saturn's magnetosphere at the time of Cassini approach. Geophysical Research Letters, 2005, 32, .	1.5	57
121	A parallel explicit/implicit time stepping scheme on block-adaptive grids. Journal of Computational Physics, 2006, 217, 722-758.	1.9	57
122	Driving Saturn's magnetospheric periodicities from the upper atmosphere/ionosphere. Journal of Geophysical Research, 2012, 117, .	3.3	57
123	The surface distributions of the production of the major volatile species, H ₂ O, CO ₂ , CO and O ₂ , from the nucleus of comet 67P/Churyumov-Gerasimenko throughout the Rosetta Mission as measured by the ROSINA double focusing mass spectrometer. Icarus, 2020, 335, 113421.	1.1	57
124	Interaction of the Saturnian magnetosphere with Titan: Results of a three-dimensional MHD simulation. Journal of Geophysical Research, 1999, 104, 2451-2458.	3.3	56
125	Modeling solar zenith angle effects on the polar wind. Journal of Geophysical Research, 2012, 117, .	3.3	56
126	Plasma environment of a weak comet â€• Predictions for Comet 67P/Churyumovâ€•Gerasimenko from multifluid-MHD and Hybrid models. Icarus, 2014, 242, 38-49.	1.1	56

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127	A GLOBAL TWO-TEMPERATURE CORONA AND INNER HELIOSPHERE MODEL: A COMPREHENSIVE VALIDATION STUDY. <i>Astrophysical Journal</i> , 2012, 745, 6.	1.6	55
128	Effects of thermospheric motions on the polar wind: A time-dependent numerical study. <i>Journal of Geophysical Research</i> , 1987, 92, 4725-4729.	3.3	54
129	SIMULATIONS OF WINDS OF WEAK-LINED T TAURI STARS. II. THE EFFECTS OF A TILTED MAGNETOSPHERE AND PLANETARY INTERACTIONS. <i>Astrophysical Journal</i> , 2010, 720, 1262-1280.	1.6	54
130	Evolution of water production of 67P/Churyumov-Gerasimenko: An empirical model and a multi-instrument study. <i>Monthly Notices of the Royal Astronomical Society</i> , 0, , stw2413.	1.6	54
131	Observation of electron and ion fluxes in the vicinity of Mars with the HARP spectrometer. <i>Nature</i> , 1989, 341, 614-616.	13.7	53
132	A three-dimensional MHD study of solar wind mass loading processes at Venus: Effects of photoionization, electron impact ionization, and charge exchange. <i>Journal of Geophysical Research</i> , 1998, 103, 23625-23638.	3.3	53
133	3D multi-fluid MHD studies of the solar wind interaction with Mars. <i>Geophysical Research Letters</i> , 1999, 26, 2689-2692.	1.5	53
134	Theory and Modeling for the Magnetospheric Multiscale Mission. <i>Space Science Reviews</i> , 2016, 199, 577-630.	3.7	53
135	D_{2O} and HDS in the coma of 67P/Churyumov-Gerasimenko. <i>Philosophical Transactions Series A, Mathematical, Physical, and Engineering Sciences</i> , 2017, 375, 20160253.	1.6	53
136	On the possible source of the ionization in the nighttime Martian ionosphere: 1. Phobos 2 Harp Electron Spectrometer measurements. <i>Journal of Geophysical Research</i> , 1991, 96, 19307-19313.	3.3	52
137	Krypton isotopes and noble gas abundances in the coma of comet 67P/Churyumov-Gerasimenko. <i>Science Advances</i> , 2018, 4, eaar6297.	4.7	52
138	Understanding storm-time ring current development through data-model comparisons of a moderate storm. <i>Journal of Geophysical Research</i> , 2007, 112, n/a-n/a.	3.3	51
139	Simulating the environment around planet-hosting stars. <i>Astronomy and Astrophysics</i> , 2016, 594, A95.	2.1	51
140	The telegraph equation in charged particle transport. <i>Astrophysical Journal</i> , 1993, 403, 377.	1.6	50
141	MESSENGER Observations and Global Simulations of Highly Compressed Magnetosphere Events at Mercury. <i>Journal of Geophysical Research: Space Physics</i> , 2019, 124, 229-247.	0.8	49
142	Scaling the Ion Inertial Length and Its Implications for Modeling Reconnection in Global Simulations. <i>Journal of Geophysical Research: Space Physics</i> , 2017, 122, 10,336.	0.8	48
143	Analysis of the 3-D shape of the terrestrial bow shock by interball/magion 4 observations. <i>Advances in Space Research</i> , 2001, 28, 857-862.	1.2	47
144	Magnetospheric and Plasma Science with Cassini-Huygens. <i>Space Science Reviews</i> , 2002, 104, 253-346.	3.7	47

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145	Probing the Edge of the Solar System: Formation of an Unstable Jet-Sheet. <i>Astrophysical Journal</i> , 2003, 591, L61-L65.	1.6	47
146	Waves on the dusk flank boundary layer during very northward interplanetary magnetic field conditions: Observations and simulation. <i>Journal of Geophysical Research</i> , 2007, 112, .	3.3	47
147	Solar wind sputtering of dust on the surface of 67P/Churyumov-Gerasimenko. <i>Astronomy and Astrophysics</i> , 2015, 583, A22.	2.1	47
148	Transport of gyration-dominated space plasmas of thermal origin: 1. Generalized transport equations. <i>Journal of Geophysical Research</i> , 1991, 96, 7759-7778.	3.3	46
149	Hot hydrogen in the exosphere of Venus. <i>Nature</i> , 1980, 283, 178-180.	13.7	45
150	Interstellar dust filtration at the heliospheric interface. <i>Journal of Geophysical Research</i> , 2000, 105, 10411-10417.	3.3	45
151	Polar wind outflow model: Saturn results. <i>Journal of Geophysical Research</i> , 2007, 112, n/a-n/a.	3.3	45
152	NUMERICAL SIMULATIONS OF CORONAL MASS EJECTION ON 2011 MARCH 7: ONE-TEMPERATURE AND TWO-TEMPERATURE MODEL COMPARISON. <i>Astrophysical Journal</i> , 2013, 773, 50.	1.6	45
153	Achievements and Challenges in the Science of Space Weather. <i>Space Science Reviews</i> , 2017, 212, 1137-1157.	3.7	45
154	NARROW DUST JETS IN A DIFFUSE GAS COMA: A NATURAL PRODUCT OF SMALL ACTIVE REGIONS ON COMETS. <i>Astrophysical Journal</i> , 2012, 749, 29.	1.6	45
155	Charge exchange avalanche at the cometopause. <i>Geophysical Research Letters</i> , 1987, 14, 1174-1177.	1.5	44
156	Self-consistent multifluid MHD simulations of Europa's exospheric interaction with Jupiter's magnetosphere. <i>Journal of Geophysical Research: Space Physics</i> , 2015, 120, 3503-3524.	0.8	44
157	Halogens as tracers of protosolar nebula material in comet 67P/Churyumov-Gerasimenko. <i>Monthly Notices of the Royal Astronomical Society</i> , 2017, 472, 1336-1345.	1.6	44
158	Saturn's Magnetospheric Configuration. , 2009, , 203-255.		44
159	The solar wind interaction with Mars: results of three-dimensional three-species MHD studies. <i>Advances in Space Research</i> , 2001, 27, 1837-1846.	1.2	43
160	Open-closed field line boundary position: A parametric study using an MHD model. <i>Journal of Geophysical Research</i> , 2004, 109, .	3.3	43
161	Ion composition and chemistry in the coma of Comet 1P/Halley-A comparison between Giotto's Ion Mass Spectrometer and our ion-chemical network. <i>Icarus</i> , 2009, 199, 505-519.	1.1	43
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