GÃ¡bor TÃ³th

List of Publications by Year
in descending order

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197	11,934	30070	31849
papers	citations	54 h-index	101 g-index

214	214	214	6026
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	The â^‡Â·B=0 Constraint in Shock-Capturing Magnetohydrodynamics Codes. Journal of Computational Physics, 2000, 161, 605-652.	3.8	799
2	Space Weather Modeling Framework: A new tool for the space science community. Journal of Geophysical Research, 2005, 110, .	3.3	631
3	HARM: A Numerical Scheme for General Relativistic Magnetohydrodynamics. Astrophysical Journal, 2003, 589, 444-457.	4.5	569
4	Adaptive numerical algorithms in space weather modeling. Journal of Computational Physics, 2012, 231, 870-903.	3.8	560
5	The global ionosphereâ€“thermosphere model. Journal of Atmospheric and Solar-Terrestrial Physics, 2006, 68, 839-864.	1.6	392
6	ALFVÃ‰N WAVE SOLAR MODEL (AWSoM): CORONAL HEATING. Astrophysical Journal, 2014, 782, 81.	4.5	356
7	Galactic disks, infall, and the global value of Omega. Astrophysical Journal, 1992, 389, 5.	4.5	310
8	Comparison of Some Flux Corrected Transport and Total Variation Diminishing Numerical Schemes for Hydrodynamic and Magnetohydrodynamic Problems. Journal of Computational Physics, 1996, 128, 82-100.	3.8	277
9	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
10	Coupling of a global MHD code and an inner magnetospheric model: Initial results. Journal of Geophysical Research, 2004, 109, .	3.3	203
11	Threeâ€dimensional MHD Simulation of the 2003 October 28 Coronal Mass Ejection: Comparison with LASCO Coronagraph Observations. Astrophysical Journal, 2008, 684, 1448-1460.	4.5	137
12	Communityâ€wide validation of geospace model ground magnetic field perturbation predictions to support model transition to operations. Space Weather, 2013, 11, 369-385.	3.7	136
13	Pulsar wind nebulae in supernova remnants. Astronomy and Astrophysics, 2001, 380, 309-317.	5.1	133
14	Adaptive Mesh Refinement for conservative systems: multi-dimensional efficiency evaluation. Computer Physics Communications, 2003, 153, 317-339.	7.5	131
15	Three-dimensional MHD simulation of a flux rope driven CME. Journal of Geophysical Research, 2004, 109, .	3.3	130
16	Semirelativistic Magnetohydrodynamics and Physics-Based Convergence Acceleration. Journal of Computational Physics, 2002, 177, 176-205.	3.8	127
17	A DATA-DRIVEN, TWO-TEMPERATURE SOLAR WIND MODEL WITH ALFVÃ‰N WAVES. Astrophysical Journal, 2010, 725, 1373-1383.	4.5	123
18	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.	3.8	123

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19	Coronal Mass Ejection Shock and Sheath Structures Relevant to Particle Acceleration. Astrophysical Journal, 2005, 622, 1225-1239.	4.5	122
20	A strong, highly-tilted interstellar magnetic field near the Solar System. Nature, 2009, 462, 1036-1038.	27.8	122
21	Growth and saturation of the Kelvinâ€“Helmholtz instability with parallel and antiparallel magnetic fields. Journal of Plasma Physics, 1999, 61, 1-19.	2.1	117
22	Modeling ionospheric outflows and their impact on the magnetosphere, initial results. Journal of Geophysical Research, 2009, 114, .	3.3	114
23	On the decay of Burgers turbulence. Journal of Fluid Mechanics, 1997, 344, 339-374.	3.4	109
24	Multifluid Blockâ€Adaptiveâ€Tree Solar wind Roeâ€type Upwind Scheme: Magnetospheric composition and dynamics during geomagnetic stormsâ€”Initial results. Journal of Geophysical Research, 2009, 114, .	3.3	103
25	Magnetospheric configuration and dynamics of Saturn's magnetosphere: A global MHD simulation. Journal of Geophysical Research, 2012, 117, .	3.3	103
26	Sun-to-thermosphere simulation of the 28-30 October 2003 storm with the Space Weather Modeling Framework. Space Weather, 2007, 5, n/a-n/a.	3.7	97
27	Three-dimensional, multifluid, high spatial resolution MHD model studies of the solar wind interaction with Mars. Journal of Geophysical Research, 2011, 116, .	3.3	93
28	Comparison of 3D kinetic and hydrodynamic models to ROSINA-COPS measurements of the neutral coma of 67P/Churyumov-Gerasimenko. Astronomy and Astrophysics, 2015, 583, A7.	5.1	93
29	CRASH: A BLOCK-ADAPTIVE-MESH CODE FOR RADIATIVE SHOCK HYDRODYNAMICSâ€”IMPLEMENTATION AND VERIFICATION. Astrophysical Journal, Supplement Series, 2011, 194, 23.	7.7	91
30	Global MHD simulations of Mercury's magnetosphere with coupled planetary interior: Induction effect of the planetary conducting core on the global interaction. Journal of Geophysical Research: Space Physics, 2015, 120, 4763-4775.	2.4	89
31	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. Astronomy and Astrophysics, 2016, 588, A134.	5.1	88
32	OBTAINING POTENTIAL FIELD SOLUTIONS WITH SPHERICAL HARMONICS AND FINITE DIFFERENCES. Astrophysical Journal, 2011, 732, 102.	4.5	86
33	Hall magnetohydrodynamics on block-adaptive grids. Journal of Computational Physics, 2008, 227, 6967-6984.	3.8	85
34	DATA-CONSTRAINED CORONAL MASS EJECTIONS IN A GLOBAL MAGNETOHYDRODYNAMICS MODEL. Astrophysical Journal, 2017, 834, 173.	4.5	83
35	Numerical Investigation of the Homologous Coronal Mass Ejection Events from Active Region 9236. Astrophysical Journal, 2007, 659, 788-800.	4.5	80
36	Effects of crustal field rotation on the solar wind plasma interaction with Mars. Geophysical Research Letters, 2014, 41, 6563-6569.	4.0	80

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37	Extended magnetohydrodynamics with embedded particleâ€inâ€cell simulation of Ganymede's magnetosphere. Journal of Geophysical Research: Space Physics, 2016, 121, 1273-1293.	2.4	78
38	Stellar winds on the main-sequence. Astronomy and Astrophysics, 2015, 577, A27.	5.1	76
39	Multiscale modeling of magnetospheric reconnection. Journal of Geophysical Research, 2007, 112, .	3.3	72
40	CRCM + BATSâ€'Râ€'US twoâ€'way coupling. Journal of Geophysical Research: Space Physics, 2013, 118, 1635-1650.	2.4	72
41	IS THE MAGNETIC FIELD IN THE HELIOSHEATH LAMINAR OR A TURBULENT SEA OF BUBBLES?. Astrophysical Journal, 2011, 734, 71.	4.5	71
42	Solar wind interaction with Mars upper atmosphere: Results from the oneâ€way coupling between the multifluid MHD model and the MTGCM model. Geophysical Research Letters, 2014, 41, 2708-2715.	4.0	71
43	CHROMOSPHERE TO 1 au SIMULATION OF THE 2011 MARCH 7th EVENT: A COMPREHENSIVE STUDY OF CORONAL MASS EJECTION PROPAGATION. Astrophysical Journal, 2017, 834, 172.	4.5	68
44	The Dehydration of Water Worlds via Atmospheric Losses. Astrophysical Journal Letters, 2017, 847, L4.	8.3	64
45	Divergence- and Curl-Preserving Prolongation and Restriction Formulas. Journal of Computational Physics, 2002, 180, 736-750.	3.8	63
46	Solution-adaptive magnetohydrodynamics for space plasmas: sun-to-earth simulations. Computing in Science and Engineering, 2004, 6, 14-35.	1.2	62
47	Global Threeâ€Dimensional Simulation of Earth's Dayside Reconnection Using a Twoâ€Way Coupled Magnetohydrodynamics With Embedded Particleâ€inâ€Cell Model: Initial Results. Journal of Geophysical Research: Space Physics, 2017, 122, 10,318.	2.4	62
48	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
49	Identifying Solar Flare Precursors Using Time Series of SDO/HMI Images and SHARP Parameters. Space Weather, 2019, 17, 1404-1426.	3.7	61
50	Martian ionospheric responses to dynamic pressure enhancements in the solar wind. Journal of Geophysical Research: Space Physics, 2014, 119, 1272-1286.	2.4	59
51	3D global multiâ€species Hallâ€MHD simulation of the Cassini T9 flyby. Geophysical Research Letters, 2007, 34, .	4.0	58
52	The effects of dynamic ionospheric outflow on the ring current. Journal of Geophysical Research, 2011, 116, n/a-n/a.	3.3	58
53	MHD model results of solar wind interaction with Mars and comparison with MAVEN plasma observations. Geophysical Research Letters, 2015, 42, 9113-9120.	4.0	58
54	Global MHD simulations of Saturn's magnetosphere at the time of Cassini approach. Geophysical Research Letters, 2005, 32, .	4.0	57

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55	A parallel explicit/implicit time stepping scheme on block-adaptive grids. Journal of Computational Physics, 2006, 217, 722-758.	3.8	57
56	The surface distributions of the production of the major volatile species, H2O, CO2, CO and O2, 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.	2.5	57
57	Modeling solar zenith angle effects on the polar wind. Journal of Geophysical Research, 2012, 117, .	3.3	56
58	Plasma environment of a weak comet â€“ Predictions for Comet 67P/Churyumovâ€“Gerasimenko from multifluid-MHD and Hybrid models. Icarus, 2014, 242, 38-49.	2.5	56
59	A GLOBAL TWO-TEMPERATURE CORONA AND INNER HELIOSPHERE MODEL: A COMPREHENSIVE VALIDATION STUDY. Astrophysical Journal, 2012, 745, 6.	4.5	55
60	Multifluid MHD study of the solar wind interaction with Mars' upper atmosphere during the 2015 March 8th ICME event. Geophysical Research Letters, 2015, 42, 9103-9112.	4.0	54
61	Evolution of water production of 67P/Churyumov-Gerasimenko: An empirical model and a multi-instrument study. Monthly Notices of the Royal Astronomical Society, 0, , stw2413.	4.4	54
62	Simulations of small-scale explosive events on the Sun. Solar Physics, 1999, 185, 127-141.	2.5	52
63	Understanding storm-time ring current development through data-model comparisons of a moderate storm. Journal of Geophysical Research, 2007, 112, n/a-n/a.	3.3	51
64	Solar wind interaction with the Martian upper atmosphere: Crustal field orientation, solar cycle, and seasonal variations. Journal of Geophysical Research: Space Physics, 2015, 120, 7857-7872.	2.4	51
65	Modeling Martian Atmospheric Losses over Time: Implications for Exoplanetary Climate Evolution and Habitability. Astrophysical Journal Letters, 2018, 859, L14.	8.3	51
66	A small and round heliosphere suggested by magnetohydrodynamic modelling of pick-up ions. Nature Astronomy, 2020, 4, 675-683.	10.1	50
67	A global multispecies singleâ€fluid MHD study of the plasma interaction around Venus. Journal of Geophysical Research: Space Physics, 2013, 118, 321-330.	2.4	49
68	MESSENGER Observations and Global Simulations of Highly Compressed Magnetosphere Events at Mercury. Journal of Geophysical Research: Space Physics, 2019, 124, 229-247.	2.4	49
69	Scaling the Ion Inertial Length and Its Implications for Modeling Reconnection in Global Simulations. Journal of Geophysical Research: Space Physics, 2017, 122, 10,336.	2.4	48
70	Probing the Edge of the Solar System: Formation of an Unstable Jet-Sheet. Astrophysical Journal, 2003, 591, L61-L65.	4.5	47
71	Polar wind outflow model: Saturn results. Journal of Geophysical Research, 2007, 112, n/a-n/a.	3.3	45
72	NUMERICAL SIMULATIONS OF CORONAL MASS EJECTION ON 2011 MARCH 7: ONE-TEMPERATURE AND TWO-TEMPERATURE MODEL COMPARISON. Astrophysical Journal, 2013, 773, 50.	4.5	45

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73	Selfâ€consistent multifluid MHD simulations of Europa's exospheric interaction with Jupiter's magnetosphere. Journal of Geophysical Research: Space Physics, 2015, 120, 3503-3524.	2.4	44
74	Selfâ€consistent inner magnetosphere simulation driven by a global MHD model. Journal of Geophysical Research, 2010, 115, .	3.3	43
75	What Controls the Structure and Dynamics of Earthâ€™s Magnetosphere?. Space Science Reviews, 2015, 188, 251-286.	8.1	43
76	Leakage of photospheric acoustic waves into non-magnetic solar atmosphere. Astronomy and Astrophysics, 2007, 467, 1299-1311.	5.1	43
77	Nonlinear dynamics of Kelvinâ€“Helmholtz unstable magnetized jets: Three-dimensional effects. Physics of Plasmas, 1999, 6, 1461-1469.	1.9	42
78	Numerical considerations in simulating the global magnetosphere. Annales Geophysicae, 2010, 28, 1589-1614.	1.6	42
79	Dynamics of ring current and electric fields in the inner magnetosphere during disturbed periods: CRCMâ€“BATSâ€Râ€US coupled model. Journal of Geophysical Research, 2010, 115, .	3.3	42
80	Including gap region fieldâ€aligned currents and magnetospheric currents in the MHD calculation of groundâ€based magnetic field perturbations. Journal of Geophysical Research, 2010, 115, .	3.3	42
81	Predicting Solar Flares with Machine Learning: Investigating Solar Cycle Dependence. Astrophysical Journal, 2020, 895, 3.	4.5	42
82	Timeâ€dependent global MHD simulations of Cassini T32 flyby: From magnetosphere to magnetosheath. Journal of Geophysical Research, 2009, 114, .	3.3	41
83	Validation of the AlfvÃ©n Wave Solar Atmosphere Model (AWSoM) with Observations from the Low Corona to 1 au. Astrophysical Journal, 2019, 887, 83.	4.5	41
84	Numerical simulations of vertical oscillations of a solar coronal loop. Astronomy and Astrophysics, 2005, 440, 385-390.	5.1	40
85	Assessing the performance of communityâ€available global MHD models using key system parameters and empirical relationships. Space Weather, 2015, 13, 868-884.	3.7	40
86	Variations of the Martian plasma environment during the ICME passage on 8 March 2015: A timeâ€dependent MHD study. Journal of Geophysical Research: Space Physics, 2017, 122, 1714-1730.	2.4	40
87	On the Azimuthal Stability of Shock Waves around Black Holes. Astrophysical Journal, 1999, 516, 411-419.	4.5	39
88	BREAKOUT CORONAL MASS EJECTION OR STREAMER BLOWOUT: THE BUGLE EFFECT. Astrophysical Journal, 2009, 693, 1178-1187.	4.5	39
89	Radiative effects in radiative shocks in shock tubes. High Energy Density Physics, 2011, 7, 130-140.	1.5	38
90	THE COUPLED EVOLUTION OF ELECTRONS AND IONS IN CORONAL MASS EJECTION-DRIVEN SHOCKS. Astrophysical Journal, 2012, 756, 81.	4.5	37

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91	Magnetic Effects at the Edge of the Solar System: MHD Instabilities, the de Laval Nozzle Effect, and an Extended Jet. Astrophysical Journal, 2004, 611, 575-586.	4.5	36
92	Fourâ€fluid MHD simulations of the plasma and neutral gas environment of comet 67P/Churyumovâ€Gerasimenko near perihelion. Journal of Geophysical Research: Space Physics, 2016, 121, 4247-4268.	2.4	36
93	Oscillatory instability of radiative shocks with transverse magnetic field - Linear analysis and nonlinear simulations. Astrophysical Journal, 1993, 413, 176.	4.5	36
94	A slow bow shock ahead of the heliosphere. Geophysical Research Letters, 2013, 40, 2923-2928.	4.0	35
95	The role of the Hall effect in the global structure and dynamics of planetary magnetospheres: Ganymede as a case study. Journal of Geophysical Research: Space Physics, 2015, 120, 5377-5392.	2.4	35
96	AlfvÃ©n wave solar model (AWSoM): proton temperature anisotropy and solar wind acceleration. Monthly Notices of the Royal Astronomical Society, 2015, 454, 3697-3709.	4.4	35
97	Three-dimensional MHD simulations of the magnetosphere of Uranus. Journal of Geophysical Research, 2004, 109, .	3.3	34
98	Confronting Observations and Modeling: The Role ofÂtheÂInterstellar Magnetic Field in Voyager 1 and 2 Asymmetries. Space Science Reviews, 2009, 143, 43-55.	8.1	34
99	Simulating the oneâ€dimensional structure of Titan's upper atmosphere: 1. Formulation of the Titan Global Ionosphereâ€Thermosphere Model and benchmark simulations. Journal of Geophysical Research, 2010, 115, .	3.3	34
100	Separator reconnection at the magnetopause for predominantly northward and southward IMF: Techniques and results. Journal of Geophysical Research: Space Physics, 2016, 121, 140-156.	2.4	34
101	A fifth-order finite difference scheme for hyperbolic equations on block-adaptive curvilinear grids. Journal of Computational Physics, 2016, 305, 604-621.	3.8	34
102	The twoâ€way relationship between ionospheric outflow and the ring current. Journal of Geophysical Research: Space Physics, 2015, 120, 4338-4353.	2.4	33
103	KINETIC VERSUS MULTI-FLUID APPROACH FOR INTERSTELLAR NEUTRALS IN THE HELIOSPHERE: EXPLORATION OF THE INTERSTELLAR MAGNETIC FIELD EFFECTS. Astrophysical Journal, 2011, 734, 45.	4.5	32
104	Realâ€Time SWMF at CCMC: Assessing the Dst Output From Continuous Operational Simulations. Space Weather, 2018, 16, 1583-1603.	3.7	32
105	What sustained multi-disciplinary research can achieve: The space weather modeling framework. Journal of Space Weather and Space Climate, 2021, 11, 42.	3.3	32
106	Rapid rebuilding of the outer radiation belt. Journal of Geophysical Research, 2011, 116, n/a-n/a.	3.3	31
107	Specification of the near-Earth space environment with SHIELDS. Journal of Atmospheric and Solar-Terrestrial Physics, 2018, 177, 148-159.	1.6	31
108	Effects of electric field methods on modeling the midlatitude ionospheric electrodynamics and inner magnetosphere dynamics. Journal of Geophysical Research: Space Physics, 2017, 122, 5321-5338.	2.4	30

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109	Integration of the radiation belt environment model into the space weather modeling framework. Journal of Atmospheric and Solar-Terrestrial Physics, 2009, 71, 1653-1663.	1.6	29
110	Pressure anisotropy in global magnetospheric simulations: A magnetohydrodynamics model. Journal of Geophysical Research, 2012, 117, .	3.3	29
111	COMET 1P/HALLEY MULTIFLUID MHD MODEL FOR THE GIOTTO FLY-BY. Astrophysical Journal, 2014, 781, 86.	4.5	29
112	CalcDeltaB: An efficient postprocessing tool to calculate groundâ€level magnetic perturbations from global magnetosphere simulations. Space Weather, 2014, 12, 553-565.	3.7	29
113	The Impact and Solar Wind Proxy of the 2017 September ICME Event at Mars. Geophysical Research Letters, 2018, 45, 7248-7256.	4.0	29
114	Simulating the oneâ€dimensional structure of Titan's upper atmosphere: 2. Alternative scenarios for methane escape. Journal of Geophysical Research, 2010, 115, .	3.3	27
115	Predicting the time derivative of local magnetic perturbations. Journal of Geophysical Research: Space Physics, 2014, 119, 310-321.	2.4	27
116	Do we know the actual magnetopause position for typical solar wind conditions?. Journal of Geophysical Research: Space Physics, 2016, 121, 6493-6508.	2.4	27
117	Importance of Ambipolar Electric Field in Driving Ion Loss From Mars: Results From a Multifluid MHD Model With the Electron Pressure Equation Included. Journal of Geophysical Research: Space Physics, 2019, 124, 9040-9057.	2.4	27
118	Numerical study of two-fluid C-type shock waves. Astrophysical Journal, 1994, 425, 171.	4.5	27
119	The LASY Preprocessor and Its Application to General Multidimensional Codes. Journal of Computational Physics, 1997, 138, 981-990.	3.8	26
120	The Twist of the Draped Interstellar Magnetic Field Ahead of the Heliopause: A Magnetic Reconnection Driven Rotational Discontinuity. Astrophysical Journal Letters, 2017, 839, L12.	8.3	26
121	Studying Dawnâ€Dusk Asymmetries of Mercury's Magnetotail Using MHDâ€EPIC Simulations. Journal of Geophysical Research: Space Physics, 2019, 124, 8954-8973.	2.4	26
122	NEAR THE BOUNDARY OF THE HELIOSPHERE: A FLOW TRANSITION REGION. Astrophysical Journal, 2012, 751, 80.	4.5	25
123	NONLINEAR MHD SIMULATIONS OF WAVE DISSIPATION IN FLUX TUBES. Solar Physics, 1997, 172, 45-52.	2.5	24
124	Simulating the one-dimensional structure of Titan's upper atmosphere: 3. Mechanisms determining methane escape. Journal of Geophysical Research, 2011, 116, .	3.3	24
125	Kinetic model of the inner magnetosphere with arbitrary magnetic field. Journal of Geophysical Research, 2012, 117, .	3.3	24
126	Pressure anisotropy in global magnetospheric simulations: Coupling with ring current models. Journal of Geophysical Research: Space Physics, 2013, 118, 5639-5658.	2.4	24

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127	Classical and semirelativistic magnetohydrodynamics with anisotropic ion pressure. Journal of Computational Physics, 2012, 231, 3610-3622.	3.8	23
128	Embedded Kinetic Simulation of Ganymede's Magnetosphere: Improvements and Inferences. Journal of Geophysical Research: Space Physics, 2019, 124, 5441-5460.	2.4	23
129	Gauss's Law satisfying Energy-Conserving Semi-Implicit Particle-in-Cell method. Journal of Computational Physics, 2019, 386, 632-652.	3.8	23
130	A Case Study on the Origin of Nearâ€Earth Plasma. Journal of Geophysical Research: Space Physics, 2020, 125, e2020JA028205.	2.4	23
131	Dual spacecraft observations of a compression event within the Jovian magnetosphere: Signatures of externally triggered supercorotation?. Journal of Geophysical Research, 2004, 109, .	3.3	22
132	On the evolution of the solar wind between 1 and 5 AU at the time of the Cassini Jupiter flyby: Multispacecraft observations of interplanetary coronal mass ejections including the formation of a merged interaction region. Journal of Geophysical Research, 2004, 109, .	3.3	21
133	Including Kinetic Ion Effects in the Coupled Global Ionospheric Outflow Solution. Journal of Geophysical Research: Space Physics, 2018, 123, 2851-2871.	2.4	21
134	Was the moon magnetized by impact plasmas?. Science Advances, 2020, 6, .	10.3	21
135	Interaction of Saturn's magnetosphere and its moons: 1. Interaction between corotating plasma and standard obstacles. Journal of Geophysical Research, 2010, 115, .	3.3	20
136	Perpendicular flow deviation in a magnetized counter-streaming plasma. Icarus, 2012, 218, 895-905.	2.5	20
137	GEMâ€CEDAR challenge: Poynting flux at DMSP and modeled Joule heat. Space Weather, 2016, 14, 113-135.	3.7	20
138	Reconnection in the Martian Magnetotail: Hallâ€<scp>MHD</scp> With Embedded Particleâ€inâ€Cell Simulations. Journal of Geophysical Research: Space Physics, 2018, 123, 3742-3763.	2.4	20
139	A Grayâ€Box Model for a Probabilistic Estimate of Regional Ground Magnetic Perturbations: Enhancing the NOAA Operational Geospace Model With Machine Learning. Journal of Geophysical Research: Space Physics, 2020, 125, e2019JA027684.	2.4	20
140	Comparison of the openâ€closed separatrix in a global magnetospheric simulation with observations: The role of the ring current. Journal of Geophysical Research, 2010, 115, .	3.3	19
141	Constraining the pickup ion abundance and temperature through the multifluid reconstruction of the Voyager 2 termination shock crossing. Journal of Geophysical Research: Space Physics, 2015, 120, 7130-7153.	2.4	19
142	Global MHD simulations of the Response of Jupiter's Magnetosphere and Ionosphere to Changes in the Solar Wind and IMF. Journal of Geophysical Research: Space Physics, 2019, 124, 5317-5341.	2.4	19
143	Multiâ€Fluid MHD Simulations of Europa's Plasma Interaction Under Different Magnetospheric Conditions. Journal of Geophysical Research: Space Physics, 2021, 126, e2020JA028888.	2.4	18
144	PLASMA FLOWS IN THE HELIOSHEATH ALONG THEVOYAGER 1AND2TRAJECTORIES DUE TO EFFECTS OF THE 11 YR SOLAR CYCLE. Astrophysical Journal, 2014, 794, 29.	4.5	17

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145	Assessing the role of oxygen on ring current formation and evolution through numerical experiments. Journal of Geophysical Research: Space Physics, 2015, 120, 4656-4668.	2.4	17
146	Modeled Interaction of Comet 67P/Churyumov-Gerasimenko with the Solar Wind Inside 2 AU. Earth, Moon and Planets, 2015, 116, 141-157.	0.6	17
147	The substorm cycle as reproduced by global MHD models. Space Weather, 2017, 15, 131-149.	3.7	17
148	The Confinement of the Heliosheath Plasma by the Solar Magnetic Field as Revealed by Energetic Neutral Atom Simulations. Astrophysical Journal Letters, 2020, 895, L26.	8.3	17
149	Threaded-field-line Model for the Low Solar Corona Powered by the AlfvÃ©n Wave Turbulence. Astrophysical Journal, 2021, 908, 172.	4.5	17
150	Predictive modeling of a radiative shock system. Reliability Engineering and System Safety, 2011, 96, 1184-1193.	8.9	16
151	Simulating Solar Maximum Conditions Using the AlfvÃ©n Wave Solar Atmosphere Model (AWSoM). Astrophysical Journal, 2021, 923, 176.	4.5	15
152	Solar Wind Interaction With the Martian Upper Atmosphere: Roles of the Cold Thermosphere and Hot Oxygen Corona. Journal of Geophysical Research: Space Physics, 2018, 123, 6639-6654.	2.4	14
153	SPECTRUM: Synthetic Spectral Calculations for Global Space Plasma Modeling. Astrophysical Journal, Supplement Series, 2019, 242, 1.	7.7	14
154	Is the Relation Between the Solar Wind Dynamic Pressure and the Magnetopause Standoff Distance so Straightforward?. Geophysical Research Letters, 2020, 47, e2019GL086474.	4.0	14
155	Three-point correlations of galaxy clusters. Astrophysical Journal, 1989, 344, 75.	4.5	14
156	The Development of a Split-tail Heliosphere and the Role of Non-ideal Processes: A Comparison of the BU and Moscow Models. Astrophysical Journal, 2021, 923, 179.	4.5	14
157	Simulating radiative shocks in nozzle shock tubes. High Energy Density Physics, 2012, 8, 161-169.	1.5	13
158	Simulating radiative shocks with the CRASH laser package. High Energy Density Physics, 2013, 9, 8-16.	1.5	13
159	MAGNETIC FLUX CONSERVATION IN THE HELIOSHEATH INCLUDING SOLAR CYCLE VARIATIONS OF MAGNETIC FIELD INTENSITY. Astrophysical Journal Letters, 2015, 803, L6.	8.3	13
160	Magnetized jets driven by the Sun: The structure of the heliosphere revisitedâ€"Updates. Physics of Plasmas, 2016, 23, .	1.9	13
161	Hall effect in the coma of 67P/Churyumovâ€"Gerasimenko. Monthly Notices of the Royal Astronomical Society, 2018, 475, 2835-2841.	4.4	12
162	Reconnectionâ€Driven Dynamics at Ganymede's Upstream Magnetosphere: 3â€D Global Hall MHD and MHDâ€EPIC Simulations. Journal of Geophysical Research: Space Physics, 2020, 125, e2020JA028162.	2.4	12

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163	Formation and Evolution of the Largeâ€Scale Magnetic Fields in Venus' Ionosphere: Results From a Three Dimensional Global Multispecies MHD Model. Geophysical Research Letters, 2020, 47, e2020GL087593.	4.0	12
164	Cavities of weak magnetic field strength in the wake of FTEs: Results from global magnetospheric MHD simulations. Geophysical Research Letters, 2009, 36, .	4.0	11
165	The importance of thermal electron heating in Titan's ionosphere: Comparison with Cassini T34 flyby. Journal of Geophysical Research, 2011, 116, n/a-n/a.	3.3	11
166	A NEW 3D MULTI-FLUID MODEL: A STUDY OF KINETIC EFFECTS AND VARIATIONS OF PHYSICAL CONDITIONS IN THE COMETARY COMA. Astrophysical Journal, 2016, 833, 160.	4.5	11
167	CORONAL JETS SIMULATED WITH THE GLOBAL ALFVÃ‰N WAVE SOLAR MODEL. Astrophysical Journal, 2017, 834, 123.	4.5	11
168	New Findings From Explainable SYMâ€H Forecasting Using Gradient Boosting Machines. Space Weather, 2022, 20, .	3.7	11
169	Reducing numerical diffusion in magnetospheric simulations. Journal of Geophysical Research, 2011, 116, n/a-n/a.	3.3	10
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