GÃ¡bor TÃ³th

List of Publications by Year
in descending order

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197	11,934	29994 54	31759 101
papers	citations	h-index	g-index

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

#	Article	IF	Citations
1	The Solar Wind with Hydrogen Ion Exchange and Large-scale Dynamics (SHIELD) Code: A Self-consistent Kineticâ€“Magnetohydrodynamic Model of the Outer Heliosphere. Astrophysical Journal, 2022, 924, 105.	1.6	6
2	AWSoM Magnetohydrodynamic Simulation of a Solar Active Region with Realistic Spectral Synthesis. Astrophysical Journal, 2022, 928, 34.	1.6	6
3	Global Driving of Auroral Precipitation: 1. Balance of Sources. Journal of Geophysical Research: Space Physics, 2022, 127, .	0.8	4
4	MSWIM2D: Two-dimensional Outer Heliosphere Solar Wind Modeling. Astrophysical Journal, Supplement Series, 2022, 260, 43.	3.0	1
5	New Findings From Explainable SYMâ€H Forecasting Using Gradient Boosting Machines. Space Weather, 2022, 20, .	1.3	11
6	Estimating Maximum Extent of Auroral Equatorward Boundary Using Historical and Simulated Surface Magnetic Field Data. Journal of Geophysical Research: Space Physics, 2021, 126, e2020JA028284.	0.8	10
7	The Impact of Kinetic Neutrals on the Heliotail. Astrophysical Journal, 2021, 906, 37.	1.6	9
8	What sustained multi-disciplinary research can achieve: The space weather modeling framework. Journal of Space Weather and Space Climate, 2021, 11, 42.	1.1	32
9	Threaded-field-line Model for the Low Solar Corona Powered by the AlfvÃ©n Wave Turbulence. Astrophysical Journal, 2021, 908, 172.	1.6	17
10	Multiâ€Fluid MHD Simulations of Europa's Plasma Interaction Under Different Magnetospheric Conditions. Journal of Geophysical Research: Space Physics, 2021, 126, e2020JA028888.	0.8	18
11	Magnetohydrodynamic with Adaptively Embedded Particle-in-Cell model: MHD-AEPIC. Journal of Computational Physics, 2021, 446, 110656.	1.9	7
12	Simulating Solar Maximum Conditions Using the AlfvÃ©n Wave Solar Atmosphere Model (AWSoM). Astrophysical Journal, 2021, 923, 176.	1.6	15
13	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.	1.6	14
14	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.	1.1	57
15	Was the moon magnetized by impact plasmas?. Science Advances, 2020, 6, .	4.7	21
16	A Case Study on the Origin of Nearâ€Earth Plasma. Journal of Geophysical Research: Space Physics, 2020, 125, e2020JA028205.	0.8	23
17	Magnetohydrodynamic With Embedded Particleâ€inâ€Cell Simulation of the Geospace Environment Modeling Dayside Kinetic Processes Challenge Event. Earth and Space Science, 2020, 7, e2020EA001331.	1.1	10
18	Dispersive Fast Magnetosonic Waves and Shockâ€Driven Compressible Turbulence in the Inner Heliosheath. Journal of Geophysical Research: Space Physics, 2020, 125, e2020JA028393.	0.8	5

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19	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.	0.8	12
20	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.	0.8	20
21	Is the Relation Between the Solar Wind Dynamic Pressure and the Magnetopause Standoff Distance so Straightforward?. Geophysical Research Letters, 2020, 47, e2019GL086474.	1.5	14
22	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.	1.5	12
23	The Confinement of the Heliosheath Plasma by the Solar Magnetic Field as Revealed by Energetic Neutral Atom Simulations. Astrophysical Journal Letters, 2020, 895, L26.	3.0	17
24	A small and round heliosphere suggested by magnetohydrodynamic modelling of pick-up ions. Nature Astronomy, 2020, 4, 675-683.	4.2	50
25	Predicting Solar Flares with Machine Learning: Investigating Solar Cycle Dependence. Astrophysical Journal, 2020, 895, 3.	1.6	42
26	Identifying Solar Flare Precursors Using Time Series of SDO/HMI Images and SHARP Parameters. Space Weather, 2019, 17, 1404-1426.	1.3	61
27	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.	0.8	19
28	Embedded Kinetic Simulation of Ganymede's Magnetosphere: Improvements and Inferences. Journal of Geophysical Research: Space Physics, 2019, 124, 5441-5460.	0.8	23
29	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.	0.8	27
30	Studying Dawnâ€Dusk Asymmetries of Mercury's Magnetotail Using MHDâ€EPIC Simulations. Journal of Geophysical Research: Space Physics, 2019, 124, 8954-8973.	0.8	26
31	SPECTRUM: Synthetic Spectral Calculations for Global Space Plasma Modeling. Astrophysical Journal, Supplement Series, 2019, 242, 1.	3.0	14
32	MESSENGER Observations and Global Simulations of Highly Compressed Magnetosphere Events at Mercury. Journal of Geophysical Research: Space Physics, 2019, 124, 229-247.	0.8	49
33	Gauss's Law satisfying Energy-Conserving Semi-Implicit Particle-in-Cell method. Journal of Computational Physics, 2019, 386, 632-652.	1.9	23
34	Validation of the AlfvÃ©n Wave Solar Atmosphere Model (AWSoM) with Observations from the Low Corona to 1 au. Astrophysical Journal, 2019, 887, 83.	1.6	41
35	Hall effect in the coma of 67P/Churyumovâ€“Gerasimenko. Monthly Notices of the Royal Astronomical Society, 2018, 475, 2835-2841.	1.6	12
36	Specification of the near-Earth space environment with SHIELDS. Journal of Atmospheric and Solar-Terrestrial Physics, 2018, 177, 148-159.	0.6	31

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37	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.	0.8	20
38	Including Kinetic Ion Effects in the Coupled Global Ionospheric Outflow Solution. Journal of Geophysical Research: Space Physics, 2018, 123, 2851-2871.	0.8	21
39	Realâ€Time SWMF at CCMC: Assessing the Dst Output From Continuous Operational Simulations. Space Weather, 2018, 16, 1583-1603.	1.3	32
40	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.	0.8	14
41	Consequences of Treating the Solar Magnetic Field as a Dipole on the Global Structure of the Heliosphere and Heliosheath. Astrophysical Journal, 2018, 860, 171.	1.6	10
42	Modeling Martian Atmospheric Losses over Time: Implications for Exoplanetary Climate Evolution and Habitability. Astrophysical Journal Letters, 2018, 859, L14.	3.0	51
43	The Impact and Solar Wind Proxy of the 2017 September ICME Event at Mars. Geophysical Research Letters, 2018, 45, 7248-7256.	1.5	29
44	CORONAL JETS SIMULATED WITH THE GLOBAL ALFVÃ‰N WAVE SOLAR MODEL. Astrophysical Journal, 2017, 834, 123.	1.6	11
45	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
46	DATA-CONSTRAINED CORONAL MASS EJECTIONS IN A GLOBAL MAGNETOHYDRODYNAMICS MODEL. Astrophysical Journal, 2017, 834, 173.	1.6	83
47	The Twist of the Draped Interstellar Magnetic Field Ahead of the Heliopause: A Magnetic Reconnection Driven Rotational Discontinuity. Astrophysical Journal Letters, 2017, 839, L12.	3.0	26
48	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.	0.8	30
49	Calculating the inductive electric field in the terrestrial magnetosphere. Journal of Geophysical Research: Space Physics, 2017, 122, 5391-5403.	0.8	8
50	The substorm cycle as reproduced by global MHD models. Space Weather, 2017, 15, 131-149.	1.3	17
51	The Dehydration of Water Worlds via Atmospheric Losses. Astrophysical Journal Letters, 2017, 847, L4.	3.0	64
52	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.	0.8	62
53	Scaling the Ion Inertial Length and Its Implications for Modeling Reconnection in Global Simulations. Journal of Geophysical Research: Space Physics, 2017, 122, 10,336.	0.8	48
54	A New 3D Multi-fluid Dust Model: A Study of the Effects of Activity and Nucleus Rotation on Dust Grain Behavior at Comet 67P/Churyumovâ€“Gerasimenko. Astrophysical Journal, 2017, 850, 72.	1.6	5

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55	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.	0.8	40
56	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.	2.1	88
57	A possible mechanism for the formation of magnetic field dropouts in the coma of 67P/Churyumovâ€“Gerasimenko. Monthly Notices of the Royal Astronomical Society, 2016, 462, S468-S475.	1.6	6
58	Magnetized jets driven by the Sun: The structure of the heliosphere revisitedâ€”Updates. Physics of Plasmas, 2016, 23, .	0.7	13
59	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.	1.6	11
60	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.	0.8	36
61	Do we know the actual magnetopause position for typical solar wind conditions?. Journal of Geophysical Research: Space Physics, 2016, 121, 6493-6508.	0.8	27
62	GEMâ€CEDAR challenge: Poynting flux at DMSP and modeled Joule heat. Space Weather, 2016, 14, 113-135.	1.3	20
63	Extended magnetohydrodynamics with embedded particleâ€inâ€cell simulation of Ganymede's magnetosphere. Journal of Geophysical Research: Space Physics, 2016, 121, 1273-1293.	0.8	78
64	Separator reconnection at the magnetopause for predominantly northward and southward IMF: Techniques and results. Journal of Geophysical Research: Space Physics, 2016, 121, 140-156.	0.8	34
65	A fifth-order finite difference scheme for hyperbolic equations on block-adaptive curvilinear grids. Journal of Computational Physics, 2016, 305, 604-621.	1.9	34
66	Assessing the performance of communityâ€available global MHD models using key system parameters and empirical relationships. Space Weather, 2015, 13, 868-884.	1.3	40
67	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.	0.8	89
68	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.	0.8	19
69	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.	0.8	35
70	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.	1.5	54
71	The twoâ€way relationship between ionospheric outflow and the ring current. Journal of Geophysical Research: Space Physics, 2015, 120, 4338-4353.	0.8	33
72	MHD model results of solar wind interaction with Mars and comparison with MAVEN plasma observations. Geophysical Research Letters, 2015, 42, 9113-9120.	1.5	58

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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.	0.8	44
74	THE PLASMA ENVIRONMENT IN COMETS OVER A WIDE RANGE OF HELIOCENTRIC DISTANCES: APPLICATION TO COMET C/2006 P1 (MCNAUGHT). Astrophysical Journal, 2015, 809, 156.	1.6	6
75	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.	0.8	51
76	Testing the magnetotail configuration based on observations of lowâ€altitude isotropic boundaries during quiet times. Journal of Geophysical Research: Space Physics, 2015, 120, 10,557.	0.8	10
77	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.	2.1	93
78	Assessing the role of oxygen on ring current formation and evolution through numerical experiments. Journal of Geophysical Research: Space Physics, 2015, 120, 4656-4668.	0.8	17
79	Stellar winds on the main-sequence. Astronomy and Astrophysics, 2015, 577, A27.	2.1	76
80	Modeled Interaction of Comet 67P/Churyumov-Gerasimenko with the Solar Wind Inside 2 AU. Earth, Moon and Planets, 2015, 116, 141-157.	0.3	17
81	An efficient second-order accurate and continuous interpolation for block-adaptive grids. Journal of Computational Physics, 2015, 297, 599-610.	1.9	7
82	MAGNETIC FLUX CONSERVATION IN THE HELIOSHEATH INCLUDING SOLAR CYCLE VARIATIONS OF MAGNETIC FIELD INTENSITY. Astrophysical Journal Letters, 2015, 803, L6.	3.0	13
83	AlfvÃ©n wave solar model (AWSoM): proton temperature anisotropy and solar wind acceleration. Monthly Notices of the Royal Astronomical Society, 2015, 454, 3697-3709.	1.6	35
84	What Controls the Structure and Dynamics of Earthâ€™s Magnetosphere?. Space Science Reviews, 2015, 188, 251-286.	3.7	43
85	Predicting the time derivative of local magnetic perturbations. Journal of Geophysical Research: Space Physics, 2014, 119, 310-321.	0.8	27
86	COMET 1P/HALLEY MULTIFLUID MHD MODEL FOR THE GIOTTO FLY-BY. Astrophysical Journal, 2014, 781, 86.	1.6	29
87	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
88	Martian ionospheric responses to dynamic pressure enhancements in the solar wind. Journal of Geophysical Research: Space Physics, 2014, 119, 1272-1286.	0.8	59
89	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.	1.5	71
90	PLASMA FLOWS IN THE HELIOSHEATH ALONG THEVOYAGER 1AND2TRAJECTORIES DUE TO EFFECTS OF THE 11 YR SOLAR CYCLE. Astrophysical Journal, 2014, 794, 29.	1.6	17

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91	CalcDeltaB: An efficient postprocessing tool to calculate groundâ€level magnetic perturbations from global magnetosphere simulations. Space Weather, 2014, 12, 553-565.	1.3	29
92	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
93	ALFVÃ‰N WAVE SOLAR MODEL (AWSoM): CORONAL HEATING. Astrophysical Journal, 2014, 782, 81.	1.6	356
94	Effects of crustal field rotation on the solar wind plasma interaction with Mars. Geophysical Research Letters, 2014, 41, 6563-6569.	1.5	80
95	Pressure anisotropy in global magnetospheric simulations: Coupling with ring current models. Journal of Geophysical Research: Space Physics, 2013, 118, 5639-5658.	0.8	24
96	A slow bow shock ahead of the heliosphere. Geophysical Research Letters, 2013, 40, 2923-2928.	1.5	35
97	Simulating radiative shocks with the CRASH laser package. High Energy Density Physics, 2013, 9, 8-16.	0.4	13
98	Implicit TVDLF Methods for Diffusion and Kinematic Flows. Journal of Hydraulic Engineering, 2013, 139, 974-983.	0.7	8
99	CRCM + BATSâ€”Râ€”US twoâ€way coupling. Journal of Geophysical Research: Space Physics, 2013, 118, 1635-1650.	3.3	72
100	A global multispecies singleâ€fluid MHD study of the plasma interaction around Venus. Journal of Geophysical Research: Space Physics, 2013, 118, 321-330.	0.8	49
101	NUMERICAL SIMULATIONS OF CORONAL MASS EJECTION ON 2011 MARCH 7: ONE-TEMPERATURE AND TWO-TEMPERATURE MODEL COMPARISON. Astrophysical Journal, 2013, 773, 50.	1.6	45
102	Communityâ€wide validation of geospace model ground magnetic field perturbation predictions to support model transition to operations. Space Weather, 2013, 11, 369-385.	1.3	136
103	Propagation into the heliosheath of a large-scale solar wind disturbance bounded by a pair of shocks. Astronomy and Astrophysics, 2013, 552, A99.	2.1	7
104	THE COUPLED EVOLUTION OF ELECTRONS AND IONS IN CORONAL MASS EJECTION-DRIVEN SHOCKS. Astrophysical Journal, 2012, 756, 81.	1.6	37
105	A GLOBAL TWO-TEMPERATURE CORONA AND INNER HELIOSPHERE MODEL: A COMPREHENSIVE VALIDATION STUDY. Astrophysical Journal, 2012, 745, 6.	1.6	55
106	Magnetospheric configuration and dynamics of Saturn's magnetosphere: A global MHD simulation. Journal of Geophysical Research, 2012, 117, .	3.3	103
107	DO COROTATING INTERACTION REGION ASSOCIATED SHOCKS SURVIVE WHEN THEY PROPAGATE INTO THE HELIOSHEATH?. Astrophysical Journal Letters, 2012, 756, L37.	3.0	4
108	Simulating radiative shocks in nozzle shock tubes. High Energy Density Physics, 2012, 8, 161-169.	0.4	13

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109	Kinetic model of the inner magnetosphere with arbitrary magnetic field. Journal of Geophysical Research, 2012, 117, .	3.3	24
110	NEAR THE BOUNDARY OF THE HELIOSPHERE: A FLOW TRANSITION REGION. Astrophysical Journal, 2012, 751, 80.	1.6	25
111	Pressure anisotropy in global magnetospheric simulations: A magnetohydrodynamics model. Journal of Geophysical Research, 2012, 117, .	3.3	29
112	Modeling solar zenith angle effects on the polar wind. Journal of Geophysical Research, 2012, 117, .	3.3	56
113	Perpendicular flow deviation in a magnetized counter-streaming plasma. Icarus, 2012, 218, 895-905.	1.1	20
114	Adaptive numerical algorithms in space weather modeling. Journal of Computational Physics, 2012, 231, 870-903.	1.9	560
115	Classical and semirelativistic magnetohydrodynamics with anisotropic ion pressure. Journal of Computational Physics, 2012, 231, 3610-3622.	1.9	23
116	OBTAINING POTENTIAL FIELD SOLUTIONS WITH SPHERICAL HARMONICS AND FINITE DIFFERENCES. Astrophysical Journal, 2011, 732, 102.	1.6	86
117	The effects of dynamic ionospheric outflow on the ring current. Journal of Geophysical Research, 2011, 116, n/a-n/a.	3.3	58
118	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
119	Reducing numerical diffusion in magnetospheric simulations. Journal of Geophysical Research, 2011, 116, n/a-n/a.	3.3	10
120	Simulating the one-dimensional structure of Titan's upper atmosphere: 3. Mechanisms determining methane escape. Journal of Geophysical Research, 2011, 116, .	3.3	24
121	Rapid rebuilding of the outer radiation belt. Journal of Geophysical Research, 2011, 116, n/a-n/a.	3.3	31
122	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
123	KINETIC VERSUS MULTI-FLUID APPROACH FOR INTERSTELLAR NEUTRALS IN THE HELIOSPHERE: EXPLORATION OF THE INTERSTELLAR MAGNETIC FIELD EFFECTS. Astrophysical Journal, 2011, 734, 45.	1.6	32
124	CRASH: A BLOCK-ADAPTIVE-MESH CODE FOR RADIATIVE SHOCK HYDRODYNAMICSâ€"IMPLEMENTATION AND VERIFICATION. Astrophysical Journal, Supplement Series, 2011, 194, 23.	3.0	91
125	IS THE MAGNETIC FIELD IN THE HELIOSHEATH LAMINAR OR A TURBULENT SEA OF BUBBLES?. Astrophysical Journal, 2011, 734, 71.	1.6	71
126	Radiative effects in radiative shocks in shock tubes. High Energy Density Physics, 2011, 7, 130-140.	0.4	38

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127	Predictive modeling of a radiative shock system. Reliability Engineering and System Safety, 2011, 96, 1184-1193.	5.1	16
128	A DATA-DRIVEN, TWO-TEMPERATURE SOLAR WIND MODEL WITH ALFVÃ‰N WAVES. Astrophysical Journal, 2010, 725, 1373-1383.	1.6	123
129	Numerical considerations in simulating the global magnetosphere. Annales Geophysicae, 2010, 28, 1589-1614.	0.6	42
130	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
131	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
132	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
133	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
134	Selfâ€consistent inner magnetosphere simulation driven by a global MHD model. Journal of Geophysical Research, 2010, 115, .	3.3	43
135	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
136	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
137	BREAKOUT CORONAL MASS EJECTION OR STREAMER BLOWOUT: THE BUGLE EFFECT. Astrophysical Journal, 2009, 693, 1178-1187.	1.6	39
138	Confronting Observations and Modeling: The Role ofÂtheÂInterstellar Magnetic Field in Voyager 1 and 2 Asymmetries. Space Science Reviews, 2009, 143, 43-55.	3.7	34
139	A strong, highly-tilted interstellar magnetic field near the Solar System. Nature, 2009, 462, 1036-1038.	13.7	122
140	Integration of the radiation belt environment model into the space weather modeling framework. Journal of Atmospheric and Solar-Terrestrial Physics, 2009, 71, 1653-1663.	0.6	29
141	Cavities of weak magnetic field strength in the wake of FTEs: Results from global magnetospheric MHD simulations. Geophysical Research Letters, 2009, 36, .	1.5	11
142	Modeling ionospheric outflows and their impact on the magnetosphere, initial results. Journal of Geophysical Research, 2009, 114, .	3.3	114
143	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
144	Timeâ€dependent global MHD simulations of Cassini T32 flyby: From magnetosphere to magnetosheath. Journal of Geophysical Research, 2009, 114, .	3.3	41

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145	Hall magnetohydrodynamics on block-adaptive grids. Journal of Computational Physics, 2008, 227, 6967-6984.	1.9	85
146	Role of periodic loadingâ€unloading in the magnetotail versus interplanetary magnetic field B_z flipping in the ring current buildup. Journal of Geophysical Research, 2008, 113, .	3.3	1
147	Threeâ€dimensional MHD Simulation of the 2003 October 28 Coronal Mass Ejection: Comparison with LASCO Coronagraph Observations. Astrophysical Journal, 2008, 684, 1448-1460.	1.6	137
148	Confronting Observations and Modeling: The Role ofÂtheÂInterstellar Magnetic Field in Voyager 1 and 2 Asymmetries. Space Sciences Series of ISSI, 2008, , 43-55.	0.0	0
149	Numerical Investigation of the Homologous Coronal Mass Ejection Events from Active Region 9236. Astrophysical Journal, 2007, 659, 788-800.	1.6	80
150	Polar wind outflow model: Saturn results. Journal of Geophysical Research, 2007, 112, n/a-n/a.	3.3	45
151	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
152	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.	1.3	97
153	3D global multiâ€species Hallâ€MHD simulation of the Cassini T9 flyby. Geophysical Research Letters, 2007, 34, .	1.5	58
154	Multiscale modeling of magnetospheric reconnection. Journal of Geophysical Research, 2007, 112, .	3.3	72
155	Leakage of photospheric acoustic waves into non-magnetic solar atmosphere. Astronomy and Astrophysics, 2007, 467, 1299-1311.	2.1	43
156	Enhancement of Photospheric Meridional Flow by Reconnection Processes. Astrophysical Journal, 2006, 645, 1537-1542.	1.6	6
157	Flexible, efficient and robust algorithm for parallel execution and coupling of components in a framework. Computer Physics Communications, 2006, 174, 793-802.	3.0	6
158	The global ionosphereâ€“thermosphere model. Journal of Atmospheric and Solar-Terrestrial Physics, 2006, 68, 839-864.	0.6	392
159	A parallel explicit/implicit time stepping scheme on block-adaptive grids. Journal of Computational Physics, 2006, 217, 722-758.	1.9	57
160	Coronal Mass Ejection Shock and Sheath Structures Relevant to Particle Acceleration. Astrophysical Journal, 2005, 622, 1225-1239.	1.6	122
161	Numerical simulations of vertical oscillations of a solar coronal loop. Astronomy and Astrophysics, 2005, 440, 385-390.	2.1	40
162	Global MHD simulations of Saturn's magnetosphere at the time of Cassini approach. Geophysical Research Letters, 2005, 32, .	1.5	57

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163	Space Weather Modeling Framework: A new tool for the space science community. Journal of Geophysical Research, 2005, 110, .	3.3	631
164	A PHYSICS-BASED SOFTWARE FRAMEWORK FOR SUN-EARTH CONNECTION MODELING. , 2005, , 383-397.		10
165	Solution-adaptive magnetohydrodynamics for space plasmas: sun-to-earth simulations. Computing in Science and Engineering, 2004, 6, 14-35.	1.2	62
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