Aaron J Ridley

List of Publications by Year in Descending Order

251 papers	7,661 citations	47 h-index	74 g-index
277 ext. papers	8,576 ext. citations	2.8 avg, IF	5.94 L-index

#	Paper	IF	Citations
251	Simulating the Solar Wind-Magnetosphere Interaction During the Matuyama-Brunhes Paleomagnetic Reversal. *Geophysical Research Letters*, **2022**, 49,	4.9	
250	FTA: A Feature Tracking Empirical Model of Auroral Precipitation. *Space Weather*, **2021**, 19, e2020SW002629	3.7	0
249	Changes in the Magnetic Field Topology and the Dayside/Nightside Reconnection Rates in Response to a Solar Wind Dynamic Pressure Front: A Case Study. *Journal of Geophysical Research: Space Physics*, **2021**, 126, e2020JA028768	2.6	2
248	Estimation of the thermospheric density using ephemerides of the CYGNSS and Swarm constellations. *Journal of Atmospheric and Solar-Terrestrial Physics*, **2021**, 221, 105687	2	
247	Impacts of Lower Thermospheric Atomic Oxygen on Thermospheric Dynamics and Composition Using the Global Ionosphere Thermosphere Model. *Journal of Geophysical Research: Space Physics*, **2020**, 125, e2020JA027877	2.6	1
246	Conductance Model for Extreme Events: Impact of Auroral Conductance on Space Weather Forecasts. *Space Weather*, **2020**, 18, e2020SW002551	3.7	10
245	Estimation of Thermal-Conductivity Coefficients in the Global Ionosphere–Thermosphere Model. *Journal of Aerospace Information Systems*, **2020**, 17, 546-553	1	2
244	Thermosphere-Ionosphere Modeling With Forecastable Inputs: Case Study of the June 2012 High-Speed Stream Geomagnetic Storm. *Space Weather*, **2020**, 18, e2019SW002352	3.7	1
243	A Simple Method for Correcting Empirical Model Densities During Geomagnetic Storms Using Satellite Orbit Data. *Space Weather*, **2020**, 18, e2020SW002565	3.7	2
242	Segmentation of SED by Boundary Flows Associated With Westward Drifting Partial Ring current. *Geophysical Research Letters*, **2019**, 46, 7920-7928	4.9	6
241	Relationship Between Temporal and Spatial Resolution for a Constellation of GNSS-R Satellites. *IEEE Journal of Selected Topics in Applied Earth Observations and Remote Sensing*, **2019**, 12, 16-25	4.7	21
240	Quantifying the Storm Time Thermospheric Neutral Density Variations Using Model and Observations. *Space Weather*, **2019**, 17, 269-284	3.7	6
239	Thermospheric Weather as Observed by Ground-Based FPIs and Modeled by GITM. *Journal of Geophysical Research: Space Physics*, **2019**, 124, 1307-1316	2.6	8
238	Multi-point observations and modeling of subauroral polarization streams (SAPS) and double-peak subauroral ion drifts (DSAIDs): A case study. *Advances in Space Research*, **2019**, 63, 3522-3535	2.4	8
237	Merging of Storm Time Midlatitude Traveling Ionospheric Disturbances and Equatorial Plasma Bubbles. *Space Weather*, **2019**, 17, 285-298	3.7	30
236	Response of the Geospace System to the Solar Wind Dynamic Pressure Decrease on 11 June 2017: Numerical Models and Observations. *Journal of Geophysical Research: Space Physics*, **2019**, 124, 2613-2627	2.6	1
235	Assessment of the Differential Drag Maneuver Operations on the CYGNSS Constellation. *IEEE Journal of Selected Topics in Applied Earth Observations and Remote Sensing*, **2019**, 12, 7-15	4.7	4

234	The Response of the Ionosphere-Thermosphere System to the 21 August 2017 Solar Eclipse. *Journal of Geophysical Research: Space Physics*, **2019**, 124, 7341-7355	2.6	17
233	HL-TWiM Empirical Model of High-Latitude Upper Thermospheric Winds. *Journal of Geophysical Research: Space Physics*, **2019**, 124, 10592-10618	2.6	8
232	Low-Density Cell of the Thermosphere at High Latitudes Revisited. *Journal of Geophysical Research: Space Physics*, **2019**, 124, 521-533	2.6	4
231	Atmospheric Gravity Waves in the Ionosphere and Thermosphere During the 2017 Solar Eclipse. *Geophysical Research Letters*, **2018**, 45, 5246-5252	4.9	17
230	The Spacecraft Orbital Characterization Kit and its Applications to the CYGNSS Mission. **2018**,		6
229	A Year-Long Comparison of GPS TEC and Global Ionosphere-Thermosphere Models. *Journal of Geophysical Research: Space Physics*, **2018**, 123, 1410-1428	2.6	10
228	Seasonal Dependence of Geomagnetic Active-Time Northern High-Latitude Upper Thermospheric Winds. *Journal of Geophysical Research: Space Physics*, **2018**, 123, 739-754	2.6	22
227	Effects of Uncertainties in the Atmospheric Density on the Probability of Collision Between Space Objects. *Space Weather*, **2018**, 16, 519-537	3.7	23
226	Midlatitude Plasma Bubbles Over China and Adjacent Areas During a Magnetic Storm on 8 September 2017. *Space Weather*, **2018**, 16, 321-331	3.7	60
225	Modeling Study of the Geospace System Response to the Solar Wind Dynamic Pressure Enhancement on 17 March 2015. *Journal of Geophysical Research: Space Physics*, **2018**, 123, 2974-2989	2.6	7
224	GITM-Data Comparisons of the Depletion and Enhancement During the 2017 Solar Eclipse. *Geophysical Research Letters*, **2018**, 45, 3319-3327	4.9	20
223	New results on the mid-latitude midnight temperature maximum. *Annales Geophysicae*, **2018**, 36, 541-553		3
222	A New Paradigm in Earth Environmental Monitoring with the CYGNSS Small Satellite Constellation. *Scientific Reports*, **2018**, 8, 8782	4.9	117
221	Assessing the Quality of Models of the Ambient Solar Wind. *Space Weather*, **2018**, 16, 1644-1667	3.7	30
220	An Ionosphere Specification Technique Based on Data Ingestion Algorithm and Empirical Orthogonal Function Analysis Method. *Space Weather*, **2018**, 16, 1410-1423	3.7	9
219	Validation of Ionospheric Specifications During Geomagnetic Storms: TEC and foF2 During the 2013 March Storm Event. *Space Weather*, **2018**, 16, 1686-1701	3.7	16
218	Seasonal dependence of northern high-latitude upper thermospheric winds: A quiet time climatological study based on ground-based and space-based measurements. *Journal of Geophysical Research: Space Physics*, **2017**, 122, 2619-2644	2.6	24
217	PFISR observation of intense ion upflow fluxes associated with an SED during the 1 June 2013 geomagnetic storm. *Journal of Geophysical Research: Space Physics*, **2017**, 122, 2589-2604	2.6	13

216	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	2.6	21
215	The effect of ring current electron scattering rates on magnetosphere-ionosphere coupling. *Journal of Geophysical Research: Space Physics*, **2017**, 122, 4168-4189	2.6	11
214	CEDAR-GEM Challenge for Systematic Assessment of Ionosphere/Thermosphere Models in Predicting TEC During the 2006 December Storm Event. *Space Weather*, **2017**, 15, 1238-1256	3.7	11
213	Hemispheric differences in the response of the upper atmosphere to the August 2011 geomagnetic storm: A simulation study. *Journal of Atmospheric and Solar-Terrestrial Physics*, **2016**, 141, 13-26	2	12
212	Geomagnetic disturbance intensity dependence on the universal timing of the storm peak. *Journal of Geophysical Research: Space Physics*, **2016**, 121, 7561-7571	2.6	1
211	Universal time effect in the response of the thermosphere to electric field changes. *Journal of Geophysical Research: Space Physics*, **2016**, 121, 3681-3698	2.6	8
210	Rating global magnetosphere model simulations through statistical data-model comparisons. *Space Weather*, **2016**, 14, 819-834	3.7	11
209	A new ionospheric electron precipitation module coupled with RAM-SCB within the geospace general circulation model. *Journal of Geophysical Research: Space Physics*, **2016**, 121, 8554-8575	2.6	29
208	Investigating the performance of simplified neutral-ion collisional heating rate in a global IT model. *Journal of Geophysical Research: Space Physics*, **2016**, 121, 578-588	2.6	7
207	New Ocean Winds Satellite Mission to Probe Hurricanes and Tropical Convection. *Bulletin of the American Meteorological Society*, **2016**, 97, 385-395	6.1	183
206	Simulating electron and ion temperature in a global ionosphere thermosphere model: Validation and modeling an idealized substorm. *Journal of Atmospheric and Solar-Terrestrial Physics*, **2016**, 138-139, 243-260	2	11
205	Effect of the solar activity variation on the Global Ionosphere Thermosphere Model (GITM). *Annales Geophysicae*, **2016**, 34, 725-736	2	5
204	Global response of the upper thermospheric winds to large ion drifts in the Jovian ovals. *Journal of Geophysical Research: Space Physics*, **2016**, 121, 4647-4667	2.6	6
203	Twenty-four hour predictions of the solar wind speed peaks by the probability distribution function model. *Space Weather*, **2016**, 14, 861-873	3.7	5
202	Modeling of the Evolution of Storm-Enhanced Density Plume during the 24 to 25 October 2011 Geomagnetic Storm. *Geophysical Monograph Series*, **2016**, 205-213	1.1	10
201	High-latitude ionospheric drivers and their effects on wind patterns in the thermosphere. *Journal of Geophysical Research: Space Physics*, **2015**, 120, 715-735	2.6	15
200	Maximizing photovoltaic power generation of a space-dart configured satellite. *Acta Astronautica*, **2015**, 111, 283-299	2.9	18
199	Thermospheric winds around the cusp region. *Journal of Geophysical Research: Space Physics*, **2015**, 120, 1248-1255	2.6	16

198	Relative Ionospheric Ranging Delay in LEO GNSS Oceanic Reflections. *IEEE Geoscience and Remote Sensing Letters*, **2015**, 12, 1416-1420	4.1	7
197	Theoretical study of zonal differences of electron density at midlatitudes with GITM simulation. *Journal of Geophysical Research: Space Physics*, **2015**, 120, 2951-2966	2.6	20
196	A simulation study of the thermosphere mass density response to substorms using GITM. *Journal of Geophysical Research: Space Physics*, **2015**, 120, 7987-8001	2.6	4
195	Retrospective-Cost-Based Adaptive Input and State Estimation for the Ionosphere□Thermosphere. *Journal of Aerospace Information Systems*, **2015**, 12, 767-783	1	4
194	Specification of the Ionosphere-Thermosphere Using the Ensemble Kalman Filter. *Lecture Notes in Computer Science*, **2015**, 274-283	0.9	10
193	Comparative Studies of Theoretical Models in the Equatorial Ionosphere. *Geophysical Monograph Series*, **2014**, 133-144	1.1	4
192	The Global Ionosphere-Thermosphere Model and the Nonhydrostatic Processes. *Geophysical Monograph Series*, **2014**, 85-100	1.1	1
191	Storm time response of the midlatitude thermosphere: Observations from a network of Fabry-Perot interferometers. *Journal of Geophysical Research: Space Physics*, **2014**, 119, 6758-6773	2.6	18
190	MAGNETOSPHERIC STRUCTURE AND ATMOSPHERIC JOULE HEATING OF HABITABLE PLANETS ORBITING M-DWARF STARS. *Astrophysical Journal*, **2014**, 790, 57	4.7	101
189	Strong ionospheric field-aligned currents for radial interplanetary magnetic fields. *Journal of Geophysical Research: Space Physics*, **2014**, 119, 3979-3995	2.6	8
188	Predictions of the solar wind speed by the probability distribution function model. *Space Weather*, **2014**, 12, 337-353	3.7	15
187	The effect of background conditions on the ionospheric response to solar flares. *Journal of Geophysical Research: Space Physics*, **2014**, 119, 5060-5075	2.6	5
186	Developing a self-consistent description of Titan's upper atmosphere without hydrodynamic escape. *Journal of Geophysical Research: Space Physics*, **2014**, 119, 4957-4972	2.6	30
185	On the generation/decay of the storm-enhanced density plumes: Role of the convection flow and field-aligned ion flow. *Journal of Geophysical Research: Space Physics*, **2014**, 119, 8543-8559	2.6	47
184	Simulation of non-hydrostatic gravity wave propagation in the upper atmosphere. *Annales Geophysicae*, **2014**, 32, 443-447	2	14
183	CYGNSS-based Ionospheric Electron Content Estimation: An Analysis **2014**,		1
182	An autonomous adaptive low-power instrument platform (AAL-PIP) for remote high-latitude geospace data collection. *Geoscientific Instrumentation, Methods and Data Systems*, **2014**, 3, 211-227	1.5	17
181	Modeling subsolar thermospheric waves during a solar flare and penetration electric fields. *Journal of Geophysical Research: Space Physics*, **2014**, 119, 10,507	2.6	3

180	CYGNSS: NASA Earth Venture Tropical Cyclone Mission **2014**,		1
179	Daytime altitude variations of the equatorial, topside magnetic field-aligned ion transport at solar minimum. *Journal of Geophysical Research: Space Physics*, **2013**, 118, 3568-3575	2.6	6
178	Exploring the influence of ionospheric O+ outflow on magnetospheric dynamics: The effect of outflow intensity. *Journal of Geophysical Research: Space Physics*, **2013**, 118, 5522-5531	2.6	12
177	Data assimilation and driver estimation for the Global Ionosphere–Thermosphere Model using the Ensemble Adjustment Kalman Filter. *Journal of Atmospheric and Solar-Terrestrial Physics*, **2013**, 104, 126-136	2	30
176	The NASA EV-2 Cyclone Global Navigation Satellite System (CYGNSS) mission **2013**,		13
175	**2013**,		7
174	Evidence for potential and inductive convection during intense geomagnetic events using normalized superposed epoch analysis. *Journal of Geophysical Research: Space Physics*, **2013**, 118, 181-191	2.6	28
173	Retrospective Cost Optimization for Adaptive State Estimation, Input Estimation, and Model Refinement. *Procedia Computer Science*, **2013**, 18, 1919-1928	1.6	4
172	Theoretical study: Influence of different energy sources on the cusp neutral density enhancement. *Journal of Geophysical Research: Space Physics*, **2013**, 118, 2340-2349	2.6	51
171	Electrodynamics of the high-latitude trough: Its relationship with convection flows and field-aligned currents. *Journal of Geophysical Research: Space Physics*, **2013**, 118, 2565-2572	2.6	18
170	Exploring the influence of ionospheric O+ outflow on magnetospheric dynamics: dependence on the source location. *Journal of Geophysical Research: Space Physics*, **2013**, 118, 1711-1722	2.6	42
169	Multi-instrument observations of SED during 24–25 October 2011 storm: Implications for SED formation processes. *Journal of Geophysical Research: Space Physics*, **2013**, 118, 7798-7809	2.6	41
168	Community-wide validation of geospace model ground magnetic field perturbation predictions to support model transition to operations. *Space Weather*, **2013**, 11, 369-385	3.7	99
167	On the performance of global magnetohydrodynamic models in the Earth's magnetosphere. *Space Weather*, **2013**, 11, 313-326	3.7	20
166	Comparison of Joule heating associated with high-speed solar wind between different models and observations. *Journal of Atmospheric and Solar-Terrestrial Physics*, **2012**, 75-76, 5-14	2	12
165	Quiet-time low latitude ionospheric electrodynamics in the non-hydrostatic Global Ionosphere–Thermosphere Model. *Journal of Atmospheric and Solar-Terrestrial Physics*, **2012**, 80, 161-172	2	20
164	Dynamical effects of internal gravity waves in the equinoctial thermosphere. *Journal of Atmospheric and Solar-Terrestrial Physics*, **2012**, 90-91, 104-116	2	47
163	The CYGNSS nanosatellite constellation hurricane mission **2012**,		78

162	Analyzing the hemispheric asymmetry in the thermospheric density response to geomagnetic storms. *Journal of Geophysical Research*, **2012**, 117, n/a-n/a		21
161	Solar wind density controlling penetration electric field at the equatorial ionosphere during a saturation of cross polar cap potential. *Journal of Geophysical Research*, **2012**, 117, n/a-n/a		13
160	**2012**,		7
159	A global model: Empirical orthogonal function analysis of total electron content 1999–2009 data. *Journal of Geophysical Research*, **2012**, 117, n/a-n/a		34
158	CEDAR Electrodynamics Thermosphere Ionosphere (ETI) Challenge for systematic assessment of ionosphere/thermosphere models: Electron density, neutral density, NmF2, and hmF2 using space based observations. *Space Weather*, **2012**, 10, n/a-n/a	3.7	52
157	Utilizing the polar cap index to explore strong driving of polar cap dynamics. *Journal of Geophysical Research*, **2012**, 117, n/a-n/a		6
156	Importance of capturing heliospheric variability for studies of thermospheric vertical winds. *Journal of Geophysical Research*, **2012**, 117, n/a-n/a		15
155	Large-Scale Measurements of Thermospheric Dynamics with a Multisite Fabry-Perot Interferometer Network: Overview of Plans and Results from Midlatitude Measurements. *International Journal of Geophysics*, **2012**, 2012, 1-10	2	29
154	Retrospective-Cost-Based Adaptive State Estimation and Input Reconstruction for the Global Ionosphere-Thermosphere Model **2012**,		1
153	Magnetospheric configuration and dynamics of Saturn's magnetosphere: A global MHD simulation. *Journal of Geophysical Research*, **2012**, 117, n/a-n/a		98
152	Joule heating associated with auroral electrojets during magnetospheric substorms. *Journal of Geophysical Research*, **2011**, 116,		6
151	Understanding the response of the ionosphere-magnetosphere system to sudden solar wind density increases. *Journal of Geophysical Research*, **2011**, 116, n/a-n/a		22
150	Testing the necessity of transient spikes in the storm time ring current drivers. *Journal of Geophysical Research*, **2011**, 116, n/a-n/a		4
149	Impact of the altitudinal Joule heating distribution on the thermosphere. *Journal of Geophysical Research*, **2011**, 116,		47
148	Energy input into the upper atmosphere associated with high-speed solar wind streams in 2005. *Journal of Geophysical Research*, **2011**, 116,		21
147	Reducing numerical diffusion in magnetospheric simulations. *Journal of Geophysical Research*, **2011**, 116, n/a-n/a		8
146	Simulating the one-dimensional structure of Titan's upper atmosphere: 3. Mechanisms determining methane escape. *Journal of Geophysical Research*, **2011**, 116,		24
145	Geospace Environment Modeling 2008–2009 Challenge: Ground magnetic field perturbations. *Space Weather*, **2011**, 9, n/a-n/a	3.7	61

144	Geospace Environment Modeling 2008–2009 Challenge: Geosynchronous magnetic field. *Space Weather*, **2011**, 9, n/a-n/a	3.7	25
143	Role of variability in determining the vertical wind speeds and structure. *Journal of Geophysical Research*, **2011**, 116, n/a-n/a		10
142	Statistical study of the effect of ULF fluctuations in the IMF on the cross polar cap potential drop for northward IMF. *Journal of Geophysical Research*, **2011**, 116, n/a-n/a		4
141	Quiet time observations of the open-closed boundary prior to the CIR-induced storm of 9 August 2008. *Space Weather*, **2011**, 9, n/a-n/a	3.7	12
140	CEDAR Electrodynamics Thermosphere Ionosphere (ETI) Challenge for systematic assessment of ionosphere/thermosphere models: NmF2, hmF2, and vertical drift using ground-based observations. *Space Weather*, **2011**, 9, n/a-n/a	3.7	57
139	Adaptive State Estimation for Nonminimum-Phase Systems with Uncertain Harmonic Inputs **2011**,		3
138	The effects of different solar flare characteristics on the global thermosphere. *Journal of Atmospheric and Solar-Terrestrial Physics*, **2011**, 73, 1840-1848	2	14
137	Retrospective-cost-based adaptive model refinement for the ionosphere and thermosphere. *Statistical Analysis and Data Mining*, **2011**, 4, 446-458	1.4	14
136	Effects of high-latitude thermosphere heating at various scale sizes simulated by a nonhydrostatic global thermosphere–ionosphere model. *Journal of Atmospheric and Solar-Terrestrial Physics*, **2011**, 73, 592-600	2	16
135	Retrospective-cost-based model refinement for system emulation and subsystem identification **2011**,		7
134	Comparison of the observed dependence of large-scale Birkeland currents on solar wind parameters with that obtained from global simulations. *Annales Geophysicae*, **2011**, 29, 1809-1826	2	19
133	Modeling ionospheric <I>fo</I>F2 by using empirical orthogonal function analysis. *Annales Geophysicae*, **2011**, 29, 1501-1515	2	32
132	Numerical considerations in simulating the global magnetosphere. *Annales Geophysicae*, **2010**, 28, 1589-1614	1	34
131	The effect of smoothed solar wind inputs on global modeling results. *Journal of Geophysical Research*, **2010**, 115, n/a-n/a		20
130	Systematic evaluation of ground and geostationary magnetic field predictions generated by global magnetohydrodynamic models. *Journal of Geophysical Research*, **2010**, 115, n/a-n/a		28
129	Exploring sources of magnetospheric plasma using multispecies MHD. *Journal of Geophysical Research*, **2010**, 115, n/a-n/a		33
128	Including gap region field-aligned currents and magnetospheric currents in the MHD calculation of ground-based magnetic field perturbations. *Journal of Geophysical Research*, **2010**, 115, n/a-n/a		35
127	Dipole tilt effects on the magnetosphere-ionosphere convection system during interplanetary magnetic field BY-dominated periods: MHD modeling. *Journal of Geophysical Research*, **2010**, 115,		6

126	Comparison of the open-closed separatrix in a global magnetospheric simulation with observations: The role of the ring current. *Journal of Geophysical Research*, **2010**, 115, n/a-n/a		17
125	Validation of SWMF magnetic field and plasma. *Space Weather*, **2010**, 8, n/a-n/a	3.7	52
124	Long-lasting goodshielding at the equatorial ionosphere. *Journal of Geophysical Research*, **2010**, 115, n/a-n/a		8
123	Simulating the one-dimensional structure of Titan's upper atmosphere: 1. Formulation of the Titan Global Ionosphere-Thermosphere Model and benchmark simulations. *Journal of Geophysical Research*, **2010**, 115,		32
122	Simulating the one-dimensional structure of Titan's upper atmosphere: 2. Alternative scenarios for methane escape. *Journal of Geophysical Research*, **2010**, 115,		27
121	Comparative study of a substorm event by satellite observation and model simulation. *Science Bulletin*, **2010**, 55, 857-864		2
120	Plasma convection jets near the poleward boundary of the nightside auroral oval and their relation to Pedersen conductivity gradients. *Annales Geophysicae*, **2010**, 28, 969-976	2	11
119	Autonomous low-power magnetic data collection platform to enable remote high latitude array deployment. *Review of Scientific Instruments*, **2009**, 80, 044501	1.7	11
118	Quantifying the effect of thermospheric parameterization in a global model. *Journal of Atmospheric and Solar-Terrestrial Physics*, **2009**, 71, 2017-2026	2	12
117	Modeling the ionospheric response to the 28 October 2003 solar flare due to coupling with the thermosphere. *Radio Science*, **2009**, 44, n/a-n/a	1.4	13
116	Cavities of weak magnetic field strength in the wake of FTEs: Results from global magnetospheric MHD simulations. *Geophysical Research Letters*, **2009**, 36,	4.9	8
115	Response of the magnetosphere-ionosphere system to a sudden southward turning of interplanetary magnetic field. *Journal of Geophysical Research*, **2009**, 114, n/a-n/a		27
114	PENGUIn multi-instrument observations of dayside high-latitude injections during the 23 March 2007 substorm. *Journal of Geophysical Research*, **2009**, 114, n/a-n/a		8
113	Self-consistent model of magnetospheric electric field, ring current, plasmasphere, and electromagnetic ion cyclotron waves: Initial results. *Journal of Geophysical Research*, **2009**, 114, n/a-n/a		22
112	A statistical study of BRIs (SMCs), isolated substorms, and individual sawtooth injections. *Journal of Geophysical Research*, **2009**, 114, n/a-n/a		33
111	Comparative Study of Subauroral Polarization Streams with DMSP Observation and RAM Simulation. *Chinese Journal of Geophysics*, **2009**, 52, 531-540		3
110	The response of the magnetosphere-ionosphere system to a sudden dynamic pressure enhancement under southward IMF conditions. *Annales Geophysicae*, **2009**, 27, 4391-4407	2	20
109	Neutral Upper Atmosphere and Ionosphere Modeling. *Space Sciences Series of ISSI*, **2008**, 107-141	0.1	1

108	Assessment of the non-hydrostatic effect on the upper atmosphere using a general circulation model (GCM). *Geophysical Research Letters*, **2008**, 35,	4.9	67
107	Global model comparison with Millstone Hill during September 2005. *Journal of Geophysical Research*, **2008**, 113, n/a-n/a		12
106	Validation of the space weather modeling framework using ground-based magnetometers. *Space Weather*, **2008**, 6, n/a-n/a	3.7	47
105	Validation of the Space Weather Modeling Framework using observations from CHAMP and DMSP. *Space Weather*, **2008**, 6, n/a-n/a	3.7	25
104	Cholesky-based reduced-rank square-root Kalman filtering **2008**,		6
103	Saturation of the polar cap potential: Inference from Alfvén wing arguments. *Journal of Geophysical Research*, **2008**, 113, n/a-n/a		78
102	Effect of the altitudinal variation of the gravitational acceleration on the thermosphere simulation. *Journal of Geophysical Research*, **2008**, 113, n/a-n/a		14
101	Statistical study of the subauroral polarization stream: Its dependence on the cross‐polar cap potential and subauroral conductance. *Journal of Geophysical Research*, **2008**, 113, n/a-n/a		43
100	Temporal evolution of the transpolar potential after a sharp enhancement in solar wind dynamic pressure. *Geophysical Research Letters*, **2008**, 35,	4.9	17
99	Substorm onset dynamics in the magnetotail as derived from joint TC-1 and Cluster data analysis. *Earth, Planets and Space*, **2008**, 60, 613-621	2.9	1
98	Data assimilation for magnetohydrodynamics with a zero-divergence constraint on the magnetic field **2008**,		2
97	Reduced-rank unscented Kalman filtering using Cholesky-based decomposition. *International Journal of Control*, **2008**, 81, 1779-1792	1.5	5
96	Localized data assimilation in the ionosphere-thermosphere using a sampled-data unscented Kalman filter **2008**,		3
95	SWMF simulation of field-aligned currents for a varying northward and duskward IMF with nonzero dipole tilt. *Annales Geophysicae*, **2008**, 26, 1461-1477	2	11
94	Balanced reconnection intervals: four case studies. *Annales Geophysicae*, **2008**, 26, 3897-3912	2	26
93	Plasma Flow and Related Phenomena in Planetary Aeronomy. *Space Science Reviews*, **2008**, 139, 311-353	7.5	27
92	Neutral Upper Atmosphere and Ionosphere Modeling. *Space Science Reviews*, **2008**, 139, 107-141	7.5	70
91	Modeling the thermospheric response to solar flares. *Journal of Geophysical Research*, **2008**, 113,		50

90	Plasma Flow and Related Phenomena in Planetary Aeronomy. *Space Sciences Series of ISSI*, **2008**, 311-353	0.1	
89	Effects of seasonal changes in the ionospheric conductances on magnetospheric field-aligned currents. *Geophysical Research Letters*, **2007**, 34,	4.9	44
88	Polar wind outflow model: Saturn results. *Journal of Geophysical Research*, **2007**, 112, n/a-n/a		41
87	Understanding storm-time ring current development through data-model comparisons of a moderate storm. *Journal of Geophysical Research*, **2007**, 112, n/a-n/a		46
86	Possible reasons for underestimating Joule heating in global models: E field variability, spatial resolution, and vertical velocity. *Journal of Geophysical Research*, **2007**, 112, n/a-n/a		53
85	Waves on the dusk flank boundary layer during very northward interplanetary magnetic field conditions: Observations and simulation. *Journal of Geophysical Research*, **2007**, 112, n/a-n/a		42
84	Technique: Large-scale ionospheric conductance estimated from combined satellite and ground-based electromagnetic data. *Journal of Geophysical Research*, **2007**, 112, n/a-n/a		19
83	Global 30–240 keV proton precipitation in the 17–18 April 2002 geomagnetic storms: 3. Impact on the ionosphere and thermosphere. *Journal of Geophysical Research*, **2007**, 112, n/a-n/a		11
82	Origin of the interhemispheric potential mismatch of merging cells for interplanetary magnetic field BY-dominated periods. *Journal of Geophysical Research*, **2007**, 112, n/a-n/a		20
81	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	85
80	Strong bulk plasma acceleration in Earth's magnetosheath: A magnetic slingshot effect?. *Geophysical Research Letters*, **2007**, 34,	4.9	56
79	Multiscale modeling of magnetospheric reconnection. *Journal of Geophysical Research*, **2007**, 112, n/a-n/a		64
78	Space Weather Forecasting. *IEEE Control Systems*, **2007**, 27, 109-123	2.9	10
77	Alfvén wings at Earth's magnetosphere under strong interplanetary magnetic fields. *Annales Geophysicae*, **2007**, 25, 533-542	2	54
76	Modeling the ring current response to a sawtooth oscillation event. *Journal of Atmospheric and Solar-Terrestrial Physics*, **2007**, 69, 67-76	2	9
75	Global auroral imaging in the ILWS era. *Advances in Space Research*, **2007**, 40, 409-418	2.4	4
74	Reduced-Order Covariance-Based Unscented Kalman Filtering with Complementary Steady-State Correlation. *Proceedings of the American Control Conference*, **2007**,	1.2	2
73	A Comparison of the Extended and Unscented Kalman Filters for Discrete-Time Systems with Nondifferentiable Dynamics. *Proceedings of the American Control Conference*, **2007**,	1.2	7

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