

Gang Lu

List of Publications by Year in descending order

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60
papers

3,692
citations

126708

33
h-index

128067

60
g-index

69
all docs

69
docs citations

69
times ranked

2004
citing authors

#	ARTICLE	IF	CITATIONS
1	Global simulation of the Geospace Environment Modeling substorm challenge event. <i>Journal of Geophysical Research</i> , 2001, 106, 381-395.	3.3	232
2	Development and Validation of the Whole Atmosphere Community Climate Model With Thermosphere and Ionosphere Extension (WACCM-X 2.0). <i>Journal of Advances in Modeling Earth Systems</i> , 2018, 10, 381-402.	1.3	213
3	A statistical study of the ionospheric convection response to changing interplanetary magnetic field conditions using the assimilative mapping of ionospheric electrodynamics technique. <i>Journal of Geophysical Research</i> , 1998, 103, 4023-4039.	3.3	210
4	Theoretical study of the low- and midlatitude ionospheric electron density enhancement during the October 2003 superstorm: Relative importance of the neutral wind and the electric field. <i>Journal of Geophysical Research</i> , 2005, 110, .	3.3	185
5	Magnetosphere-ionosphere-thermosphere coupling: Effect of neutral winds on energy transfer and field-aligned current. <i>Journal of Geophysical Research</i> , 1995, 100, 19643.	3.3	164
6	Global energy deposition during the January 1997 magnetic cloud event. <i>Journal of Geophysical Research</i> , 1998, 103, 11685-11694.	3.3	159
7	Upper-atmospheric effects of magnetic storms: a brief tutorial. <i>Journal of Atmospheric and Solar-Terrestrial Physics</i> , 2000, 62, 1115-1127.	0.6	148
8	Global impact of ionospheric outflows on the dynamics of the magnetosphere and cross-polar cap potential. <i>Journal of Geophysical Research</i> , 2002, 107, SMP 11-1.	3.3	116
9	A dayside ionospheric positive storm phase driven by neutral winds. <i>Journal of Geophysical Research</i> , 2008, 113, .	3.3	106
10	Interhemispheric asymmetry of the high-latitude ionospheric convection pattern. <i>Journal of Geophysical Research</i> , 1994, 99, 6491.	3.3	105
11	Energy transport in the thermosphere during the solar storms of April 2002. <i>Journal of Geophysical Research</i> , 2005, 110, .	3.3	105
12	Parameterization of monoenergetic electron impact ionization. <i>Geophysical Research Letters</i> , 2010, 37, .	1.5	93
13	Nonlinear response of the polar ionosphere to large values of the interplanetary electric field. <i>Journal of Geophysical Research</i> , 2001, 106, 18495-18504.	3.3	88
14	Electron impact ionization: A new parameterization for 100 eV to 1 MeV electrons. <i>Journal of Geophysical Research</i> , 2008, 113, .	3.3	84
15	Coexistence of ionospheric positive and negative storm phases under northern winter conditions: A case study. <i>Journal of Geophysical Research</i> , 2001, 106, 24493-24504.	3.3	81
16	Thermosphere density variations due to the 15–24 April 2002 solar events from CHAMP/STAR accelerometer measurements. <i>Journal of Geophysical Research</i> , 2005, 110, .	3.3	78
17	Wind and temperature effects on thermosphere mass density response to the November 2004 geomagnetic storm. <i>Journal of Geophysical Research</i> , 2010, 115, .	3.3	78
18	Ionospheric and thermospheric variations associated with prompt penetration electric fields. <i>Journal of Geophysical Research</i> , 2012, 117, .	3.3	74

#	ARTICLE	IF	CITATIONS
19	High-latitude energy input and its impact on the thermosphere. <i>Journal of Geophysical Research: Space Physics</i> , 2016, 121, 7108-7124.	0.8	64
20	On the relationship of Joule heating and nitric oxide radiative cooling in the thermosphere. <i>Journal of Geophysical Research</i> , 2010, 115, .	3.3	63
21	A high-resolution model of field-aligned currents through empirical orthogonal functions analysis (MFACE). <i>Geophysical Research Letters</i> , 2012, 39, .	1.5	58
22	Joule heating patterns as a function of polar cap index. <i>Journal of Geophysical Research</i> , 2002, 107, SIA 8-1.	3.3	55
23	High-latitude Joule heating response to IMF inputs. <i>Journal of Geophysical Research</i> , 2005, 110, .	3.3	54
24	Ionospheric data assimilation and forecasting during storms. <i>Journal of Geophysical Research: Space Physics</i> , 2016, 121, 764-778.	0.8	51
25	First Results From the Ionospheric Extension of WACCM-X During the Deep Solar Minimum Year of 2008. <i>Journal of Geophysical Research: Space Physics</i> , 2018, 123, 1534-1553.	0.8	50
26	High-latitude ionospheric electrodynamics as determined by the assimilative mapping of ionospheric electrodynamics procedure for the conjunctive SUNDIAL/ATLAS 1/GEM period of March 28-29, 1992. <i>Journal of Geophysical Research</i> , 1996, 101, 26697-26718.	3.3	48
27	Joule heating and nitric oxide in the thermosphere. <i>Journal of Geophysical Research</i> , 2009, 114, .	3.3	48
28	Rapid recovery of thermosphere density during the October 2003 geomagnetic storms. <i>Journal of Geophysical Research</i> , 2011, 116, .	3.3	48
29	Variations of total electron content during geomagnetic disturbances: A model/observation comparison. <i>Geophysical Research Letters</i> , 1998, 25, 253-256.	1.5	47
30	Global ionospheric and thermospheric response to the 5 April 2010 geomagnetic storm: An integrated data-model investigation. <i>Journal of Geophysical Research: Space Physics</i> , 2014, 119, 10,358.	0.8	46
31	Optimal interpolation analysis of high-latitude ionospheric electrodynamics using empirical orthogonal functions: Estimation of dominant modes of variability and temporal scales of large-scale electric fields. <i>Journal of Geophysical Research</i> , 2005, 110, .	3.3	45
32	An investigation of the influence of data and model inputs on assimilative mapping of ionospheric electrodynamics. <i>Journal of Geophysical Research</i> , 2001, 106, 417-433.	3.3	35
33	Assimilative mapping of ionospheric electrodynamics in the thermosphere-ionosphere general circulation model comparisons with global ionospheric and thermospheric observations during the GEM/SUNDIAL period of March 28-29, 1992. <i>Journal of Geophysical Research</i> , 1996, 101, 26681-26696.	3.3	32
34	Modeling ionospheric super-fountain effect based on the coupled TIMEGCM-SAMI3. <i>Journal of Geophysical Research: Space Physics</i> , 2013, 118, 2527-2535.	0.8	32
35	Neutral wind effect in producing a storm time ionospheric additional layer in the equatorial ionization anomaly region. <i>Journal of Geophysical Research</i> , 2009, 114, .	3.3	28
36	Intraannual variability of tides in the thermosphere from model simulations and in situ satellite observations. <i>Journal of Geophysical Research: Space Physics</i> , 2015, 120, 751-765.	0.8	25

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37	Large-scale Ionospheric Disturbances During the 17 March 2015 Storm: A Model-Data Comparative Study. <i>Journal of Geophysical Research: Space Physics</i> , 2020, 125, e2019JA027726.	0.8	25
38	The AMIE procedure: Prospects for space weather specification and prediction. <i>Advances in Space Research</i> , 1998, 22, 103-112.	1.2	23
39	Large Scale High-Latitude Ionospheric Electrodynamic Fields and Currents. <i>Space Science Reviews</i> , 2017, 206, 431-450.	3.7	23
40	Upper thermospheric responses to forcing from above and below during 1-10 April 2010: Results from an ensemble of numerical simulations. <i>Journal of Geophysical Research: Space Physics</i> , 2015, 120, 3160-3174.	0.8	21
41	Thermospheric recovery during the 5 April 2010 geomagnetic storm. <i>Journal of Geophysical Research: Space Physics</i> , 2017, 122, 4588-4599.	0.8	21
42	Solar filament impact on 21 January 2005: Geospace consequences. <i>Journal of Geophysical Research: Space Physics</i> , 2014, 119, 5401-5448.	0.8	20
43	Reversed ionospheric convections during the November 2004 storm: Impact on the upper atmosphere. <i>Journal of Geophysical Research</i> , 2009, 114, .	3.3	18
44	Reversed two-cell convection in the Northern and Southern hemispheres during northward interplanetary magnetic field. <i>Journal of Geophysical Research</i> , 2011, 116, n/a-n/a.	3.3	18
45	Ionosphere-thermosphere energy budgets for the ICME storms of March 2013 and 2015 estimated with GITM and observational proxies. <i>Space Weather</i> , 2017, 15, 1102-1124.	1.3	18
46	Comparison of AMIE-modeled and Sondrestrom-measured Joule heating: A study in model resolution and electric field-conductivity correlation. <i>Journal of Geophysical Research</i> , 2009, 114, .	3.3	15
47	Effects of High-Latitude Forcing Uncertainty on the Low-Latitude and Midlatitude Ionosphere. <i>Journal of Geophysical Research: Space Physics</i> , 2018, 123, 862-882.	0.8	14
48	Impact of nitric oxide, solar EUV and particle precipitation on thermospheric density decrease. <i>Journal of Atmospheric and Solar-Terrestrial Physics</i> , 2019, 182, 147-154.	0.6	14
49	3D Tomographic Reconstruction of SED Plume During 17 March 2013 Storm. <i>Journal of Geophysical Research: Space Physics</i> , 2020, 125, e2020JA028257.	0.8	13
50	Low- and Mid-Latitude Ionospheric Response to the 2013 St. Patrick's Day Geomagnetic Storm in the American Sector: Global Ionosphere Thermosphere Model Simulation. <i>Frontiers in Astronomy and Space Sciences</i> , 2022, 9, .	1.1	11
51	RCM and AMIE studies of the Harang reversal formation during a steady magnetospheric convection event. <i>Journal of Geophysical Research: Space Physics</i> , 2014, 119, 7228-7242.	0.8	9
52	Importance of Regional-scale Auroral Precipitation and Electrical Field Variability to the Storm-Time Thermospheric Temperature Enhancement and Inversion Layer (TTEIL) in the Antarctic E Region. <i>Journal of Geophysical Research: Space Physics</i> , 2020, 125, e2020JA028224.	0.8	9
53	Magnetosphere-Ionosphere Coupling via Prescribed Field-Aligned Current Simulated by the TIEGCM. <i>Journal of Geophysical Research: Space Physics</i> , 2021, 126, .	0.8	8
54	A Data-model Comparative Study of Ionospheric Positive Storm Phase in the Midlatitude F Region. <i>Geophysical Monograph Series</i> , 0, , 63-75.	0.1	3

#	ARTICLE	IF	CITATIONS
55	Appreciation of 2017 GRL Peer Reviewers. Geophysical Research Letters, 2018, 45, 4494-4528.	1.5	0
56	Thank You to Our 2018 Peer Reviewers. Geophysical Research Letters, 2019, 46, 12608-12636.	1.5	0
57	Thank You to Our 2019 Peer Reviewers. Geophysical Research Letters, 2020, 47, e2020GL088048.	1.5	0
58	Thank You to Our 2020 Peer Reviewers. Geophysical Research Letters, 2021, 48, e2021GL093126.	1.5	0
59	Large Scale High-Latitude Ionospheric Electrodynamics Fields and Currents. Space Sciences Series of ISSI, 2018, , 439-458.	0.0	0
60	Thank You to Our 2021 Peer Reviewers. Geophysical Research Letters, 2022, 49, .	1.5	0