Arthur D Richmond

List of Publications by Year
in descending order

218 papers	14,559 citations	15495 65 h-index	22808 112 g-index
229 all docs	229 docs citations	229 times ranked	2988 citing authors

#	Article	IF	Citations
1	A thermosphere/ionosphere general circulation model with coupled electrodynamics. Geophysical Research Letters, 1992, 19, 601-604.	1.5	865
2	A coupled thermosphere/ionosphere general circulation model. Geophysical Research Letters, 1988, 15, 1325-1328.	1.5	652
3	Ionospheric Electrodynamics Using Magnetic Apex Coordinates.. Journal of Geomagnetism and Geoelectricity, 1995, 47, 191-212.	0.8	577
4	Mapping electrodynamic features of the highâ€latitude ionosphere from localized observations: Technique. Journal of Geophysical Research, 1988, 93, 5741-5759.	3.3	568
5	Estimation of ionospheric electric fields, ionospheric currents, and fieldâ€aligned currents from ground magnetic records. Journal of Geophysical Research, 1981, 86, 801-813.	3.3	340
6	Thermospheric response to a magnetic substorm. Journal of Geophysical Research, 1975, 80, 2839-2850.	3.3	298
7	Interplanetary magnetic field control of highâ€latitude electric fields and currents determined from Greenland Magnetometer Data. Journal of Geophysical Research, 1985, 90, 1325-1338.	3.3	258
8	Gravity wave generation, propagation, and dissipation in the thermosphere. Journal of Geophysical Research, 1978, 83, 4131-4145.	3.3	241
9	Equatorial electrojetâ€”I. Development of a model including winds and instabilities. Journal of Atmospheric and Solar-Terrestrial Physics, 1973, 35, 1083-1103.	0.9	240
10	An empirical model of quietâ€day ionospheric electric fields at middle and low latitudes. Journal of Geophysical Research, 1980, 85, 4658-4664.	3.3	236
11	On the production mechanism of electric currents and fields in the ionosphere. Journal of Geophysical Research, 1976, 81, 547-555.	3.3	213
12	Development and Validation of the Whole Atmosphere Community Climate Model With Thermosphere and Ionosphere Extension (WACCMâ€X 2.0). Journal of Advances in Modeling Earth Systems, 2018, 10, 381-402.	1.3	213
13	Ionospheric variability due to planetary waves and tides for solar minimum conditions. Journal of Geophysical Research, 2010, 115, .	3.3	207
14	Connections between deep tropical clouds and the Earth's ionosphere. Geophysical Research Letters, 2007, 34, .	1.5	198
15	Storm-time changes in the upper atmosphere at low latitudes. Journal of Atmospheric and Solar-Terrestrial Physics, 2002, 64, 1383-1391.	0.6	196
16	Interaction between direct penetration and disturbance dynamo electric fields in the storm-time equatorial ionosphere. Geophysical Research Letters, 2005, 32, .	1.5	190
17	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. Journal of Geophysical Research, 2005, 110, .	3.3	185
18	Long-lasting disturbances in the equatorial ionospheric electric field simulated with a coupled magnetosphere-ionosphere-thermosphere model. Journal of Geophysical Research, 2003, 108, .	3.3	179

#	Article	IF	Citations
19	Magnetic Coordinate Systems. Space Science Reviews, 2017, 206, 27-59.	3.7	178
20	Simulation of the pre-reversal enhancement in the low latitude vertical ion drifts. Geophysical Research Letters, 2000, 27, 1851-1854.	1.5	175
21	An investigation into the influence of tidal forcing onFregion equatorial vertical ion drift using a global ionosphere-thermosphere model with coupled electrodynamics. Journal of Geophysical Research, 2001, 106, 24733-24744.	3.3	165
22	Magnetosphere-ionosphere-thermosphere coupling: Effect of neutral winds on energy transfer and field-aligned current. Journal of Geophysical Research, 1995, 100, 19643.	3.3	164
23	A computationally compact representation of Magneticâ€Apex and Quasiâ€Dipole coordinates with smooth base vectors. Journal of Geophysical Research, 2010, 115, .	3.3	151
24	Upper-atmospheric effects of magnetic storms: a brief tutorial. Journal of Atmospheric and Solar-Terrestrial Physics, 2000, 62, 1115-1127.	0.6	148
25	Thermosphere extension of the Whole Atmosphere Community Climate Model. Journal of Geophysical Research, 2010, 115, .	3.3	144
26	Observations and simulations of the ionospheric and thermospheric response to the December 2006 geomagnetic storm: Initial phase. Journal of Geophysical Research, 2008, 113, .	3.3	120
27	Electrodynamic effects of thermospheric winds from the NCAR Thermospheric General Circulation Model. Journal of Geophysical Research, 1987, 92, 12365-12376.	3.3	117
28	Electrodynamic coupling of high and low latitudes: Simulations of shielding/overshielding effects. Journal of Geophysical Research, 2000, 105, 22991-23003.	3.3	114
29	How does the thermosphere and ionosphere react to a geomagnetic storm?. Geophysical Monograph Series, 1997, , 203-225.	0.1	113
30	A theory of ionospheric response to upwardâ€propagating tides: Electrodynamic effects and tidal mixing effects. Journal of Geophysical Research: Space Physics, 2013, 118, 5891-5905.	0.8	113
31	A dayside ionospheric positive storm phase driven by neutral winds. Journal of Geophysical Research, 2008, 113, .	3.3	106
32	Interhemispheric asymmetry of the high-latitude ionospheric convection pattern. Journal of Geophysical Research, 1994, 99, 6491.	3.3	105
33	The Global-Scale Observations of the Limb and Disk (GOLD) Mission. Space Science Reviews, 2017, 212, 383-408.	3.7	105
34	Theoretical effects of geomagnetic activity on low-latitude ionospheric electric fields. Journal of Geophysical Research, 2005, 110, .	3.3	100
35	Simulations of solar and lunar tidal variability in the mesosphere and lower thermosphere during sudden stratosphere warmings and their influence on the lowâ€latitude ionosphere. Journal of Geophysical Research, 2012, 117, .	3.3	98
36	Winds in the high-latitude lower thermosphere: Dependence on the interplanetary magnetic field. Journal of Geophysical Research, 2003, 108, .	3.3	95

#	Article	IF	Citations
37	Behavior of the F₂ peak ionosphere over the South Pacific at dusk during quiet summer conditions from COSMIC data. Journal of Geophysical Research, 2008, 113, .	3.3	92
38	Global distribution of ionospheric and fieldâ€aligned currents during substorms as determined from six IMS meridian chains of magnetometers: Initial results. Journal of Geophysical Research, 1982, 87, 8228-8240.	3.3	91
39	Equatorial electrojetâ€"II. Use of the model to study the equatorial ionosphere. Journal of Atmospheric and Solar-Terrestrial Physics, 1973, 35, 1105-1118.	0.9	90
40	Ionospheric wind dynamo theory: A review.. Journal of Geomagnetism and Geoelectricity, 1979, 31, 287-310.	0.8	88
41	Mapping electrodynamic features of the highâ€latitude ionosphere from localized observations: Combined incoherentâ€scatter radar and magnetometer measurements for January 18â€"19, 1984. Journal of Geophysical Research, 1988, 93, 5760-5776.	3.3	83
42	Largeâ€amplitude gravity wave energy production and dissipation in the thermosphere. Journal of Geophysical Research, 1979, 84, 1880-1890.	3.3	82
43	Modeling the ionosphere wind dynamo: A review. Pure and Applied Geophysics, 1989, 131, 413-435.	0.8	82
44	Coexistence of ionospheric positive and negative storm phases under northern winter conditions: A case study. Journal of Geophysical Research, 2001, 106, 24493-24504.	3.3	81
45	Assessment of the nonâ€hydrostatic effect on the upper atmosphere using a general circulation model (GCM). Geophysical Research Letters, 2008, 35, .	1.5	81
46	Experiments with a lunar atmospheric tidal model. Journal of Geophysical Research, 1997, 102, 13465-13471.	3.3	79
47	Stratospheric warmings and the geomagnetic lunar tide: 1958â€"2007. Journal of Geophysical Research, 2012, 117, .	3.3	79
48	Comparison of equatorial electrojet models. Journal of Atmospheric and Solar-Terrestrial Physics, 1977, 39, 1119-1124.	0.9	78
49	Ionospheric effects of the gravity wave launched by the September 18, 1974, sudden commencement. Journal of Geophysical Research, 1978, 83, 999-1009.	3.3	78
50	Ionospheric electric field variations during a geomagnetic storm simulated by a coupled magnetosphere ionosphere thermosphere (CMIT) model. Geophysical Research Letters, 2008, 35, .	1.5	78
51	Ionospheric electrical conductances produced by auroral proton precipitation. Journal of Geophysical Research, 2001, 106, 117-125.	3.3	77
52	Lowâ€latitude plasma drifts from a simulation of the global atmospheric dynamo. Journal of Geophysical Research, 1993, 98, 6039-6046.	3.3	75
53	Ionospheric convection response to slow, strong variations in a northward interplanetary magnetic field: A case study for January 14, 1988. Journal of Geophysical Research, 1993, 98, 19273-19292.	3.3	75
54	The ionospheric dynamo and equatorial magnetic variations. Journal of Atmospheric and Solar-Terrestrial Physics, 1973, 35, 1045-1061.	0.9	74

#	Article	IF	Citations
55	The quiet-time equatorial electrojet and counter-electrojet.. Journal of Geomagnetism and Geoelectricity, 1979, 31, 311-340.	0.8	74
56	Assimilation of FORMOSATâ€3/COSMIC electron density profiles into a coupled thermosphere/ionosphere model using ensemble Kalman filtering. Journal of Geophysical Research, 2012, 117, .	3.3	74
57	Attribution of ionospheric vertical plasma drift perturbations to largeâ€scale waves and the dependence on solar activity. Journal of Geophysical Research: Space Physics, 2013, 118, 2452-2465.	0.8	73
58	High-latitude ionospheric electric field variability and electric potential derived from DE-2 plasma drift measurements: Dependence on IMF and dipole tilt. Journal of Geophysical Research, 2003, 108, SIA 1-1.	3.3	72
59	Large-scale variations of the low-latitude ionosphere during the October-November 2003 superstorm: Observational results. Journal of Geophysical Research, 2005, 110, .	3.3	71
60	Modeling storm-time electrodynamics of the low-latitude ionosphereâ€“thermosphere system: Can long lasting disturbance electric fields be accounted for?. Journal of Atmospheric and Solar-Terrestrial Physics, 2007, 69, 1182-1199.	0.6	70
61	Sources of lowâ€latitude ionospheric EÂÃ—ÂB drifts and their variability. Journal of Geophysical Research, 2012, 117, .	3.3	68
62	Ionospheric convection response to changing IMF direction. Geophysical Research Letters, 1991, 18, 721-724.	1.5	67
63	An ionospheric conductance model based on ground magnetic disturbance data. Journal of Geophysical Research, 1998, 103, 14769-14780.	3.3	66
64	Modelling the effects of changes in the Earth's magnetic field from 1957 to 1997 on the ionospheric hmF2 and foF2 parameters. Journal of Atmospheric and Solar-Terrestrial Physics, 2008, 70, 1512-1524.	0.6	66
65	Global measures of ionospheric electrodynamic activity inferred from combined incoherent scatter radar and ground magnetometer observations. Journal of Geophysical Research, 1990, 95, 1061-1071.	3.3	65
66	Causal link of the waveâ€4 structures in plasma density and vertical plasma drift in the lowâ€latitude ionosphere. Journal of Geophysical Research, 2009, 114, .	3.3	64
67	Forecasting the dynamic and electrodynamic response to the January 2009 sudden stratospheric warming. Geophysical Research Letters, 2011, 38, n/a-n/a.	1.5	64
68	Highâ€latitude energy input and its impact on the thermosphere. Journal of Geophysical Research: Space Physics, 2016, 121, 7108-7124.	0.8	64
69	Equatorial electrojet and regular daily variation SRâ€”III. Comparison of observations with a physical model. Journal of Atmospheric and Solar-Terrestrial Physics, 1976, 38, 113-121.	0.9	61
70	Longitudinal variations in theFregion ionosphere and the topside ionosphere-plasmasphere: Observations and model simulations. Journal of Geophysical Research, 2011, 116, n/a-n/a.	3.3	61
71	The relationship between the structure of the equatorial anomaly and the strength of the equatorial electrojet. Journal of Atmospheric and Solar-Terrestrial Physics, 1973, 35, 1171-1180.	0.9	59
72	Electrodynamic coupling of high and low latitudes: Observations on May 27, 1993. Journal of Geophysical Research, 2000, 105, 22979-22989.	3.3	58

#	Article	IF	Citations
73	Ionospheric conductivity dependence of electric fields and currents estimated from ground magnetic observations. Journal of Geophysical Research, 1982, 87, 8331-8337.	3.3	57
74	Ionospheric control of the magnetospheric configuration: Thermospheric neutral winds. Journal of Geophysical Research, 2003, 108, .	3.3	57
75	Effects of highâ€latitude ionospheric electric field variability on global thermospheric Joule heating and mechanical energy transfer rate. Journal of Geophysical Research, 2008, 113, .	3.3	57
76	Modes of high-latitude electric field variability derived from DE-2 measurements: Empirical Orthogonal Function (EOF) analysis. Geophysical Research Letters, 2002, 29, 11-1.	1.5	56
77	Electric field in the ionosphere and plasmasphere on quiet days. Journal of Geophysical Research, 1976, 81, 1447-1450.	3.3	55
78	Modeling equatorial ionospheric electric fields. Journal of Atmospheric and Solar-Terrestrial Physics, 1995, 57, 1103-1115.	0.9	51
79	Geomagnetic Crochets and Associated Ionospheric Current Systems. Radio Science, 1971, 6, 139-164.	0.8	49
80	Ionospheric electrodynamics: A tutorial. Geophysical Monograph Series, 2000, , 131-146.	0.1	49
81	Model simulation of the equatorial electrojet in the Peruvian and Philippine sectors. Journal of Atmospheric and Solar-Terrestrial Physics, 2008, 70, 2203-2211.	0.6	49
82	Impact of electric field variability on Joule heating and thermospheric temperature and density. Geophysical Research Letters, 2009, 36, .	1.5	49
83	Dynamic effects of aurora-generated gravity waves on the mid-latitude ionosphere. Journal of Atmospheric and Solar-Terrestrial Physics, 1979, 41, 841-852.	0.9	48
84	Height distribution of Joule heating and its influence on the thermosphere. Journal of Geophysical Research, 2012, 117, .	3.3	48
85	Variations of total electron content during geomagnetic disturbances: A model/observation comparison. Geophysical Research Letters, 1998, 25, 253-256.	1.5	47
86	Changes in the Earth's magnetic field over the past century: Effects on the ionosphereâ€thermosphere system and solar quiet (Sq) magnetic variation. Journal of Geophysical Research: Space Physics, 2013, 118, 849-858.	0.8	47
87	An analysis of the momentum forcing in the high-latitude lower thermosphere. Journal of Geophysical Research, 2007, 112, n/a-n/a.	3.3	46
88	Seasonal and longitudinal variations of the solar quiet (Sq) current system during solar minimum determined by CHAMP satellite magnetic field observations. Journal of Geophysical Research, 2011, 116, n/a-n/a.	3.3	46
89	Selfâ€induced motions of thermal plasma in the magnetosphere and the stability of the plasmapause. Radio Science, 1973, 8, 1019-1027.	0.8	45
90	A magnetosphere-thermosphere-ionosphere electrodynamics general circulation model. Journal of Geophysical Research, 1998, 103, 17467-17477.	3.3	45

#	Article	IF	Citations
91	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. Journal of Geophysical Research, 2005, 110, .	3.3	45
92	Simulation study of the longitudinal variation of evening vertical ionospheric drifts at the magnetic equator during equinox. Journal of Geophysical Research, 2005, 110, .	3.3	45
93	On the ionospheric application of Poynting's theorem. Journal of Geophysical Research, 2010, 115, .	3.3	45
94	Electrodynamics of the equatorial evening ionosphere: 1. Importance of winds in different regions. Journal of Geophysical Research: Space Physics, 2015, 120, 2118-2132.	0.8	45
95	Atmospheric semidiurnal lunar tide climatology simulated by the Whole Atmosphere Community Climate Model. Journal of Geophysical Research, 2012, 117, .	3.3	44
96	On the dayâ€toâ€day variation of the equatorial electrojet during quiet periods. Journal of Geophysical Research: Space Physics, 2014, 119, 6966-6980.	0.8	44
97	Post-Storm Middle and Low-Latitude Ionospheric Electric Fields Effects. Space Science Reviews, 2017, 206, 407-429.	3.7	43
98	The nature of gravity wave ducting in the thermosphere. Journal of Geophysical Research, 1978, 83, 1385-1389.	3.3	41
99	The dependence of the coupled magnetosphereâ€ionosphereâ€thermosphere system on the Earth's magnetic dipole moment. Journal of Geophysical Research, 2012, 117, .	3.3	41
100	How changes in the tilt angle of the geomagnetic dipole affect the coupled magnetosphereâ€ionosphereâ€thermosphere system. Journal of Geophysical Research, 2012, 117, .	3.3	40
101	Tidal Winds at Ionospheric Heights. Radio Science, 1971, 6, 175-189.	0.8	39
102	Ground-based studies of ionospheric convection associated with substorm expansion. Journal of Geophysical Research, 1994, 99, 19451.	3.3	39
103	Simulation of equatorial electrojet magnetic effects with the thermosphereâ€ionosphereâ€electrodynamics general circulation model. Journal of Geophysical Research, 2007, 112, .	3.3	39
104	Impact of semidiurnal tidal variability during SSWs on the mean state of the ionosphere and thermosphere. Journal of Geophysical Research: Space Physics, 2016, 121, 8077-8088.	0.8	39
105	F-Region Dynamo Simulations at Low and Mid-Latitude. Space Science Reviews, 2017, 206, 471-493.	3.7	39
106	The response of the coupled magnetosphere-ionosphere-thermosphere system to a 25% reduction in the dipole moment of the Earth's magnetic field. Journal of Geophysical Research, 2011, 116, n/a-n/a.	3.3	38
107	Quasiâ€twoâ€day wave coupling of the mesosphere and lower thermosphereâ€ionosphere in the TIMEâ€GCM: Twoâ€day oscillations in the ionosphere. Journal of Geophysical Research, 2012, 117, .	3.3	38
108	Mapping highâ€latitude ionospheric electrodynamics with SuperDARN and AMPERE. Journal of Geophysical Research: Space Physics, 2015, 120, 5854-5870.	0.8	38

#	Article	IF	Citations
109	Electrodynamic patterns for September 19, 1984. Journal of Geophysical Research, 1989, 94, 16913-16923.	3.3	37
110	Radar interferometry technique and anisotropy of the echo power distribution: First results. Radio Science, 1991, 26, 1315-1326.	0.8	36
111	Wavenumber broadening of the quasi 2 day planetary wave in the ionosphere. Journal of Geophysical Research: Space Physics, 2013, 118, 3515-3526.	0.8	36
112	Energy Relations of Atmospheric Tides and Their Significance to Approximate Methods of Solution for Tides with Dissipative Forces. Journals of the Atmospheric Sciences, 1975, 32, 980-987.	0.6	35
113	An investigation of the influence of data and model inputs on assimilative mapping of ionospheric electrodynamics. Journal of Geophysical Research, 2001, 106, 417-433.	3.3	35
114	Wind dynamo effects on ground magnetic perturbations and vertical drifts. Journal of Geophysical Research, 2008, 113, .	3.3	35
115	SuperDARN assimilative mapping. Journal of Geophysical Research: Space Physics, 2013, 118, 7954-7962.	0.8	33
116	Comparison of magnetic perturbation data from LEO satellite constellations: Statistics of DMSP and AMPERE. Space Weather, 2014, 12, 2-23.	1.3	33
117	Lowâ€latitude E region ionization by energetic ring current particles. Journal of Geophysical Research, 1978, 83, 2201-2204.	3.3	32
118	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. Journal of Geophysical Research, 1996, 101, 26681-26696.	3.3	32
119	Theoretical study of new plasma structures in the lowâ€latitude ionosphere during a major magnetic storm. Journal of Geophysical Research, 2009, 114, .	3.3	32
120	The Ionospheric Wind Dynamo: Effects of Its Coupling With Different Atmospheric Regions. Geophysical Monograph Series, 0, , 49-65.	0.1	32
121	Ground magnetic effects of the equatorial electrojet simulated by the TIEâ€GCM driven by TIMED satellite data. Journal of Geophysical Research: Space Physics, 2014, 119, 3150-3161.	0.8	32
122	The computation of magnetic effects of field-aligned magnetospheric currents. Journal of Atmospheric and Solar-Terrestrial Physics, 1974, 36, 245-252.	0.9	31
123	Comparison of VHF Doppler beam swinging and spaced antenna observations with the MU radar: First results. Radio Science, 1990, 25, 629-640.	0.8	30
124	Longitudinal and interhemispheric variations of auroral ionospheric electrodynamics in a realistic geomagnetic field. Journal of Geophysical Research, 1998, 103, 4011-4021.	3.3	30
125	Magnetic mirroring in an incident proton beam. Journal of Geophysical Research, 1999, 104, 4447-4455.	3.3	30
126	TIMEâ€GCM study of the ionospheric equatorial vertical drift changes during the 2006 stratospheric sudden warming. Journal of Geophysical Research: Space Physics, 2014, 119, 1287-1305.	0.8	30

#	Article	IF	Citations
127	Neutral wind effect in producing a storm time ionospheric additional layer in the equatorial ionization anomaly region. Journal of Geophysical Research, 2009, 114, .	3.3	28
128	Expert Knowledge and Multivariate Emulation: The Thermosphereâ€“Ionosphere Electrodynamics General Circulation Model (TIE-GCM). Technometrics, 2009, 51, 414-424.	1.3	27
129	Inâ€situ generated gravity waves as a possible seeding mechanism for equatorial spreadâ€F. Geophysical Research Letters, 1982, 9, 789-792.	1.5	26
130	Neutral wind influence on the electrodynamic coupling between the ionosphere and the magnetosphere. Journal of Geophysical Research, 2002, 107, SMP 2-1.	3.3	26
131	Theoretical effects of geomagnetic activity on thermospheric tides. Journal of Geophysical Research, 1993, 98, 15599-15612.	3.3	25
132	Analysis of thermospheric response to magnetospheric inputs. Journal of Geophysical Research, 2008, 113, .	3.3	25
133	Intense dayside Joule heating during the 5 April 2010 geomagnetic storm recovery phase observed by AMIE and AMPERE. Journal of Geophysical Research, 2012, 117, .	3.3	25
134	Mesoscale and largeâ€scale variability in highâ€latitude ionospheric convection: Dominant modes and spatial/temporal coherence. Journal of Geophysical Research: Space Physics, 2013, 118, 7895-7904.	0.8	25
135	Dependence of the highâ€latitude thermospheric densities on the interplanetary magnetic field. Journal of Geophysical Research, 2009, 114, .	3.3	24
136	Forcing the TIEGCM model with Birkeland currents from the Active Magnetosphere and Planetary Electrodynamics Response Experiment. Journal of Geophysical Research, 2012, 117, .	3.3	24
137	Thermospheric Dynamics and Electrodynamics. Astrophysics and Space Science Library, 1983, , 523-607.	1.0	24
138	The AMIE procedure: Prospects for space weather specification and prediction. Advances in Space Research, 1998, 22, 103-112.	1.2	23
139	Electrodynamics of the equatorial evening ionosphere: 2. Conductivity influences on convection, current, and electrodynamic energy flow. Journal of Geophysical Research: Space Physics, 2015, 120, 2133-2147.	0.8	23
140	The F-Region Gravity and Pressure Gradient Current Systems: A Review. Space Science Reviews, 2017, 206, 451-469.	3.7	23
141	Smallâ€Scale and Mesoscale Variabilities in the Electric Field and Particle Precipitation and Their Impacts on Joule Heating. Journal of Geophysical Research: Space Physics, 2018, 123, 9862-9872.	0.8	23
142	Estimation of ionospheric electric fields and currents from a regional magnetometer array. Journal of Geophysical Research, 1985, 90, 3525-3530.	3.3	22
143	Mean winds, tides, and quasi-2 day wave in the polar lower thermosphere observed in European Incoherent Scatter (EISCAT) 8 day run data in November 2003. Journal of Geophysical Research, 2005, 110, .	3.3	22
144	Dominant modes of variability in largeâ€scale Birkeland currents. Journal of Geophysical Research: Space Physics, 2015, 120, 6722-6735.	0.8	22

#	Article	IF	Citations
145	Inverse procedure for highâ€latitude ionospheric electrodynamics: Analysis of satelliteâ€borne magnetometer data. Journal of Geophysical Research: Space Physics, 2015, 120, 5241-5251.	0.8	22
146	Radar interferometry technique: Threeâ€dimensional wind measurement theory. Radio Science, 1991, 26, 1209-1218.	0.8	21
147	Lunar tides in the Thermosphere-Ionosphere-Electrodynamics General Circulation Model. Journal of Geophysical Research, 1999, 104, 1-13.	3.3	21
148	Sq current system during stratospheric sudden warming events in 2006 and 2009. Journal of Geophysical Research, 2012, 117, .	3.3	21
149	Theory of longitudinal gradients in the equatorial electrojet. Journal of Atmospheric and Solar-Terrestrial Physics, 1976, 38, 279-286.	0.9	20
150	A storm time assimilative mapping of ionospheric electrodynamics analysis for the severe geomagnetic storm of November 8â€“9, 1991. Journal of Geophysical Research, 1995, 100, 19329.	3.3	20
151	The ionospheric gravity and diamagnetic current systems. Journal of Geophysical Research, 2011, 116, n/a-n/a.	3.3	20
152	Relation of the westward drift of the geomagnetic field to the rotation of the Earth's core. Journal of Geophysical Research, 1969, 74, 3013-3018.	3.3	19
153	Simulation of electric field and current during the 11 June 1993 disturbance dynamo event: Comparison with the observations. Journal of Geophysical Research, 2010, 115, .	3.3	19
154	Simulations of the equatorial thermosphere anomaly: Fieldâ€aligned ion drag effect. Journal of Geophysical Research, 2012, 117, .	3.3	19
155	Global Modeling of Storm-Time Thermospheric Dynamics and Electrodynamics. Geophysical Monograph Series, 0, , 187-200.	0.1	18
156	Dependence of the high-latitude lower thermospheric momentum forcing on the interplanetary magnetic field. Journal of Geophysical Research, 2007, 112, n/a-n/a.	3.3	17
157	Dependence of the highâ€latitude lower thermospheric wind vertical vorticity and horizontal divergence on the interplanetary magnetic field. Journal of Geophysical Research: Space Physics, 2014, 119, 1356-1368.	0.8	17
158	A Comparison of Modelâ€Based Ionospheric and Ocean Tidal Magnetic Signals With Observatory Data. Geophysical Research Letters, 2018, 45, 7257-7267.	1.5	17
159	Solar cycle variations in F region electrodynamic drifts at Arecibo. Journal of Geophysical Research, 1990, 95, 4303-4306.	3.3	16
160	Globalâ€Scale Observations and Modeling of Farâ€Ultraviolet Airglow During Twilight. Journal of Geophysical Research: Space Physics, 2020, 125, e2019JA027645.	0.8	16
161	Mapping of the ionospheric fieldâ€aligned currents to the equatorial magnetosphere. Journal of Geophysical Research, 1997, 102, 14467-14476.	3.3	15
162	DYNAMICAL METEOROLOGY | Atmospheric Tides. , 2015, , 287-297.		15

#	Article	IF	Citations
163	An application of principal component analysis to the interpretation of ionospheric current systems. Journal of Geophysical Research: Space Physics, 2017, 122, 5687-5708.	0.8	15
164	Investigation of seasonal and interannual variations of internal gravity wave intensity in the thermosphere over Saint Santin. Journal of Geophysical Research, 1994, 99, 6297.	3.3	14
165	Ionospheric drift similarities at magnetic conjugate and nonconjugate locations. Journal of Geophysical Research, 1996, 101, 15773-15782.	3.3	14
166	Electrodynamic coupling effects in the thermosphere/ionosphere system. Advances in Space Research, 1997, 20, 1115-1124.	1.2	14
167	Modeling the Storm Time Electrodynamics. , 2011, , 455-464.		14
168	Effects of Highâ€Latitude Forcing Uncertainty on the Lowâ€Latitude and Midlatitude Ionosphere. Journal of Geophysical Research: Space Physics, 2018, 123, 862-882.	0.8	14
169	Electrodynamical Coupling of the Geospace System During Solar Flares. Journal of Geophysical Research: Space Physics, 2021, 126, .	0.8	14
170	On the formation of a fast thermospheric zonal wind at the magnetic dip equator. Geophysical Research Letters, 2011, 38, n/a-n/a.	1.5	13
171	Examining the Magnetic Signal Due To Gravity and Plasma Pressure Gradient Current With the TIEâ€GCM. Journal of Geophysical Research: Space Physics, 2017, 122, 12,486.	0.8	13
172	Recent advances in studies of magnetosphere-ionosphere coupling.. Journal of Geomagnetism and Geoelectricity, 1986, 38, 653-714.	0.8	12
173	Comment on â€œIonospheric convection associated with discrete levels of particle precipitationâ€. Geophysical Research Letters, 1987, 14, 158-159.	1.5	11
174	Auroral effects on midlatitude semidiurnal tides. Geophysical Research Letters, 1991, 18, 412-415.	1.5	11
175	Regional estimation of electric fields and currents in the polar ionosphere. Geophysical Research Letters, 1995, 22, 283-286.	1.5	11
176	Bayesian calibration of the Thermosphere-Ionosphere Electrodynamics General Circulation Model (TIE-GCM). Geoscientific Model Development, 2009, 2, 137-144.	1.3	11
177	Midâ€Latitude Thermosphereâ€Ionosphere Na (TINa) Layers Observed With Highâ€Sensitivity Na Doppler Lidar Over Boulder (40.13Â°N, 105.24Â°W). Geophysical Research Letters, 2021, 48, e2021GL093729.	1.5	11
178	Modeling seasonal and diurnal effects on ionospheric conductances, regionâ€2 currents, and plasma convection in the inner magnetosphere. Journal of Geophysical Research, 2007, 112, .	3.3	10
179	Electrodynamics of Ionosphereâ€“Thermosphere Coupling. , 2011, , 191-201.		10
180	Waveâ€“Mean Flow Interaction in the Storm-Time Thermosphere: A Two-Dimensional Model Simulation. Journals of the Atmospheric Sciences, 1992, 49, 660-680.	0.6	9

#	Article	IF	Citations
181	Relationship of the ionospheric convection reversal to the hard auroral precipitation boundary. Journal of Geophysical Research, 1996, 101, 15423-15432.	3.3	9
182	Estimation of electric fields and currents from ground-based magnetometer data. Geophysical Monograph Series, 1984, , 67-76.	0.1	8
183	Mapping ionospheric convection response to IMF By negative and Bz positive conditions. Journal of Atmospheric and Solar-Terrestrial Physics, 1994, 56, 223-235.	0.9	8
184	Space weather research prompts study of ionosphere and upper atmospheric electrodynamics. Eos, 1996, 77, 101.	0.1	8
185	Comparison of the auroralEregion neutral winds derived with the European Incoherent Scatter radar and predicted by the National Center for Atmospheric Research Thermosphere-ionosphere-mesosphere-electrodynamics general circulation model. Journal of Geophysical Research, 2001, 106, 24691-24700.	3.3	8
186	Modeling the geomagnetic perturbations produced by ionospheric currents, above and below the ionosphere. Journal of Geodynamics, 2002, 33, 143-156.	0.7	8
187	Global-Scale Observations of the Limb and Disk (Gold): New Observing Capabilities for the Ionosphere-Thermosphere. Geophysical Monograph Series, 0, , 319-326.	0.1	8
188	Lidar and CTIPe model studies of the fast amplitude growth with altitude of the diurnal temperature â€œtidesâ€•in the Antarctic winter lower thermosphere and dependence on geomagnetic activity. Geophysical Research Letters, 2015, 42, 697-704.	1.5	8
189	Impacts of Multiscale FACs on the Ionosphereâ€Thermosphere System: GITM Simulation. Journal of Geophysical Research: Space Physics, 2019, 124, 3532-3542.	0.8	8
190	Magnetosphereâ€Ionosphere Coupling via Prescribed Fieldâ€Aligned Current Simulated by the TIEGCM. Journal of Geophysical Research: Space Physics, 2021, 126, .	0.8	8
191	The ionosphere and upper atmosphere. , 1998, , 35-44.		7
192	Wavelength dependence of solar irradiance enhancement during X-class flares and its influence on the upper atmosphere. Journal of Atmospheric and Solar-Terrestrial Physics, 2014, 115-116, 87-94.	0.6	7
193	Impacts of Binning Methods on Highâ€Latitude Electrodynamic Forcing: Static Versus Boundaryâ€Oriented Binning Methods. Journal of Geophysical Research: Space Physics, 2020, 125, e2019JA027270.	0.8	7
194	Magnetic Substorm Characteristics Described by Magnetic Potential Maps for 26 â€“ 28 March 1976. Astrophysics and Space Science Library, 1979, , 269-286.	1.0	7
195	Ionospheric storm of 4â€“5 August 1972 in the Asia-Australia-Pacific sector. Journal of Atmospheric and Solar-Terrestrial Physics, 1977, 39, 43-50.	0.9	6
196	Ionâ€neutral coupling effects on lowâ€latitude thermospheric evening winds. Journal of Geophysical Research: Space Physics, 2016, 121, 4638-4646.	0.8	6
197	Relative contributions of momentum forcing and heating to highâ€latitude lower thermospheric winds. Journal of Geophysical Research: Space Physics, 2017, 122, 1031-1041.	0.8	6
198	Atmospheric Physics: Atmospheric Electrodynamics.. Science, 1985, 228, 572-573.	6.0	5

#	Article	IF	Citations
199	Global Ionospheric Convection during Substorm Expansion. Astrophysics and Space Science Library, 1998, , 617-622.	1.0	5
200	Ionospheric electrodynamics and irregularities: A review of contributions by U.S. scientists from 1979 to 1982. Reviews of Geophysics, 1983, 21, 234-241.	9.0	4
201	Modeling the ion loss effect on the generation of region 2 fieldâ€aligned currents via equivalent magnetospheric conductances. Journal of Geophysical Research, 1993, 98, 15467-15476.	3.3	4
202	Editorial: Topical Volume on Earthâ€™s Magnetic Fieldâ€”Understanding Geomagnetic Sources from the Earthâ€™s Interior and Its Environment. Space Science Reviews, 2017, 206, 1-3.	3.7	4
203	The Ionospheric Wind Dynamo. Journal of Geomagnetism and Geoelectricity, 1991, 43, 433-440.	0.8	3
204	A Data-model Comparative Study of Ionospheric Positive Storm Phase in the Midlatitude F Region. Geophysical Monograph Series, 0, , 63-75.	0.1	3
205	Magnetic Coordinate Systems. Space Sciences Series of ISSI, 2018, , 29-61.	0.0	3
206	Reply to the Comment by Lockwood and Cowley on â€œIonospheric convection response to changing IMF directionâ€. Geophysical Research Letters, 1991, 18, 2175-2176.	1.5	2
207	Modeling the Ionosphere Wind Dynamo: A Review. , 1989, , 413-435.		2
208	The F F -Region Gravity and Pressure Gradient Current Systems: A Review. Space Sciences Series of ISSI, 2018, , 459-477.	0.0	2
209	Sources of the High-Latitude Thermospheric Neutral Mass Density Variations. Journal of Astronomy and Space Sciences, 2010, 27, 329-335.	0.3	2
210	Correction to â€œSimulation of electric field and current during the 11 June 1993 disturbance dynamo event: Comparison with the observationsâ€. Journal of Geophysical Research, 2010, 115, .	3.3	1
211	Winter Temperature and Tidal Structures from 2011 to 2014 at McMurdo Station: Observations from Fe Boltzmann Temperature and Rayleigh Lidar. EPJ Web of Conferences, 2016, 119, 12003.	0.1	1
212	Thermosphereâ€Ionosphere Model Development: A Personal Perspective. Journal of Geophysical Research: Space Physics, 2019, 124, 9154-9165.	0.8	1
213	Analysis of the Steady State Available Energy Budget in the Highâ€Latitude Lower Thermosphere. Journal of Geophysical Research: Space Physics, 2019, 124, 2283-2297.	0.8	1
214	Contributions of Heating and Forcing to the High-Latitude Lower Thermosphere: Dependence on the Interplanetary Magnetic Field. Journal of Astronomy and Space Sciences, 2010, 27, 205-212.	0.3	1
215	Correction to â€œVariations of total electron content during geomagnetic disturbances: A model/observation comparisonâ€. Geophysical Research Letters, 1998, 25, 3107-3107.	1.5	0
216	A STUDY ON THE IONOSPHERE AND THERMOSPHERE INTERACTION BASED ON NCAR-TIEGCM: DEPENDENCE OF THE INTERPLANETARY MAGNETIC FIELD (IMF) ON THE MOMENTUM FORCING IN THE HIGH-LATITUDE LOWER THERMOSPHERE. Journal of Astronomy and Space Sciences, 2005, 22, 147-174.	0.3	0

#	Article	IF	Citations
217	Post-Storm Middle and Low-Latitude Ionospheric Electric Fields Effects. Space Sciences Series of ISSI, 2018, , 415-437.	0.0	0
218	F F -Region Dynamo Simulations at Low and Mid-Latitude. Space Sciences Series of ISSI, 2018, , 479-501.	0.0	0