Rod A Heelis

List of Publications by Year in descending order

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238 papers 10,437 citations

52 h-index 45285 90 g-index

245 all docs

245 docs citations

times ranked

245

2727 citing authors

#	Article	IF	CITATIONS
1	Atmospheric Lunar Tide in the Low Latitude Thermosphere″onosphere. Geophysical Research Letters, 2022, 49, .	1.5	4
2	Topside Plasma Flows in the Equatorial Ionosphere and Their Relationships to Fâ€Region Winds Near 250Âkm. Journal of Geophysical Research: Space Physics, 2022, 127, .	0.8	9
3	Lower-thermosphere–ionosphere (LTI) quantities: current status of measuring techniques and models. Annales Geophysicae, 2021, 39, 189-237.	0.6	25
4	Ion Velocity and Temperature Variation Around Topside Nighttime Irregularities: Contrast Between Low―and Mid‣atitude Regions. Journal of Geophysical Research: Space Physics, 2021, 126, e2020JA028810.	0.8	10
5	Largeâ€Scale O ⁺ Depletions Observed by ICON in the Postâ€Midnight Topside Ionosphere: Data/Model Comparison. Geophysical Research Letters, 2021, 48, e2020GL092061.	1.5	16
6	Atmosphereâ€lonosphere (Aâ€l) Coupling as Viewed by ICON: Dayâ€toâ€Day Variability Due to Planetary Wave (PW)â€Tide Interactions. Journal of Geophysical Research: Space Physics, 2021, 126, e2020JA028927.	0.8	14
7	Isolated Peak of Oxygen Ion Fraction in the Postâ€Noon Equatorial Fâ€Region: ICON and SAMI3/WACCMâ€X. Journal of Geophysical Research: Space Physics, 2021, 126, e2021JA029217.	0.8	5
8	Sensitivity of Upper Atmosphere to Different Characteristics of Flow Bursts in the Auroral Zone. Journal of Geophysical Research: Space Physics, 2021, 126, e2021JA029253.	0.8	7
9	Q2DWâ€tide and â€ionosphere interactions as observed from ICON and groundâ€based radars. Journal of Geophysical Research: Space Physics, 2021, 126, e2021JA029961.	0.8	4
10	Regulation of ionospheric plasma velocities by thermospheric winds. Nature Geoscience, 2021, 14, 893-898.	5 . 4	25
11	Lowâ€Latitude Whistlerâ€Wave Spectra and Polarization From VEFI and CINDI Payloads on C/NOFS Satellite. Journal of Geophysical Research: Space Physics, 2020, 125, e2019JA027074.	0.8	1
12	Challenges to Understanding the Earth's Ionosphere and Thermosphere. Journal of Geophysical Research: Space Physics, 2020, 125, e2019JA027497.	0.8	53
13	Ion Cyclotron Resonant Absorption Lines in ELF Hiss Power Spectral Density in the Lowâ€Latitude Ionosphere. Geophysical Research Letters, 2020, 47, e2019GL086315.	1.5	4
14	Effects of Alignment Between Particle Precipitation and Ion Convection Patterns on Joule Heating. Journal of Geophysical Research: Space Physics, 2019, 124, 4905-4915.	0.8	9
15	Spatial Characteristics of Mesoscale Plasma Flow Perturbations and Accompanying Electron Precipitation in the High‣atitude Ionosphere. Journal of Geophysical Research: Space Physics, 2019, 124, 10444-10458.	0.8	1
16	Impact of Flow Bursts in the Auroral Zone on the Ionosphere and Thermosphere. Journal of Geophysical Research: Space Physics, 2019, 124, 10459-10467.	0.8	12
17	Temporal Characteristic of the Mesoscale Plasma Flow Perturbations in the Highâ€Latitude Ionosphere. Journal of Geophysical Research: Space Physics, 2019, 124, 459-469.	0.8	2
18	Coordinated Satellite Observations of the Very Low Frequency Transmission Through the Ionospheric <i>D</i> Layer at Low Latitudes, Using Broadband Radio Emissions From Lightning. Journal of Geophysical Research: Space Physics, 2018, 123, 2926-2952.	0.8	8

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19	Measurement of Individual H + and O + Ion Temperatures in the Topside Ionosphere. Journal of Geophysical Research: Space Physics, 2018, 123, 1525-1533.	0.8	1
20	The Plasma Environment Associated With Equatorial Ionospheric Irregularities. Journal of Geophysical Research: Space Physics, 2018, 123, 1583-1592.	0.8	10
21	Motions of the Convection Reversal Boundary and Local Plasma in the Highâ€Latitude Ionosphere. Journal of Geophysical Research: Space Physics, 2018, 123, 2953-2963.	0.8	7
22	The Ionospheric Connection Explorer Mission: Mission Goals and Design. Space Science Reviews, 2018, 214, 1.	3.7	152
23	Mesoscale Plasma Convection Perturbations in the Highâ€Latitude Ionosphere. Journal of Geophysical Research: Space Physics, 2018, 123, 7609-7620.	0.8	10
24	Combined Contribution of Solar Illumination, Solar Activity, and Convection to Ion Upflow Above the Polar Cap. Journal of Geophysical Research: Space Physics, 2018, 123, 4317-4328.	0.8	17
25	Observed Propagation Route of VLF Transmitter Signals in the Magnetosphere. Journal of Geophysical Research: Space Physics, 2018, 123, 5528-5537.	0.8	27
26	Plasma Dynamics Associated With Equatorial Ionospheric Irregularities. Geophysical Research Letters, 2018, 45, 7927-7932.	1.5	6
27	The Ion/Electron Temperature Characteristics of Polar Cap Classical and Hot Patches and Their Influence on Ion Upflow. Geophysical Research Letters, 2018, 45, 8072-8080.	1.5	20
28	Daytime ion and electron temperatures in the topside ionosphere at middle latitudes. Journal of Geophysical Research: Space Physics, 2017, 122, 2202-2209.	0.8	3
29	Source of the lowâ€altitude hiss in the ionosphere. Geophysical Research Letters, 2017, 44, 2060-2069.	1.5	30
30	Modeling the daytime energy balance of the topside ionosphere at middle latitudes. Journal of Geophysical Research: Space Physics, 2017, 122, 5733-5742.	0.8	4
31	Equatorial plasma bubbles: Variations of occurrence and spatial scale in local time, longitude, season, and solar activity. Journal of Geophysical Research: Space Physics, 2017, 122, 5743-5755.	0.8	46
32	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
33	Daytime zonal drifts in the ionospheric 150Âkm and <i>E</i> regions estimated using EAR observations. Journal of Geophysical Research: Space Physics, 2017, 122, 9045-9055.	0.8	6
34	Ion Velocity Measurements for the Ionospheric Connections Explorer. Space Science Reviews, 2017, 212, 615-629.	3.7	61
35	Automated identification of discrete, lightningâ€generated, multipleâ€dispersed whistler waves in C/NOFSâ€VEFI very low frequency observations. Radio Science, 2016, 51, 1547-1569.	0.8	4
36	Duskside enhancement of equatorial zonal electric field response to convection electric fields during the St. Patrick's Day storm on 17 March 2015. Journal of Geophysical Research: Space Physics, 2016, 121, 538-548.	0.8	88

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37	Earth's ion upflow associated with polar cap patches: Global and in situ observations. Geophysical Research Letters, 2016, 43, 1845-1853.	1.5	34
38	Plasma and convection reversal boundary motions in the highâ€latitude ionosphere. Journal of Geophysical Research: Space Physics, 2016, 121, 5752-5763.	0.8	5
39	Response of the ionospheric convection reversal boundary at high latitudes to changes in the interplanetary magnetic field. Journal of Geophysical Research: Space Physics, 2015, 120, 5022-5034.	0.8	16
40	Modeling subauroral polarization streams during the 17 March 2013 storm. Journal of Geophysical Research: Space Physics, 2015, 120, 1738-1750.	0.8	52
41	Unique latitudinal shape of ion upper transition height (HT) surface during deep solar minimum (2008-2009). Journal of Geophysical Research: Space Physics, 2015, 120, 1419-1427.	0.8	2
42	Topside signature of medium-scale traveling ionospheric disturbances. Annales Geophysicae, 2014, 32, 959-965.	0.6	24
43	Topside equatorial zonal ion velocities measured by C/NOFS during rising solar activity. Annales Geophysicae, 2014, 32, 69-75.	0.6	18
44	A method to estimate whistler wave vector from polarization using threeâ€component electric field data. Radio Science, 2014, 49, 131-145.	0.8	6
45	Solar filament impact on 21 January 2005: Geospace consequences. Journal of Geophysical Research: Space Physics, 2014, 119, 5401-5448.	0.8	20
46	Vertical ExB drifts from radar and C/NOFS observations in the Indian and Indonesian sectors: Consistency of observations and model. Journal of Geophysical Research: Space Physics, 2014, 119, 3777-3788.	0.8	15
47	Identifying equatorial ionospheric irregularities using in situ ion drifts. Annales Geophysicae, 2014, 32, 421-429.	0.6	10
48	Radioâ€tomographic images of postmidnight equatorial plasma depletions. Geophysical Research Letters, 2014, 41, 13-19.	1.5	12
49	Daytime altitude variations of the equatorial, topside magnetic fieldâ€aligned ion transport at solar minimum. Journal of Geophysical Research: Space Physics, 2013, 118, 3568-3575.	0.8	6
50	Low latitude thermospheric responses to magnetic storms. Journal of Geophysical Research: Space Physics, 2013, 118, 3866-3876.	0.8	18
51	Storm time meridional wind perturbations in the equatorial upper thermosphere. Journal of Geophysical Research: Space Physics, 2013, 118, 2756-2764.	0.8	4
52	Specifying the equatorial ionosphere using CINDI on C/NOFS, COSMIC, and data interpolating empirical orthogonal functions. Journal of Geophysical Research: Space Physics, 2013, 118, 6706-6722.	0.8	5
53	In situ irregularity identification and scintillation estimation using wavelets and CINDI on C/NOFS. Radio Science, 2013, 48, 388-395.	0.8	5
54	Reply to Tsurutani et al.'s comment on & amp; quot; Storming the Bastille: the effect of electric fields on the ionospheric F-layer & amp; quot; by Rishbeth et al. (2010). Annales Geophysicae, 2013, 31, 151-152.	0.6	8

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55	Exploring the role of ionospheric drivers during the extreme solar minimum of 2008. Annales Geophysicae, 2013, 31, 2147-2156.	0.6	21
56	Measurements of Thermal Ion Drift Velocity and Temperature Using Planar Sensors. Geophysical Monograph Series, 2013, , 61-71.	0.1	67
57	The role of zonal winds in the production of a preâ€reversal enhancement in the vertical ion drift in the low latitude ionosphere. Journal of Geophysical Research, 2012, 117, .	3.3	50
58	lon drift meter calibration and photoemission correction for the C/NOFS satellite. Journal of Geophysical Research, 2012, 117, .	3.3	20
59	The influence of hemispheric asymmetries on fieldâ€aligned ion drifts at the geomagnetic equator. Geophysical Research Letters, 2012, 39, .	1.5	18
60	Characteristics of low″atitude ionospheric depletions and enhancements during solar minimum. Journal of Geophysical Research, 2012, 117, .	3.3	30
61	A modeling study of the longitudinal dependence of storm time midlatitude dayside total electron content enhancements. Journal of Geophysical Research, 2012, 117, .	3.3	48
62	Threeâ€dimensional numerical simulations of equatorial spread <i>F</i> : Results and observations in the Pacific sector. Journal of Geophysical Research, 2012, 117, .	3.3	20
63	Equatorial longitude and local time variations of topside magnetic field-aligned ion drifts at solar minimum. Journal of Geophysical Research, 2012, 117, n/a-n/a.	3.3	13
64	Response of the equatorial topside ionosphere to $27\hat{a}$ day variations in solar EUV input during a low solar activity period using C/NOFS. Journal of Geophysical Research, 2012, 117, .	3.3	7
65	Ground and Space-Based Measurement of Rocket Engine Burns in the Ionosphere. IEEE Transactions on Plasma Science, 2012, 40, 1267-1286.	0.6	58
66	On TIEâ€GCM simulation of the evening equatorial plasma vortex. Journal of Geophysical Research, 2012, 117, .	3.3	35
67	Onset conditions of bubbles and blobs: A case study on 2 March 2009. Geophysical Research Letters, 2011, 38, n/a-n/a.	1.5	30
68	C/NOFS observations of the equatorial ionospheric electric field response to the 2009 major sudden stratospheric warming event. Journal of Geophysical Research, 2011, 116, n/a-n/a.	3.3	32
69	Observations of low-latitude plasma density enhancements and their associated plasma drifts. Journal of Geophysical Research, 2011, 116, n/a-n/a.	3.3	24
70	Observations of quiet time vertical ion drift in the equatorial ionosphere during the solar minimum period of 2009. Journal of Geophysical Research, 2011, 116, n/a-n/a.	3.3	94
71	Latitude and local time variations of topside magnetic field-aligned ion drifts at solar minimum. Journal of Geophysical Research, $2011,116,n$ /a-n/a.	3.3	15
72	Topside equatorial ionospheric density and composition during and after extreme solar minimum. Journal of Geophysical Research, 2011, 116, n/a-n/a.	3.3	45

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73	Superrotation of the ionosphere and quiet time zonal ion drifts at low and middle latitudes observed by Republic of China Satellite-1 (ROCSAT-1). Journal of Geophysical Research, 2011, 116, n/a-n/a.	3.3	14
74	Response of the topside ionosphere to high-speed solar wind streams. Journal of Geophysical Research, 2011, 116, $n/a-n/a$.	3.3	9
75	Storming the Bastille: the effect of electric fields on the ionospheric F-layer. Annales Geophysicae, 2010, 28, 977-981.	0.6	37
76	A numerical study of geometry dependent errors in velocity, temperature, and density measurements from single grid planar retarding potential analyzers. Physics of Plasmas, 2010, 17, .	0.7	7
77	Longitudinal and seasonal variations of the equatorial ionospheric ion density and eastward drift velocity in the dusk sector. Journal of Geophysical Research, 2010, 115, .	3.3	33
78	Ion temperature and density relationships measured by CINDI from the C/NOFS spacecraft during solar minimum. Journal of Geophysical Research, 2010, 115 , .	3.3	34
79	Mapping the duskside topside ionosphere with CINDI and DMSP. Journal of Geophysical Research, 2010, 115, n/a-n/a.	3.3	1
80	A comparison of ionospheric O ⁺ /lightâ€ion transition height derived from ionâ€composition measurements and the topside ion density profiles over equatorial latitudes. Geophysical Research Letters, 2010, 37, .	1.5	7
81	Lowâ€latitude measurements of neutral thermospheric helium dominance near 400 km during extreme solar minimum. Journal of Geophysical Research, 2010, 115, .	3.3	13
82	Characterization of the electric potential distribution and large scale auroral zone flows in the ionosphere. Journal of Geophysical Research, 2010, 115, .	3.3	0
83	Mediumâ€scale equatorial plasma irregularities observed by Coupled Ionâ€Neutral Dynamics Investigation sensors aboard the Communication Navigation Outage Forecast System in a prolonged solar minimum. Journal of Geophysical Research, 2010, 115, .	3 . 3	42
84	Response of the topside ionosphere to recurrent geomagnetic activity. Journal of Geophysical Research, 2010, 115 , .	3.3	20
85	Quiet time meridional (vertical) ion drifts at low and middle latitudes observed by ROCSATâ€1. Journal of Geophysical Research, 2010, 115, .	3.3	16
86	WN4 effect on longitudinal distribution of different ion species in the topside ionosphere at low latitudes by means of DEMETER, DMSP-F13 and DMSP-F15 data. Annales Geophysicae, 2009, 27, 2893-2902.	0.6	25
87	Influences of geomagnetic fields on longitudinal variations of vertical plasma drifts in the presunset equatorial topside ionosphere. Journal of Geophysical Research, 2009, 114, .	3.3	27
88	Behavior of the O+/H+ transition height during the extreme solar minimum of 2008. Geophysical Research Letters, 2009, 36, .	1.5	121
89	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
90	Stormtime measurements of topside ionospheric upflow from Defense Meteorological Satellite Program. Journal of Geophysical Research, 2009, 114, .	3.3	7

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91	Formation of a plasma depletion shell in the equatorial ionosphere. Journal of Geophysical Research, 2009, 114 , .	3.3	78
92	Electrostatic potential drop across the ionospheric signature of the lowâ€latitude boundary layer. Journal of Geophysical Research, 2009, 114, .	3.3	14
93	Storm time signatures of the ionospheric zonal ion drift at middle latitudes. Journal of Geophysical Research, 2009, 114, .	3.3	22
94	Storm time density enhancements in the middleâ€latitude dayside ionosphere. Journal of Geophysical Research, 2009, 114, .	3.3	106
95	A statistical analysis of systematic errors in temperature and ram velocity estimates from satellite-borne retarding potential analyzers. Physics of Plasmas, 2009, 16, .	0.7	10
96	Longitudinal variations of electron temperature and total ion density in the sunset equatorial topside ionosphere. Geophysical Research Letters, 2008, 35, .	1.5	72
97	lonospheric storm time dynamics as seen by GPS tomography and in situ spacecraft observations. Journal of Geophysical Research, 2008, 113 , .	3.3	25
98	Errors in ram velocity and temperature measurements inferred from satellite-borne retarding potential analyzers. Physics of Plasmas, 2008, 15, 062905.	0.7	14
99	Longitudinal variations in the equatorial vertical drift in the topside ionosphere. Journal of Geophysical Research, 2007, 112, n/a-n/a.	3.3	113
100	Variations in the low―and middleâ€latitude topside ion concentration observed by DMSP during superstorm events. Journal of Geophysical Research, 2007, 112, .	3.3	40
101	Characteristics of high-latitude vertical plasma flow from the Defense Meteorological Satellite Program. Journal of Geophysical Research, 2006, 111, .	3.3	17
102	Seasonal and latitudinal distributions of the dominant light ions at 600 km topside ionosphere from 1999 to 2002. Journal of Geophysical Research, 2005, 110, .	3.3	15
103	Comparison of topside equatorial parameters derived from DMSP, Jicamarca, and Another Model of the Ionosphere (SAMI2). Journal of Geophysical Research, 2005, 110, .	3.3	3
104	Characteristics of ion velocity structure at high latitudes during steady southward interplanetary magnetic field conditions. Journal of Geophysical Research, 2005, 110, .	3.3	28
105	Seasonal and longitudinal variation of large-scale topside equatorial plasma depletions. Journal of Geophysical Research, 2005, 110, .	3.3	70
106	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
107	Variations of thermospheric composition according to AE-C data and CTIP modelling. Annales Geophysicae, 2004, 22, 441-452.	0.6	13
108	Using insitu satellite data to describe global scale variations in space weather. , 2004, , .		O

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109	Supercooled ion temperatures observed in the topside ionosphere at dawn meridian during storm periods. Journal of Geophysical Research, 2004, 109, .	3.3	10
110	Observed saturation of the ionospheric polar cap potential during the 31 March 2001 storm. Geophysical Research Letters, 2003, 30, .	1.5	82
111	Plasma density enhancements associated with equatorial spreadF: ROCSAT-1 and DMSP observations. Journal of Geophysical Research, 2003, 108 , .	3.3	80
112	Observations of shock impact, disturbance dynamo effect, and a midlatitude large-density depletion at 600 km altitude on the 17 April 2002 storm day. Journal of Geophysical Research, 2003, 108, .	3.3	16
113	High-latitude plasma outflow as measured by the DMSP spacecraft. Journal of Geophysical Research, 2003, 108, .	3.3	27
114	A modified CTIP model and comparisons with DMSP satellite data. Philosophical Transactions Series A, Mathematical, Physical, and Engineering Sciences, 2003, 361, 139-142.	1.6	2
115	Observation of a large density dropout across the magnetic field at 600 km altitude during the 6–7 April 2000 magnetic storm. Journal of Geophysical Research, 2002, 107, SIA 18-1.	3.3	34
116	Interplanetary magnetic field control of theta aurora development. Journal of Geophysical Research, 2002, 107, SIA 4-1.	3.3	43
117	Relative solar and auroral contribution to the polarFregion: Implications for National Space Weather Program. Journal of Geophysical Research, 2002, 107, SIA 15-1.	3.3	8
118	Ion and neutral motions observed in the winter polar upper atmosphere. Journal of Geophysical Research, 2002, 107, SIA 17-1-SIA 17-7.	3.3	15
119	Longitudinal ionospheric effects in the South Atlantic evening sector during solar maximum. Journal of Geophysical Research, 2002, 107, SIA 3-1.	3.3	1
120	Storm time plasma irregularities in the pre-dawn hours observed by the low-latitude ROCSAT-1 satellite at 600 km altitude. Geophysical Research Letters, 2001, 28, 685-688.	1.5	30
121	ROCSAT 1 ionospheric plasma and electrodynamics instrument observations of equatorial spreadF: An early transitional scale result. Journal of Geophysical Research, 2001, 106, 29153-29159.	3.3	46
122	A modelling study of the latitudinal variations in the nighttime plasma temperatures of the equatorial topside ionosphere during northern winter at solar maximum. Annales Geophysicae, 2000, 18, 1435-1446.	0.6	13
123	Transformation of high-latitude ionosphericFregion patches into blobs during the March 21, 1990, storm. Journal of Geophysical Research, 2000, 105, 5215-5230.	3.3	62
124	Magnetospheric multiscale and global electrodynamics missions. Geophysical Monograph Series, 1999, , 225-235.	0.1	6
125	Regional, scale size, and interplanetary magnetic field variability of magnetic field and ion drift structures in the high-latitude ionosphere. Journal of Geophysical Research, 1999, 104, 199-212.	3.3	3
126	On relationships between horizontal velocity structure and thermal ion upwellings at high latitudes. Geophysical Research Letters, 1999, 26, 1829-1832.	1.5	12

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127	Electron temperatures during rapid subauroral ion drift events. Annales Geophysicae, 1998, 16, 450-459.	0.6	29
128	Seasonal and universal time distribution of patches in the northern and southern polar caps. Journal of Geophysical Research, 1998, 103, 29229-29237.	3.3	34
129	Global distribution of density irregularities in the equatorial ionosphere. Journal of Geophysical Research, 1998, 103, 407-417.	3. 3	177
130	Spatial distribution of ionospheric plasma and field structures in the high-latitudeFregion. Journal of Geophysical Research, 1998, 103, 6955-6968.	3. 3	42
131	Analysis of the ionospheric cross polar cap potential drop using DMSP data during the National Space Weather Program study period. Journal of Geophysical Research, 1998, 103, 26337-26347.	3.3	39
132	Equatorial density irregularity structures at intermediate scales and their temporal evolution. Journal of Geophysical Research, 1998, 103, 3969-3981.	3.3	38
133	Structure and occurrence of polar ionization patches. Journal of Geophysical Research, 1998, 103, 2201-2208.	3.3	43
134	Evolution of the global aurora during positive IMFBzand varying IMFByconditions. Journal of Geophysical Research, 1997, 102, 17489-17497.	3.3	56
135	William B. Hanson 1923 - 1994: A retrospective. Journal of Geophysical Research, 1997, 102, 2035-2038.	3.3	1
136	Solar activity variations in the composition of the low-latitude topside ionosphere. Journal of Geophysical Research, 1997, 102, 295-305.	3.3	39
137	Structures in ionospheric number density and velocity associated with polar cap ionization patches. Journal of Geophysical Research, 1997, 102, 307-318.	3.3	50
138	Fast equatorial bubbles. Journal of Geophysical Research, 1997, 102, 2039-2045.	3. 3	35
139	How wide in magnetic local time is the cusp? An event study. Journal of Geophysical Research, 1997, 102, 4765-4776.	3.3	32
140	Longitude variations in ion composition in the morning and evening topside equatorial ionosphere near solar minimum. Journal of Geophysical Research, 1996, 101, 7951-7960.	3.3	54
141	The Nightside Ionosphere: Ionospheric Convection during an Isolated Substorm on October 21, 1981. Journal of Geomagnetism and Geoelectricity, 1996, 48, 915-923.	0.8	0
142	Response time of the polar ionospheric convection pattern to changes in the north-south direction of the IMF. Geophysical Research Letters, 1995, 22, 631-634.	1.5	70
143	Global equatorial ionospheric vertical plasma drifts measured by the AE-E satellite. Journal of Geophysical Research, 1995, 100, 5769.	3.3	183
144	Effects of zonal winds and metallic ions on the behavior of intermediate layers. Journal of Geophysical Research, 1995, 100, 7829.	3.3	17

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145	High-latitude ionospheric convection pattern during steady northward interplanetary magnetic field. Journal of Geophysical Research, 1995, 100, 14537.	3.3	31
146	Summary of field-aligned Poynting flux observations from DE 2. Geophysical Research Letters, 1995, 22, 1861-1864.	1.5	49
147	Interpretation and modeling of the high-latitude electromagnetic energy flux. Journal of Geophysical Research, 1995, 100, 19715.	3.3	89
148	Adaptive identification and characterization of polar ionization patches. Journal of Geophysical Research, 1995, 100, 23819.	3.3	58
149	Four cells or two? Are four convection cells really necessary?. Journal of Geophysical Research, 1994, 99, 3955.	3.3	25
150	Comparison of low-latitude ion and neutral zonal drifts using DE 2 data. Journal of Geophysical Research, 1994, 99, 341.	3.3	52
151	DMSP F8 observations of the mid-latitude and low-latitude topside ionosphere near solar minimum. Journal of Geophysical Research, 1994, 99, 3817.	3.3	39
152	Field-aligned Poynting Flux observations in the high-latitude ionosphere. Journal of Geophysical Research, 1994, 99, 11417.	3.3	43
153	Coupling of microprocesses and macroprocesses due to velocity shear: An application to the low-altitude ionosphere. Journal of Geophysical Research, 1994, 99, 8873.	3.3	172
154	Modeling daytime F layer patches over Sondrestrom. Radio Science, 1994, 29, 249-268.	0.8	50
155	Ground-based studies of ionospheric convection associated with substorm expansion. Journal of Geophysical Research, 1994, 99, 19451.	3.3	39
156	Thermal Ion Drifts in the Dayside High-Latitude Ionosphere. , 1994, , 43-57.		2
157	A proposed production model of rapid subauroral ion drifts and their relationship to substorm evolution. Journal of Geophysical Research, 1993, 98, 6069-6078.	3.3	222
158	Effects of electrical coupling on equatorial ionospheric plasma motions: When is the ⟨i⟩F⟨ i⟩ region a dominant driver in the lowâ€latitude dynamo?. Journal of Geophysical Research, 1993, 98, 6033-6037.	3.3	63
159	Modeling polar cap <i>F</i> â€region patches using time varying convection. Geophysical Research Letters, 1993, 20, 1783-1786.	1.5	122
160	A Comparison of in situ measurements of and from Dynamics Explorer 2. Journal of Geophysical Research, 1993, 98, 21501-21516.	3.3	20
161	Fieldâ€aligned drifts in subauroral ion drift events. Journal of Geophysical Research, 1993, 98, 21493-21499.	3.3	49
162	Ion composition of the topside equatorial ionosphere during solar minimum. Journal of Geophysical Research, 1992, 97, 4299-4303.	3.3	39

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163	Upflowing ionospheric ions in the auroral region. Journal of Geophysical Research, 1992, 97, 16855-16863.	3.3	34
164	Response of the ionospheric convection pattern to a rotation of the interplanetary magnetic field on January 14, 1988. Journal of Geophysical Research, 1992, 97, 19449-19460.	3.3	19
165	Eastâ€west ion drifts at midâ€latitudes observed by Dynamics Explorer 2. Journal of Geophysical Research, 1992, 97, 19461-19469.	3.3	64
166	Threeâ€dimensional ionospheric plasma circulation. Journal of Geophysical Research, 1992, 97, 13903-13910.	3.3	18
167	Dynamics Explorer Measurements of Particles, Fields, and Plasma Drifts Over a Horse-Collar Auroral Pattern Journal of Geomagnetism and Geoelectricity, 1992, 44, 1225-1237.	0.8	6
168	A morphological study of vertical ionospheric flows in the high″atitude ⟨i⟩F⟨/i⟩ region. Journal of Geophysical Research, 1991, 96, 3627-3646.	3.3	104
169	The ionospheric signatures of rapid subauroral ion drifts. Journal of Geophysical Research, 1991, 96, 5785-5792.	3.3	217
170	Coordinated radar and optical measurements of stable auroral arcs at the polar cap boundary. Journal of Geophysical Research, 1991, 96, 17847-17863.	3.3	15
171	The High Latitude Ionospheric Convection Pattern. Journal of Geomagnetism and Geoelectricity, 1991, 43, 245-257.	0.8	3
172	Model of the highâ€latitude ionospheric convection pattern during southward interplanetary magnetic field using DE 2 data. Journal of Geophysical Research, 1990, 95, 2333-2343.	3.3	89
173	Magnetic fieldâ€aligned coupling effects on ionospheric plasma structure. Journal of Geophysical Research, 1990, 95, 7995-8008.	3.3	24
174	Distributions of He ⁺ at middle and equatorial latitudes during solar maximum. Journal of Geophysical Research, 1990, 95, 10313-10320.	3.3	55
175	lonospheric flows associated with a transpolar arc. Journal of Geophysical Research, 1990, 95, 21169-21178.	3.3	26
176	Polar cap deflation during magnetospheric substorms. Journal of Geophysical Research, 1989, 94, 3785-3789.	3.3	31
177	Combining electric field and aurora observations from DE 1 and 2 with ground magnetometer records to estimate ionospheric electromagnetic quantities. Journal of Geophysical Research, 1989, 94, 6723-6738.	3.3	22
178	Low″atitude zonal and vertical ion drifts seen by DE 2. Journal of Geophysical Research, 1989, 94, 6751-6761.	3.3	91
179	Plasma and field properties of suprathermal electron bursts. Journal of Geophysical Research, 1989, 94, 12031-12036.	3.3	13
180	Distribution of convection potential around the polar cap boundary as a function of the interplanetary magnetic field. Journal of Geophysical Research, 1989, 94, 13447-13461.	3.3	44

#	Article	IF	CITATIONS
181	Dayside observations of thermalâ€ion upwellings at 800â€km Altitude: An ionospheric signature of the cleft ion fountain. Journal of Geophysical Research, 1989, 94, 15277-15290.	3.3	59
182	Studies of ionospheric plasma and electrodynamics and their application to ionosphereâ€magnetosphere coupling. Reviews of Geophysics, 1988, 26, 317-328.	9.0	30
183	Origin of density enhancements in the winter polar cap ionosphere. Radio Science, 1988, 23, 513-519.	0.8	115
184	Thermospheric dynamics during November 21â€"22, 1981: Dynamics Explorer measurements and thermospheric general circulation model predictions. Journal of Geophysical Research, 1988, 93, 209-225.	3.3	32
185	On the relationship between dynamics of the polar thermosphere and morphology of the aurora: Globalâ \in scale observations from Dynamics Explorers 1 and 2. Journal of Geophysical Research, 1988, 93, 2675-2692.	3.3	51
186	Global and local Joule heating effects seen by DE 2. Journal of Geophysical Research, 1988, 93, 7551-7557.	3.3	37
187	Coherent mesoscale convection patterns during northward interplanetary magnetic field. Journal of Geophysical Research, 1988, 93, 14501-14514.	3.3	43
188	A model for multiple throat structures in the polar cap flow entry region. Journal of Geophysical Research, 1988, 93, 9785-9790.	3.3	34
189	<i>E</i> and <i>F</i> region study of the evening sector auroral oval: A Chatanika/Dynamics Explorer 2/NOAA 6 comparison. Journal of Geophysical Research, 1987, 92, 2477-2494.	3.3	48
190	Ionospheric convection signatures and magnetic field topology. Journal of Geophysical Research, 1987, 92, 12352-12364.	3.3	19
191	Electrodynamics and plasma processes in the ionosphere. Reviews of Geophysics, 1987, 25, 419-431.	9.0	9
192	Multiple auroral arcs and Birkeland currents: Evidence for plasma sheet boundary waves. Geophysical Research Letters, 1986, 13, 805-808.	1.5	32
193	On the currentâ€voltage relationship of the magnetospheric generator at intermediate spatial scales. Geophysical Research Letters, 1986, 13, 495-498.	1.5	49
194	The theta aurora. Journal of Geophysical Research, 1986, 91, 3177-3224.	3.3	270
195	Ionospheric convection signatures observed by De 2 during northward interplanetary magnetic field. Journal of Geophysical Research, 1986, 91, 5817-5830.	3.3	97
196	Observations of ionospheric magnetospheric coupling: DE and Chatanika coincidences. Journal of Geophysical Research, 1986, 91, 5803-5815.	3.3	20
197	Rocket and satellite observations of electric fields and ion convection in the dayside auroral ionosphere. Canadian Journal of Physics, 1986, 64, 1417-1425.	0.4	11
198	The geomagnetic mass spectrometer— mass and energy dispersions of ionospheric ion flows into the magnetosphere. Nature, 1985, 316, 612-613.	13.7	36

#	Article	IF	Citations
199	The HiLat satellite mission. Radio Science, 1985, 20, 416-424.	0.8	19
200	Neutral motions in the polar thermosphere for northward interplanetary magnetic field. Geophysical Research Letters, 1985, 12, 159-162.	1.5	74
201	Electrical coupling effects on the temporal evolution of F layer plasma structure. Journal of Geophysical Research, 1985, 90, 437-445.	3.3	25
202	IMF <i>B_y</i> â€dependent plasma flow and Birkeland currents in the dayside magnetosphere: 1. Dynamics Explorer observations. Journal of Geophysical Research, 1985, 90, 1577-1593.	3.3	217
203	Universal time dependence of nighttime F region densities at high latitudes. Journal of Geophysical Research, 1985, 90, 4319-4332.	3.3	45
204	Thermospheric and ionospheric structure of the southern hemisphere polar cap on October 21, 1981, as determined from Dynamics Explorer 2 satellite data. Journal of Geophysical Research, 1985, 90, 6553-6566.	3.3	30
205	A Sunâ€aligned arc observed by DMSP and AE . Journal of Geophysical Research, 1985, 90, 9697-9710.	3.3	43
206	Interplanetary Magnetic Field Effects on High Latitude Ionospheric Convection., 1985,, 293-303.		5
207	Velocity spike at the poleward edge of the auroral zone. Journal of Geophysical Research, 1984, 89, 1627-1634.	3.3	19
208	The effects of interplanetary magnetic field orientation on dayside highâ€latitude ionospheric convection. Journal of Geophysical Research, 1984, 89, 2873-2880.	3.3	284
209	Particle acceleration parallel and perpendicular to the magnetic field observed by DEâ€2. Journal of Geophysical Research, 1984, 89, 3893-3902.	3.3	86
210	Ionâ€neutral coupling in the highâ€latitude <i>F</i> region: Evaluation of ion heating terms from Dynamics Explorer 2. Journal of Geophysical Research, 1984, 89, 7495-7508.	3.3	154
211	MITHRAS: A brief description. Radio Science, 1984, 19, 665-673.	0.8	15
212	The HILAT program. Eos, 1983, 64, 163-170.	0.1	15
213	Multistation measurements of high″atitude ionospheric convection. Journal of Geophysical Research, 1983, 88, 10111-10121.	3.3	49
214	The Low Altitude Cleft: Plasma Entry and Magnetospheric Topology. , 1983, , 57-72.		6
215	Plasma injection and transport in the midâ€altitude polar cusp. Geophysical Research Letters, 1982, 9, 921-924.	1.5	147
216	Dynamics Explorer observations of equatorial spread F: Evidence for drift waves. Geophysical Research Letters, 1982, 9, 993-996.	1.5	17

#	Article	lF	CITATIONS
217	A model of the highâ€latitude ionospheric convection pattern. Journal of Geophysical Research, 1982, 87, 6339-6345.	3.3	531
218	The polar ionosphere. Reviews of Geophysics, 1982, 20, 567-576.	9.0	24
219	A feature of the behavior of He ⁺ in the nightside highâ€latitude ionosphere during equinox. Journal of Geophysical Research, 1981, 86, 59-64.	3.3	20
220	Auroral arc electrodynamic parameters measured by AE and the Chatanika Radar. Journal of Geophysical Research, 1981, 86, 4671-4685.	3.3	69
221	Observational evidence for a boundary layer source of dayside region 1 fieldâ€aligned currents. Journal of Geophysical Research, 1981, 86, 5577-5589.	3.3	97
222	Cusp region particle precipitation and ion convection for northward interplanetary magnetic field. Geophysical Research Letters, 1980, 7, 393-396.	1.5	65
223	Rapid subauroral ion drifts observed by Atmosphere Explorer C. Geophysical Research Letters, 1979, 6, 657-660.	1.5	263
224	IMF Changes and Polar-Cap Electric Fields and Currents. Astrophysics and Space Science Library, 1979, , 47-62.	1.0	10
225	Dayside auroral arcs and convection. Geophysical Research Letters, 1978, 5, 391-394.	1.5	93
226	Ion temperature troughs and interhemispheric transport observed in the equatorial ionosphere. Journal of Geophysical Research, 1978, 83, 3683-3689.	3.3	29
227	lon convection and the formation of the midâ€atitude <i>F</i> region ionization trough. Journal of Geophysical Research, 1978, 83, 4255-4264.	3.3	183
228	Measurement of magnetic field aligned potential differences using high resolution conjugate photoelectron energy spectra. Geophysical Research Letters, 1977, 4, 373-376.	1.5	22
229	Characteristics of auroral electron acceleration regions observed by Atmosphere Explorer C. Journal of Geophysical Research, 1976, 81, 2223-2230.	3.3	80
230	Ion convection velocity reversals in the dayside cleft. Journal of Geophysical Research, 1976, 81, 3803-3809.	3.3	203
231	Properties of spikelike shear flow reversals observed in the auroral plasma by Atmosphere Explorer C. Journal of Geophysical Research, 1976, 81, 3886-3896.	3.3	59
232	The Mid-Latitude Trough-Revisited. Geophysical Monograph Series, 0, , 25-33.	0.1	26
233	The Linkage between the Ring Current and the Ionosphere System. Geophysical Monograph Series, 0, , 135-143.	0.1	9
234	A Digest of Electrodynamic Coupling and Layer Instabilities in the Nighttime Midlatitude Ionosphere. Geophysical Monograph Series, 0, , 283-290.	0.1	2

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#	Article	IF	CITATIONS
235	Midlatitude Ionospheric Dynamics and Disturbances: Introduction. Geophysical Monograph Series, 0, , 1-7.	0.1	5
236	Global Modeling of Storm-Time Thermospheric Dynamics and Electrodynamics. Geophysical Monograph Series, 0, , 187-200.	0.1	18
237	Impact of the Neutral Wind Dynamo on the Development of the Region 2 Dynamo. Geophysical Monograph Series, 0, , 179-186.	0.1	2
238	Low- and Middle-Latitude Ionospheric Dynamics Associated with Magnetic Storms. Geophysical Monograph Series, 0, , 51-61.	0.1	11