

M R Hairston

List of Publications by Year in descending order

Source: <https://exaly.com/author-pdf/9347711/publications.pdf>

Version: 2024-02-01

113
papers

3,863
citations

109321

35
h-index

144013

57
g-index

121
all docs

121
docs citations

121
times ranked

2018
citing authors

#	ARTICLE	IF	CITATIONS
1	Lobe Reconnection and Cusp-Aligned Auroral Arcs. <i>Journal of Geophysical Research: Space Physics</i> , 2022, 127, .	2.4	11
2	The Dependence of Cold and Hot Patches on Local Plasma Transport and Particle Precipitation in Northern Hemisphere Winter. <i>Geophysical Research Letters</i> , 2022, 49, .	4.0	3
3	ASHLEY: A New Empirical Model for the High-Latitude Electron Precipitation and Electric Field. <i>Space Weather</i> , 2021, 19, e2020SW002671.	3.7	17
4	Transpolar Arcs During a Prolonged Radial Interplanetary Magnetic Field Interval. <i>Journal of Geophysical Research: Space Physics</i> , 2021, 126, e2021JA029197.	2.4	4
5	Solar and Geomagnetic Activity Impact on Occurrence and Spatial Size of Cold and Hot Polar Cap Patches. <i>Geophysical Research Letters</i> , 2021, 48, e2021GL094526.	4.0	8
6	Hemispheric Asymmetries in Poynting Flux Derived From DMSP Spacecraft. <i>Geophysical Research Letters</i> , 2021, 48, e2021GL094781.	4.0	24
7	Auroral heating of plasma patches due to high-latitude reconnection. <i>Journal of Geophysical Research: Space Physics</i> , 2021, 126, e2021JA029657.	2.4	0
8	Dual-Lobe Reconnection and Horse-Collar Auroras. <i>Journal of Geophysical Research: Space Physics</i> , 2020, 125, e2020JA028567.	2.4	21
9	Statistical Study of the Relationship Between Ion Upflow and Field-Aligned Current in the Topside Ionosphere for Both Hemispheres During Geomagnetic Disturbed and Quiet Time. <i>Journal of Geophysical Research: Space Physics</i> , 2020, 125, e2019JA027538.	2.4	6
10	Dawnside Auroral Polarization Streams. <i>Journal of Geophysical Research: Space Physics</i> , 2020, 125, e2019JA027742.	2.4	18
11	On the Production of Ionospheric Irregularities Via Kelvin-Helmholtz Instability Associated with Cusp Flow Channels. <i>Journal of Geophysical Research: Space Physics</i> , 2020, 125, e2019JA027734.	2.4	16
12	Impacts of Binning Methods on High-Latitude Electrodynamic Forcing: Static Versus Boundary-Oriented Binning Methods. <i>Journal of Geophysical Research: Space Physics</i> , 2020, 125, e2019JA027270.	2.4	7
13	Event Studies of O + Density Variability Within Quiet-Time Plasma Sheet. <i>Journal of Geophysical Research: Space Physics</i> , 2019, 124, 4168-4187.	2.4	2
14	Study of the Equatorial and Low-Latitude Electrodynamic and Ionospheric Disturbances During the 22-23 June 2015 Geomagnetic Storm Using Ground-Based and Spaceborne Techniques. <i>Journal of Geophysical Research: Space Physics</i> , 2018, 123, 2424-2440.	2.4	57
15	Topside Ionospheric Electron Temperature Observations of the 21 August 2017 Eclipse by DMSP Spacecraft. <i>Geophysical Research Letters</i> , 2018, 45, 7242-7247.	4.0	16
16	Coincident Observations by the Kharkiv IS Radar and Ionosonde, DMSP and Arase (ERG) Satellites, and FLIP Model Simulations: Implications for the NRLMSISE-00 Hydrogen Density, Plasmasphere, and Ionosphere. <i>Geophysical Research Letters</i> , 2018, 45, 8062-8071.	4.0	17
17	Testing nowcasts of the ionospheric convection from the expanding and contracting polar cap model. <i>Space Weather</i> , 2017, 15, 623-636.	3.7	12
18	DMSP observations of high latitude Poynting flux during magnetic storms. <i>Journal of Atmospheric and Solar-Terrestrial Physics</i> , 2017, 164, 294-307.	1.6	11

#	ARTICLE	IF	CITATIONS
19	Storm time coupling between the magnetosheath and the polar ionosphere. <i>Journal of Geophysical Research: Space Physics</i> , 2017, 122, 7541-7554.	2.4	5
20	RISRâ€œ observations of the IMF B y influence on reverse convection during extreme northward IMF. <i>Journal of Geophysical Research: Space Physics</i> , 2017, 122, 3707-3720.	2.4	4
21	Responses in the polar and equatorial ionosphere to the March 2015 St. Patrick Day storm. <i>Journal of Geophysical Research: Space Physics</i> , 2016, 121, 11,213.	2.4	33
22	Equatorial ionospheric plasma drifts and O⁺ concentration enhancements associated with disturbance dynamo during the 2015 St. Patrick's Day magnetic storm. <i>Journal of Geophysical Research: Space Physics</i> , 2016, 121, 7961-7973.	2.4	37
23	Earth's ion upflow associated with polar cap patches: Global and in situ observations. <i>Geophysical Research Letters</i> , 2016, 43, 1845-1853.	4.0	34
24	Equatorial broad plasma depletions associated with the evening prereversal enhancement and plasma bubbles during the 17 March 2015 storm. <i>Journal of Geophysical Research: Space Physics</i> , 2016, 121, 10,209.	2.4	22
25	The auroral ionosphere TEC response to an interplanetary shock. <i>Geophysical Research Letters</i> , 2016, 43, 1810-1818.	4.0	14
26	Formation of polar ionospheric tongue of ionization during minor geomagnetic disturbed conditions. <i>Journal of Geophysical Research: Space Physics</i> , 2015, 120, 6860-6873.	2.4	19
27	Correlation between Poynting flux and soft electron precipitation in the dayside polar cap boundary regions. <i>Journal of Geophysical Research: Space Physics</i> , 2015, 120, 9102-9109.	2.4	12
28	The postsunset vertical plasma drift and its effects on the generation of equatorial plasma bubbles observed by the C/NOFS satellite. <i>Journal of Geophysical Research: Space Physics</i> , 2015, 120, 2263-2275.	2.4	92
29	Response of reverse convection to fast IMF transitions. <i>Journal of Geophysical Research: Space Physics</i> , 2015, 120, 4020-4037.	2.4	4
30	Dayside reconnection under interplanetary magnetic field dominated conditions: The formation and movement of bending arcs. <i>Journal of Geophysical Research: Space Physics</i> , 2015, 120, 2967-2978.	2.4	22
31	Topside equatorial zonal ion velocities measured by C/NOFS during rising solar activity. <i>Annales Geophysicae</i> , 2014, 32, 69-75.	1.6	18
32	Storm-time meridional flows: a comparison of CINDI observations and model results. <i>Annales Geophysicae</i> , 2014, 32, 659-668.	1.6	4
33	Relationship between plasma bubbles and density enhancements: Observations and interpretation. <i>Journal of Geophysical Research: Space Physics</i> , 2014, 119, 1325-1336.	2.4	35
34	Solar filament impact on 21 January 2005: Geospace consequences. <i>Journal of Geophysical Research: Space Physics</i> , 2014, 119, 5401-5448.	2.4	20
35	F region dusk ion temperature spikes at the equatorward edge of the highâ€œatitude convection pattern. <i>Geophysical Research Letters</i> , 2014, 41, 300-307.	4.0	9
36	Radioâ€œtomographic images of postmidnight equatorial plasma depletions. <i>Geophysical Research Letters</i> , 2014, 41, 13-19.	4.0	12

#	ARTICLE	IF	CITATIONS
37	Sounding of the plasmasphere by Midcontinent Magnetoseismic Chain (McMAC) magnetometers. <i>Journal of Geophysical Research: Space Physics</i> , 2013, 118, 3077-3086.	2.4	44
38	Large-scale quasiperiodic plasma bubbles: C/NOFS observations and causal mechanism. <i>Journal of Geophysical Research: Space Physics</i> , 2013, 118, 3602-3612.	2.4	46
39	Long-lasting daytime equatorial plasma bubbles observed by the C/NOFS satellite. <i>Journal of Geophysical Research: Space Physics</i> , 2013, 118, 2398-2408.	2.4	46
40	Vertical and meridional equatorial ion flows observed by CINDI during the 26 September 2011 storm. <i>Journal of Geophysical Research: Space Physics</i> , 2013, 118, 5230-5243.	2.4	11
41	Imaging space weather over Europe. <i>Space Weather</i> , 2013, 11, 69-78.	3.7	13
42	Imaging magnetospheric boundaries at ionospheric heights. <i>Journal of Geophysical Research: Space Physics</i> , 2013, 118, 7294-7305.	2.4	14
43	Field-aligned current reconfiguration and magnetospheric response to an impulse in the interplanetary magnetic field B_Y component. <i>Geophysical Research Letters</i> , 2013, 40, 2489-2494.	4.0	10
44	Ionospheric Joule heating, fast flow channels, and magnetic field line topology for IMF B_Y -dominant conditions: Observations and comparisons with predicted reconnection jet speeds. <i>Journal of Geophysical Research</i> , 2012, 117, .	3.3	16
45	Generation and characteristics of equatorial plasma bubbles detected by the C/NOFS satellite near the sunset terminator. <i>Journal of Geophysical Research</i> , 2012, 117, .	3.3	53
46	Extreme Poynting flux in the dayside thermosphere: Examples and statistics. <i>Geophysical Research Letters</i> , 2011, 38, n/a-n/a.	4.0	85
47	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
48	The nonlinear response of the polar cap potential under southward IMF: A statistical view. <i>Journal of Geophysical Research</i> , 2011, 116, n/a-n/a.	3.3	19
49	Temporal variations and spatial extent of the electron density enhancements in the polar magnetosphere during geomagnetic storms. <i>Journal of Geophysical Research</i> , 2010, 115, .	3.3	10
50	Ion temperature and density relationships measured by CINDI from the C/NOFS spacecraft during solar minimum. <i>Journal of Geophysical Research</i> , 2010, 115, .	3.3	34
51	Statistical behavior of the topside electron density as determined from DMSP observations: A probabilistic climatology. <i>Journal of Geophysical Research</i> , 2010, 115, .	3.3	14
52	Mapping the duskside topside ionosphere with CINDI and DMSP. <i>Journal of Geophysical Research</i> , 2010, 115, n/a-n/a.	3.3	1
53	Stratification of east-west plasma flow channels observed in the ionospheric cusp in response to IMF B_Y polarity changes. <i>Geophysical Research Letters</i> , 2010, 37, .	4.0	13
54	Multisatellite low-altitude observations of a magnetopause merging burst. <i>Journal of Geophysical Research</i> , 2010, 115, .	3.3	4

#	ARTICLE	IF	CITATIONS
55	Vertical thermal O ⁺ flows at 850 km in dynamic auroral boundary coordinates. Journal of Geophysical Research, 2010, 115, .	3.3	33
56	Dynamic temporal evolution of polar cap tongue of ionization during magnetic storm. Journal of Geophysical Research, 2010, 115, .	3.3	39
57	Ionospheric convection signatures of the interchange cycle at small interplanetary magnetic field clock angles. Journal of Geophysical Research, 2010, 115, .	3.3	4
58	10.1007/s11478-008-2004-5. , 2010, 48, 154.		0
59	Unusually elongated, bright airglow plume in the polar cap F region: Is it a tongue of ionization?. Geophysical Research Letters, 2009, 36, .	4.0	15
60	Behavior of the O ⁺ /H ⁺ transition height during the extreme solar minimum of 2008. Geophysical Research Letters, 2009, 36, .	4.0	121
61	Broad plasma decreases in the equatorial ionosphere. Geophysical Research Letters, 2009, 36, .	4.0	26
62	Three-way validation of the Rankin Inlet PolarDARN radar velocity measurements. Radio Science, 2009, 44, .	1.6	16
63	Electrostatic potential drop across the ionospheric signature of the low-latitude boundary layer. Journal of Geophysical Research, 2009, 114, .	3.3	14
64	Transpolar voltage and polar cap flux during the substorm cycle and steady convection events. Journal of Geophysical Research, 2009, 114, .	3.3	38
65	Statistical description of low-latitude plasma blobs as observed by DMSP F15 and KOMPSAT-1. Advances in Space Research, 2008, 41, 650-654.	2.6	21
66	Features of morning-time auroras during SC. Geomagnetism and Aeronomy, 2008, 48, 154-164.	0.8	6
67	Ionospheric storm time dynamics as seen by GPS tomography and in situ spacecraft observations. Journal of Geophysical Research, 2008, 113, .	3.3	25
68	High-latitude ionosphere convection and Birkeland current response for the 15 May 2005 magnetic storm recovery phase. Journal of Geophysical Research, 2008, 113, .	3.3	18
69	Observations of ionospheric convection from the Wallops SuperDARN radar at middle latitudes. Journal of Geophysical Research, 2007, 112, n/a-n/a.	3.3	55
70	Correction to "Polar cap bifurcation during steady northward interplanetary magnetic field with $B_Y < 0$ ". Journal of Geophysical Research, 2007, 112, .	3.3	1
71	A statistical comparison of the AMIE derived and DMSP-SSIES observed high-latitude ionospheric electric field. Journal of Geophysical Research, 2006, 111, .	3.3	26
72	Ionospheric signatures of internal reconnection for northward interplanetary magnetic field: Observation of "reciprocal cells" and magnetosheath ion precipitation. Journal of Geophysical Research, 2006, 111, .	3.3	17

#	ARTICLE	IF	CITATIONS
73	Characteristics of high-latitude vertical plasma flow from the Defense Meteorological Satellite Program. <i>Journal of Geophysical Research</i> , 2006, 111, .	3.3	17
74	First observations of the temporal/spatial variation of the sub-auroral polarization stream from the SuperDARN Wallops HF radar. <i>Geophysical Research Letters</i> , 2006, 33, .	4.0	70
75	Correction to "Ring current and the magnetosphere-ionosphere coupling during the superstorm of 20 November 2003". <i>Journal of Geophysical Research</i> , 2005, 110, .	3.3	1
76	Comparison of DMSP cross-track ion drifts and SuperDARN line-of-sight velocities. <i>Annales Geophysicae</i> , 2005, 23, 2479-2486.	1.6	48
77	Ring current and the magnetosphere-ionosphere coupling during the superstorm of 20 November 2003. <i>Journal of Geophysical Research</i> , 2005, 110, .	3.3	78
78	Saturation of the ionospheric polar cap potential during the October-November 2003 superstorms. <i>Journal of Geophysical Research</i> , 2005, 110, .	3.3	60
79	Coupled response of the inner magnetosphere and ionosphere on 17 April 2002. <i>Journal of Geophysical Research</i> , 2005, 110, .	3.3	85
80	Observations of ionospheric plasma flows within theta auroras. <i>Journal of Geophysical Research</i> , 2005, 110, .	3.3	16
81	Global plasmasphere evolution 22-23 April 2001. <i>Journal of Geophysical Research</i> , 2005, 110, .	3.3	91
82	On the distribution of ionospheric electron density observations. <i>Space Weather</i> , 2005, 3, n/a-n/a.	3.7	7
83	Using insitu satellite data to describe global scale variations in space weather. , 2004, , .		0
84	Polar cap bifurcation during steady-state northward interplanetary magnetic field with $\hat{B}_Y \hat{B}_Z$. <i>Journal of Geophysical Research</i> , 2004, 109, .	3.3	24
85	Magnetospheric electric fields and plasma sheet injection to low L-shells during the 4-5 June 1991 magnetic storm: Comparison between the Rice Convection Model and observations. <i>Journal of Geophysical Research</i> , 2004, 109, .	3.3	64
86	Plasmapause undulation of 17 April 2002. <i>Geophysical Research Letters</i> , 2004, 31, .	4.0	33
87	Measuring the dayside reconnection rate during an interval of due northward interplanetary magnetic field. <i>Annales Geophysicae</i> , 2004, 22, 4243-4258.	1.6	49
88	Case study of the 15 July 2000 magnetic storm effects on the ionosphere-driver of the positive ionospheric storm in the winter hemisphere. <i>Journal of Geophysical Research</i> , 2003, 108, .	3.3	46
89	Observed saturation of the ionospheric polar cap potential during the 31 March 2001 storm. <i>Geophysical Research Letters</i> , 2003, 30, .	4.0	82
90	Plasma density enhancements associated with equatorial spreadF: ROCSAT-1 and DMSP observations. <i>Journal of Geophysical Research</i> , 2003, 108, .	3.3	80

#	ARTICLE	IF	CITATIONS
91	Control of plasmaspheric dynamics by both convection and sub-auroral polarization stream. Geophysical Research Letters, 2003, 30, .	4.0	117
92	High-latitude plasma outflow as measured by the DMSP spacecraft. Journal of Geophysical Research, 2003, 108, .	3.3	27
93	Detailed analysis of a substorm event on 6 and 7 June 1989 1. Growth phase evolution of nightside auroral activities and ionospheric convection toward expansion phase onset. Journal of Geophysical Research, 2002, 107, SMP 36-1-SMP 36-23.	3.3	21
94	Testing global storm-time electric field models using particle spectra on multiple spacecraft. Journal of Geophysical Research, 2002, 107, SMP 21-1-SMP 21-11.	3.3	19
95	Consequences of a saturated convection electric field on the ring current. Geophysical Research Letters, 2002, 29, 62-1-62-4.	4.0	33
96	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
97	Evolution of ionospheric multicell convection during northward interplanetary magnetic field with $ B_z/B_y > 1$. Journal of Geophysical Research, 2000, 105, 27095-27107.	3.3	40
98	Global storm time auroral X-ray morphology and timing and comparison with UV measurements. Journal of Geophysical Research, 2000, 105, 15757-15777.	3.3	21
99	The ionospheric response to interplanetary magnetic field variations: Evidence for rapid global change and the role of preconditioning in the magnetosphere. Journal of Geophysical Research, 2000, 105, 22955-22977.	3.3	14
100	Global X-ray observations of magnetospheric convection-driven auroral disturbances. Geophysical Research Letters, 2000, 27, 3233-3236.	4.0	8
101	Analysis of the ionospheric cross polar cap potential drop and electrostatic potential distribution patterns during the January 1997 cme event using DMSP data. Journal of Atmospheric and Solar-Terrestrial Physics, 1999, 61, 195-206.	1.6	17
102	Parameterization of the Defense Meteorological Satellite Program ionospheric electrostatic potentials by the interplanetary magnetic field strength and direction. Journal of Geophysical Research, 1999, 104, 177-184.	3.3	45
103	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
104	Empirical polar cap potentials. Journal of Geophysical Research, 1997, 102, 111-125.	3.3	286
105	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.	4.0	70
106	High-latitude ionospheric convection pattern during steady northward interplanetary magnetic field. Journal of Geophysical Research, 1995, 100, 14537.	3.3	31
107	Large-scale convection patterns observed by DMSP. Journal of Geophysical Research, 1994, 99, 3827.	3.3	361
108	The interaction of a magnetic cloud with the Earth: Ionospheric convection in the northern and southern hemispheres for a wide range of quasi-steady interplanetary magnetic field conditions. Journal of Geophysical Research, 1993, 98, 7633-7655.	3.3	82

#	ARTICLE	IF	CITATIONS
109	Ionospheric convection response to slow, strong variations in a northward interplanetary magnetic field: A case study for January 14, 1988. <i>Journal of Geophysical Research</i> , 1993, 98, 19273-19292.	3.3	75
110	Response of the ionospheric convection pattern to a rotation of the interplanetary magnetic field on January 14, 1988. <i>Journal of Geophysical Research</i> , 1992, 97, 19449-19460.	3.3	19
111	Three-dimensional ionospheric plasma circulation. <i>Journal of Geophysical Research</i> , 1992, 97, 13903-13910.	3.3	18
112	Distribution of convection potential around the polar cap boundary as a function of the interplanetary magnetic field. <i>Journal of Geophysical Research</i> , 1989, 94, 13447-13461.	3.3	44
113	Modeling Inner Magnetospheric Electric Fields: Latest Self-Consistent Results. <i>Geophysical Monograph Series</i> , 0, , 263-269.	0.1	14