

# James LaBelle

## List of Publications by Year in descending order

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2,788  
citations

186265

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243625

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docs citations

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times ranked

1308  
citing authors

#	ARTICLE	IF	CITATIONS
1	South Pole Station Ground-Based and Cluster Satellite Measurements of Leaked and Escaping Auroral Kilometric Radiation. <i>Journal of Geophysical Research: Space Physics</i> , 2022, 127, .	2.4	4
2	High bandwidth measurements of auroral Langmuir waves with multiple antennas. <i>Annales Geophysicae</i> , 2022, 40, 231-245.	1.6	4
3	A Statistical Study of Auroral Medium Frequency Bursts and Anomalous Incoherent Scatter Radar Echoes. <i>Radio Science</i> , 2022, 57, .	1.6	1
4	Interferometric Study of Ionospheric Plasma Irregularities in Regions of Phase Scintillations and HF Backscatter. <i>Geophysical Research Letters</i> , 2022, 49, .	4.0	8
5	The Cusp as a VLF Saucer Source: First Rocket Observations of Long-Duration VLF Saucers on the Dayside. <i>Geophysical Research Letters</i> , 2021, 48, e2020GL090747.	4.0	3
6	Langmuir Turbulence in the Auroral Ionosphere: Origins and Effects. <i>Frontiers in Astronomy and Space Sciences</i> , 2021, 7, .	2.8	8
7	Flickering Low Frequency Auroral Hiss. <i>Journal of Geophysical Research: Space Physics</i> , 2021, 126, e2020JA029098.	2.4	1
8	TRICE 2 Observations of Low-Energy Magnetospheric Ions Within the Cusp. <i>Journal of Geophysical Research: Space Physics</i> , 2021, 126, e2021JA029382.	2.4	4
9	Modulated Upper-Hybrid Waves Coincident With Lower-Hybrid Waves in the Cusp. <i>Journal of Geophysical Research: Space Physics</i> , 2021, 126, e2021JA029590.	2.4	3
10	Estimating Polar Cap Density and Medium-Frequency Burst Source Heights Using 2 f ce Roar Radio Emissions. <i>Journal of Geophysical Research: Space Physics</i> , 2020, 125, e2020JA028166.	2.4	3
11	Inferring Source Properties of Monoenergetic Electron Precipitation From Kappa and Maxwellian Moment-Voltage Relationships. <i>Journal of Geophysical Research: Space Physics</i> , 2019, 124, 1548-1567.	2.4	3
12	Special issue "The 13th International Conference on Substorms". <i>Earth, Planets and Space</i> , 2019, 71, .	2.5	0
13	Statistical Study of Electron Bunching in Auroral Langmuir Waves. <i>Journal of Geophysical Research: Space Physics</i> , 2019, 124, 5956-5975.	2.4	5
14	Properties of the Stimulated Electromagnetic Emissions During the Inclined High-Frequency Pumping of the Ionosphere Near the Fourth Electron Gyroharmonic at the High-Frequency Active Auroral Research Program Facility. <i>Geophysical Research Letters</i> , 2019, 46, 5653-5661.	4.0	0
15	Storm phase-partitioned rates and budgets of global Alfvénic energy deposition, electron precipitation, and ion outflow. <i>Journal of Atmospheric and Solar-Terrestrial Physics</i> , 2018, 167, 1-12.	1.6	8
16	Polarization measurements of unusual cases of medium frequency burst emissions extending below 1.5 MHz. <i>Earth, Planets and Space</i> , 2018, 70, .	2.5	5
17	Nonthermal Limit of Monoenergetic Precipitation in the Auroral Acceleration Region. <i>Geophysical Research Letters</i> , 2018, 45, 10, 167-10, 176.	4.0	2
18	Long-hiss fine structure within auroral hiss: A review and synthesis. <i>Journal of Atmospheric and Solar-Terrestrial Physics</i> , 2017, 156, 72-79.	1.6	1

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19	Phase sorting wave-particle correlator. Journal of Geophysical Research: Space Physics, 2017, 122, 2069-2078.	2.4	6
20	IMF Control of Alfvénic Energy Transport and Deposition at High Latitudes. Journal of Geophysical Research: Space Physics, 2017, 122, 12,189.	2.4	17
21	Laboratory Measurements of X-Ray Emissions From Centimeter-Long Streamer Corona Discharges. Geophysical Research Letters, 2017, 44, 11,174.	4.0	11
22	An autonomous receiver/digital signal processor applied to ground-based and rocket-borne wave experiments. Journal of Geophysical Research: Space Physics, 2016, 121, 7334-7343.	2.4	3
23	On the propagation and mode conversion of auroral medium frequency bursts. Journal of Geophysical Research: Space Physics, 2016, 121, 1706-1721.	2.4	3
24	Right-hand polarized 4 f ce auroral roar emissions: 2. Nonlinear generation theory. Journal of Geophysical Research: Space Physics, 2016, 121, 7981-7987.	2.4	7
25	Alfvén wave-driven ionospheric mass outflow and electron precipitation during storms. Journal of Geophysical Research: Space Physics, 2016, 121, 7828-7846.	2.4	13
26	Right-hand polarized 4 f ce auroral roar emissions: 1. Observations. Journal of Geophysical Research: Space Physics, 2016, 121, 7974-7980.	2.4	2
27	Comparison of fine structures of electron cyclotron harmonic emissions in aurora. Journal of Geophysical Research: Space Physics, 2015, 120, 8861-8871.	2.4	5
28	Detection of traveling ionospheric disturbances by medium-frequency Doppler sounding using AM radio transmissions. Radio Science, 2015, 50, 249-263.	1.6	9
29	Further evidence for a connection between auroral kilometric radiation and ground-level signals measured in Antarctica. Journal of Geophysical Research: Space Physics, 2015, 120, 2061-2075.	2.4	9
30	A new natural radio emission observed at South Pole Station. Journal of Geophysical Research: Space Physics, 2014, 119, 566-574.	2.4	5
31	DEMETER observations of bursty MF emissions and their relation to ground-level auroral MF burst. Journal of Geophysical Research: Space Physics, 2014, 119, 10,144.	2.4	4
32	Z-mode maser instability. Journal of Geophysical Research: Space Physics, 2013, 118, 7584-7592.	2.4	5
33	Natural cyclotron harmonic radiation from the ionosphere. , 2013, , .		0
34	Artificial Ionospheric Layers during Pump Frequency Stepping Near the 4th Gyroharmonic at HAARP. Physical Review Letters, 2013, 110, 065002.	7.8	39
35	Diffusion Processes: An Observational Perspective. Geophysical Monograph Series, 2013, , 331-341.	0.1	50
36	Dayside auroral hiss observed at South Pole Station. Journal of Geophysical Research: Space Physics, 2013, 118, 1220-1230.	2.4	7

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37	Experimental tests of a topside generation mechanism for auroral medium frequency radio emissions. Journal of Geophysical Research, 2012, 117, .	3.3	5
38	Interpretation of vector electric field measurements of bursty Langmuir waves in the cusp. Journal of Geophysical Research, 2012, 117, .	3.3	3
39	First observations of $f_{ce}$ auroral roars. Geophysical Research Letters, 2012, 39, .	4.0	8
40	An explanation for the fine structure of MF burst emissions. Geophysical Research Letters, 2011, 38, n/a-n/a.	4.0	12
41	Ground-level detection of auroral kilometric radiation. Geophysical Research Letters, 2011, 38, n/a-n/a.	4.0	20
42	Theoretical constraints on the generation mechanism of auroral medium frequency burst radio emissions. Journal of Geophysical Research, 2011, 116, n/a-n/a.	3.3	4
43	Changes in mode properties versus mode conversion for waves in Earth's auroral ionosphere. Journal of Geophysical Research, 2011, 116, n/a-n/a.	3.3	6
44	Waveform and envelope field statistics for waves with stochastically driven amplitudes. Physics of Plasmas, 2010, 17, 032110.	1.9	6
45	Further sounding rocket observations of structured whistler mode auroral emissions. Journal of Geophysical Research, 2010, 115, .	3.3	1
46	Electric field statistics and modulation characteristics of bursty Langmuir waves observed in the cusp. Journal of Geophysical Research, 2010, 115, .	3.3	20
47	Fully resolved observations of auroral medium frequency burst radio emissions. Geophysical Research Letters, 2009, 36, .	4.0	13
48	PENGUIn multi-instrument observations of dayside high-latitude injections during the 23 March 2007 substorm. Journal of Geophysical Research, 2009, 114, .	3.3	8
49	Rocket observations of two distinct types of dispersive features of auroral HF waves. Journal of Geophysical Research, 2009, 114, .	3.3	1
50	Experimental tests of the generation mechanism of auroral medium frequency burst radio emissions. Journal of Geophysical Research, 2009, 114, .	3.3	14
51	Mode identification of whistler mode, $Z$ -mode, and Langmuir/Upper Hybrid mode waves observed in an auroral sounding rocket experiment. Journal of Geophysical Research, 2008, 113, .	3.3	6
52	Ground based observations of low frequency auroral hiss fine structure. Journal of Geophysical Research, 2008, 113, .	3.3	7
53	Auroral medium frequency burst radio emission associated with the 23 March 2007 THEMIS study substorm. Journal of Geophysical Research, 2008, 113, .	3.3	10
54	Statistics of auroral Langmuir waves. Annales Geophysicae, 2008, 26, 3885-3895.	1.6	5

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55	Ground and satellite observations of the evolution of growth phase auroral arcs. Journal of Geophysical Research, 2007, 112, .	3.3	28
56	Experimental tests of the eigenmode theory of auroral roar fine structure and its application to remote sensing. Journal of Geophysical Research, 2007, 112, .	3.3	4
57	Methods in the study of discrete upper hybrid waves. Journal of Geophysical Research, 2007, 112, .	3.3	3
58	Auroral ion outflow: low altitude energization. Annales Geophysicae, 2007, 25, 1967-1977.	1.6	32
59	Narrow-band extremely low frequency (ELF) wave phenomena observed at South Pole Station. Geophysical Research Letters, 2006, 33, .	4.0	4
60	Further study of flickering auroral roar emission: 1. South Pole observations. Journal of Geophysical Research, 2006, 111, .	3.3	6
61	Further study of flickering auroral roar emission: 2. Theory and numerical calculations. Journal of Geophysical Research, 2006, 111, .	3.3	3
62	In situ measurement of thermal electrons on the SIERRA nightside auroral sounding rocket. Journal of Geophysical Research, 2006, 111, .	3.3	22
63	LF/MF Whistler mode dispersive signals observed with rocket-borne instruments in the auroral downward current region. Journal of Geophysical Research, 2006, 111, .	3.3	7
64	Structured waves near the plasma frequency observed in three auroral rocket flights. Annales Geophysicae, 2006, 24, 2911-2919.	1.6	8
65	Mode Conversion Radiation in the Terrestrial Ionosphere and Magnetosphere. , 2006, , 211-234.		0
66	Observation of the reactive component of Langmuir wave phase-bunched electrons. Geophysical Research Letters, 2005, 32, .	4.0	13
67	Statistical studies of auroral MF burst emissions observed at South Pole Station and at multiple sites in northern Canada. Journal of Geophysical Research, 2005, 110, .	3.3	18
68	Discrete Langmuir waves in density structure. Journal of Geophysical Research, 2005, 110, .	3.3	10
69	High-latitude propagation studies using a meridional chain of LF/MF/HF receivers. Annales Geophysicae, 2004, 22, 1705-1718.	1.6	3
70	Rocket observations of structured upper hybrid waves at $f_{uh} = 2f_{ce}$ . Geophysical Research Letters, 2004, 31, .	4.0	24
71	Rocket and ground-based electron density soundings versus IRI representation. Advances in Space Research, 2003, 31, 569-575.	2.6	23
72	A Model of Zebra Emission in Solar Type IV Radio Bursts. Astrophysical Journal, 2003, 593, 1195-1207.	4.5	73

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73	Measurement and modeling of auroral absorption of HF radio waves using a single receiver. Radio Science, 2002, 37, 6-1-6-12.	1.6	5
74	Interpreting observations of MF/HF radio emissions: Unstable wave modes and possibilities to passively diagnose ionospheric densities. Journal of Geophysical Research, 2002, 107, SIA 26-1-SIA 26-9.	3.3	9
75	Statistical study of auroral roar emissions observed at South Pole Station. Journal of Geophysical Research, 2002, 107, SIA 17-1.	3.3	11
76	Auroral Radio Emissions, 1. Hisses, Roars, and Bursts. Space Science Reviews, 2002, 101, 295-440.	8.1	121
77	Location of Pc 1 waves relative to the magnetopause. Annales Geophysicae, 2002, 20, 1763-1767.	1.6	11
78	Observations of auroral roar emissions at polar cap latitudes: Results from the Early Polar Cap Observatory. Radio Science, 2001, 36, 1859-1868.	1.6	6
79	First observations of flickering auroral roar. Geophysical Research Letters, 2001, 28, 123-126.	4.0	11
80	Statistical and case studies of auroral roar observed with a medium frequency interferometer. Journal of Geophysical Research, 2001, 106, 21147-21155.	3.3	14
81	Plasma conditions in auroral roar source regions inferred from radio and radar observations. Journal of Geophysical Research, 2001, 106, 21157-21164.	3.3	16
82	A medium-frequency interferometer for studying auroral radio emissions. Review of Scientific Instruments, 2000, 71, 3200-3206.	1.3	10
83	Discrete electrostatic eigenmodes associated with ionospheric density structure: Generation of auroral roar fine frequency structure. Journal of Geophysical Research, 2000, 105, 27589-27596.	3.3	26
84	HF chirps: Eigenmode trapping in density depletions. Geophysical Research Letters, 2000, 27, 321-324.	4.0	34
85	Narrowband structure in HF waves above the electron plasma frequency in the auroral ionosphere. Geophysical Research Letters, 1999, 26, 1825-1828.	4.0	29
86	Latitudinal dynamics of auroral roar emissions. Journal of Geophysical Research, 1999, 104, 17217-17232.	3.3	7
87	Rocket observations of banded structure in waves near the Langmuir frequency in the auroral ionosphere. Journal of Geophysical Research, 1999, 104, 28109-28122.	3.3	31
88	High-frequency and time resolution rocket observations of structured low- and medium-frequency whistler mode emissions in the auroral ionosphere. Journal of Geophysical Research, 1999, 104, 28101-28107.	3.3	12
89	Rocket measurements of high-altitude spread F irregularities at the magnetic dip equator. Journal of Geophysical Research, 1998, 103, 23427-23441.	3.3	27
90	Propagation of medium frequency (1-4 MHz) auroral radio waves to the ground via the Z-mode radio window. Journal of Geophysical Research, 1998, 103, 29267-29275.	3.3	38

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91	Further investigation of auroral roar fine structure. Journal of Geophysical Research, 1998, 103, 2219-2229.	3.3	27
92	PHAZE II observations of lower hybrid burst structures occurring on density gradients. Geophysical Research Letters, 1998, 25, 3091-3094.	4.0	22
93	The latitude dependence of auroral roar. Journal of Geophysical Research, 1998, 103, 14911-14915.	3.3	22
94	Low-frequency impulsive auroral hiss observations at high geomagnetic latitudes. Journal of Geophysical Research, 1998, 103, 20459-20468.	3.3	7
95	Ionospheric structure and the generation of auroral roar. Journal of Geophysical Research, 1998, 103, 29253-29266.	3.3	23
96	The plasma frequency tracker: An instrument for probing the frequency structure of narrow-Band MF/HF Electric Fields. Geophysical Monograph Series, 1998, , 169-174.	0.1	1
97	On the generation and propagation of auroral electromagnetic ion cyclotron waves. Journal of Geophysical Research, 1997, 102, 17241-17253.	3.3	23
98	Observations of auroral medium frequency bursts. Journal of Geophysical Research, 1997, 102, 22221-22231.	3.3	26
99	The Brazil/Guarã Equatorial Spread F Campaign: Results of the large scale measurements. Geophysical Research Letters, 1997, 24, 1691-1694.	4.0	19
100	Imaging spread-F structures using GPS observations at Alcântara, Brazil. Geophysical Research Letters, 1997, 24, 1703-1706.	4.0	23
101	High resolution OI (630 nm) image measurements of F-region depletion drifts during the Guarã Campaign. Geophysical Research Letters, 1997, 24, 1699-1702.	4.0	60
102	DC electric field measurements with the Guarã Spread-F Rocket. Geophysical Research Letters, 1997, 24, 1695-1698.	4.0	10
103	The polarization of auroral radio emissions. Geophysical Research Letters, 1997, 24, 3161-3164.	4.0	46
104	Quasiperiodic $\sim 1/45$ -60 s fluctuations of VLF signals propagating in the Earth-ionosphere waveguide: A result of pulsating auroral particle precipitation?. Journal of Geophysical Research, 1997, 102, 347-361.	3.3	4
105	Evaluating the stationarity of equatorial spread-F time series data. Journal of Atmospheric and Solar-Terrestrial Physics, 1997, 59, 439-443.	1.6	0
106	Quasi-thermal fluctuations in a beam-plasma system. Physics of Plasmas, 1996, 3, 1234-1240.	1.9	26
107	Lower ionospheric cyclotron maser theory: A possible source of 2E' and 3E' auroral radio emissions. Journal of Geophysical Research, 1996, 101, 27015-27025.	3.3	32
108	Coincident bursts of auroral kilometric radiation and VLF emissions associated with a type III solar radio noise event. Journal of Geophysical Research, 1995, 100, 281.	3.3	1

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109	Statistical and case studies of radio emissions observed near 2 $f_{ce}$ and 3 $f_{ce}$ in the auroral zone. <i>Journal of Geophysical Research</i> , 1995, 100, 7745.	3.3	45
110	Characteristics of the ion pressure tensor in the Earth's magnetosheath. <i>Geophysical Research Letters</i> , 1995, 22, 667-670.	4.0	27
111	Observation of electromagnetic oxygen cyclotron waves in a flickering aurora. <i>Geophysical Research Letters</i> , 1995, 22, 2465-2468.	4.0	31
112	Fine structure of auroral roar emissions. <i>Journal of Geophysical Research</i> , 1995, 100, 21953-21959.	3.3	31
113	Ground-based observations of MF/HF radio noise in the auroral zone. <i>Journal of Geophysical Research</i> , 1994, 99, 2109.	3.3	13
114	A new type of auroral radio emission observed at medium frequencies ( $\sim$ 1350-3700 kHz) using ground-based receivers. <i>Geophysical Research Letters</i> , 1994, 21, 2753-2756.	4.0	28
115	The spectrum of LF/MF/HF radio noise at ground level during substorms. <i>Geophysical Research Letters</i> , 1994, 21, 2749-2752.	4.0	29
116	On quasi-thermal fluctuations near the plasma frequency in the outer plasmasphere: A case study. <i>Journal of Geophysical Research</i> , 1994, 99, 23651.	3.3	24
117	Correction [to "Ground-based observations of radio emissions near 2 $f_{ce}$ and 3 $f_{ce}$ in the auroral zone"]. <i>Geophysical Research Letters</i> , 1993, 20, 2413-2413.	4.0	0
118	Ground-based observations of radio emissions near 2 $f_{ce}$ and 3 $f_{ce}$ in the auroral zone. <i>Geophysical Research Letters</i> , 1993, 20, 1447-1450.	4.0	43
119	Anomalous plasma diffusion and the magnetopause boundary layer. <i>IEEE Transactions on Plasma Science</i> , 1992, 20, 833-842.	1.3	13
120	Poynting vector measurements of electromagnetic ion cyclotron waves in the plasmasphere. <i>Journal of Geophysical Research</i> , 1992, 97, 13789-13797.	3.3	25
121	Bispectral analysis of equatorial spread $F$ density irregularities. <i>Journal of Geophysical Research</i> , 1992, 97, 8643-8651.	3.3	9
122	Band splitting in solar type II radio bursts. <i>Astrophysical Journal</i> , 1992, 399, L167.	4.5	17
123	Plasma diffusion at the magnetopause: The case of lower hybrid drift waves. <i>Journal of Geophysical Research</i> , 1991, 96, 16009-16013.	3.3	55
124	The interaction of impulsive solar wind discontinuities with the magnetosphere: A multi-satellite case study. <i>Planetary and Space Science</i> , 1990, 38, 841-850.	1.7	2
125	The plasma wave signature of a "magnetic hole" in the vicinity of the magnetopause. <i>Journal of Geophysical Research</i> , 1990, 95, 19099-19114.	3.3	35
126	Radio noise of auroral origin: 1968-1988. <i>Journal of Atmospheric and Solar-Terrestrial Physics</i> , 1989, 51, 197-211.	0.9	19



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127	Natural and man-made emissions at 1.0–5.6 MHz measured between 10 and 18 $R_E$ . Radio Science, 1989, 24, 725-737.	1.6	16
128	Reply [to "Comment on "Are fast atmospheric pulsations optical signatures of lightning-induced electron precipitation?". Geophysical Research Letters, 1989, 16, 636-638.	4.0	1
129	Ionization from soft electron precipitation in the auroral $F$ region. Journal of Geophysical Research, 1989, 94, 3791-3798.	3.3	25
130	Average electric wave spectra across the plasma sheet and their relation to ion bulk speed. Journal of Geophysical Research, 1989, 94, 15221-15230.	3.3	30
131	The measurement of wavelength in space plasmas. Reviews of Geophysics, 1989, 27, 495-518.	23.0	53
132	Plasma waves at the dayside magnetopause. Space Science Reviews, 1988, 47, 175.	8.1	160
133	Correction to "Are fast atmospheric pulsations optical signatures of lightning-induced electron precipitation?". Geophysical Research Letters, 1988, 15, 277-282.	4.0	2
134	Reply [to "Comment on "Are fast atmospheric pulsations optical signatures of lightning-induced electron precipitation?". Geophysical Research Letters, 1988, 15, 636-638.	4.0	2
135	The duskside plasmopause/ring current interface: Convection and plasma wave observations. Journal of Geophysical Research, 1988, 93, 2573-2590.	3.3	62
136	Detection of spatial density irregularities with the Viking plasma wave interferometer. Geophysical Research Letters, 1987, 14, 467-470.	4.0	18
137	Are fast atmospheric pulsations optical signatures of lightning-induced electron precipitation?. Geophysical Research Letters, 1987, 14, 1023-1026.	4.0	4
138	Observations of plasma waves within regions of perpendicular ion acceleration. Geophysical Research Letters, 1986, 13, 1113-1116.	4.0	49
139	The Condor Equatorial Spread $F$ Campaign: Overview and results of the large-scale measurements. Journal of Geophysical Research, 1986, 91, 5487-5503.	3.3	87
140	The generation of kilometer scale irregularities in equatorial spread $F$ . Journal of Geophysical Research, 1986, 91, 5504-5512.	3.3	41
141	An analysis of the role of drift waves in equatorial spread $F$ . Journal of Geophysical Research, 1986, 91, 5513-5525.	3.3	69
142	Large amplitude wave packets observed in the ionosphere in association with transverse ion acceleration. Journal of Geophysical Research, 1986, 91, 7113-7118.	3.3	100
143	Electron plasma waves in the solar wind: AMPTE/IRM and UKS observations. Advances in Space Research, 1986, 6, 93-96.	2.6	6
144	Interferometric phase velocity measurements in the auroral electrojet. Planetary and Space Science, 1986, 34, 1285-1297.	1.7	12

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145	Mapping of electric field structures from the equatorial $F$ region to the underlying $E$ region. Journal of Geophysical Research, 1985, 90, 4341-4346.	3.3	40
146	Absolute electron density measurements in the equatorial ionosphere. Journal of Atmospheric and Solar-Terrestrial Physics, 1985, 47, 781-789.	0.9	31
147	Interferometric phase velocity measurements. Geophysical Research Letters, 1984, 11, 19-22.	4.0	42
148	Argon Ions Injected Parallel and Perpendicular to the Magnetic Field. Geophysical Monograph Series, 0, , 201-205.	0.1	5
149	A Comparison of Plasma Waves Produced by Ion Accelerators in the F-Region Ionosphere. Geophysical Monograph Series, 0, , 206-208.	0.1	7
150	Medium-Frequency Burst Emissions: A Terrestrial Analog to Solar Type III Bursts?. , 0, , .		1