James LaBelle

List of Publications by Year
in descending order

Source: https://exaly.com/author-pdf/2764924/publications.pdf

Version: 2024-02-01

150	2,788	186265	243625
papers	citations	28 h-index	44 g-index

153	153	153	1308
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Plasma waves at the dayside magnetopause. Space Science Reviews, 1988, 47, 175.	8.1	160
2	Auroral Radio Emissions, 1. Hisses, Roars, and Bursts. Space Science Reviews, 2002, 101, 295-440.	8.1	121
3	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
4	The Condor Equatorial Spread F Campaign: Overview and results of the largeâ€scale measurements. Journal of Geophysical Research, 1986, 91, 5487-5503.	3.3	87
5	A Model of Zebra Emission in Solar Type IV Radio Bursts. Astrophysical Journal, 2003, 593, 1195-1207.	4.5	73
6	An analysis of the role of drift waves in equatorial spread F. Journal of Geophysical Research, 1986, 91, 5513-5525.	3.3	69
7	The duskside plasmapause/ring current interface: Convection and plasma wave observations. Journal of Geophysical Research, 1988, 93, 2573-2590.	3.3	62
8	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
9	Plasma diffusion at the magnetopause: The case of lower hybrid drift waves. Journal of Geophysical Research, 1991, 96, 16009-16013.	3.3	55
10	The measurement of wavelength in space plasmas. Reviews of Geophysics, 1989, 27, 495-518.	23.0	53
11	Diffusion Processes: An Observational Perspective. Geophysical Monograph Series, 2013, , 331-341.	0.1	50
12	Observations of plasma waves within regions of perpendicular ion acceleration. Geophysical Research Letters, 1986, 13, 1113-1116.	4.0	49
13	The polarization of auroral radio emissions. Geophysical Research Letters, 1997, 24, 3161-3164.	4.0	46
14	Statistical and case studies of radio emissions observed near 2Æ'ceand 3Æ'cein the auroral zone. Journal of Geophysical Research, 1995, 100, 7745.	3.3	45
15	Groundâ€based observations of radio emissions near 2f_{ce} and 3f_{ce} in the auroral zone. Geophysical Research Letters, 1993, 20, 1447-1450.	4.0	43
16	Interferometric phase velocity measurements. Geophysical Research Letters, 1984, 11, 19-22.	4.0	42
17	The generation of kilometer scale irregularities in equatorial spread F. Journal of Geophysical Research, 1986, 91, 5504-5512.	3.3	41
18	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

#	Article	IF	Citations
19	Artificial Ionospheric Layers during Pump Frequency Stepping Near the 4th Gyroharmonic at HAARP. Physical Review Letters, 2013, 110, 065002.	7.8	39
20	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
21	The plasma wave signature of a â€œmagnetic holeâ€•in the vicinity of the magnetopause. Journal of Geophysical Research, 1990, 95, 19099-19114.	3.3	35
22	HF chirps: Eigenmode trapping in density depletions. Geophysical Research Letters, 2000, 27, 321-324.	4.0	34
23	Lower ionospheric cyclotron maser theory: A possible source of 2Æ'ceand 3Æ'ceauroral radio emissions. Journal of Geophysical Research, 1996, 101, 27015-27025.	3.3	32
24	Auroral ion outflow: low altitude energization. Annales Geophysicae, 2007, 25, 1967-1977.	1.6	32
25	Absolute electron density measurements in the equatorial ionosphere. Journal of Atmospheric and Solar-Terrestrial Physics, 1985, 47, 781-789.	0.9	31
26	Observation of electromagnetic oxygen cyclotron waves in a flickering aurora. Geophysical Research Letters, 1995, 22, 2465-2468.	4.0	31
27	Fine structure of auroral roar emissions. Journal of Geophysical Research, 1995, 100, 21953-21959.	3.3	31
28	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
29	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
30	The spectrum of LF/MF/HF radio noise at ground level during substorms. Geophysical Research Letters, 1994, 21, 2749-2752.	4.0	29
31	Narrowband structure in HF waves above the electron plasma frequency in the auroral ionosphere. Geophysical Research Letters, 1999, 26, 1825-1828.	4.0	29
32	A new type of auroral radio emission observed at medium frequencies (â^¼1350-3700 kHz) using ground-based receivers. Geophysical Research Letters, 1994, 21, 2753-2756.	4.0	28
33	Ground and satellite observations of the evolution of growth phase auroral arcs. Journal of Geophysical Research, 2007, 112, .	3.3	28
34	Characteristics of the ion pressure tensor in the Earth's magnetosheath. Geophysical Research Letters, 1995, 22, 667-670.	4.0	27
35	Rocket measurements of high-altitude spread F irregularities at the magnetic dip equator. Journal of Geophysical Research, 1998, 103, 23427-23441.	3.3	27
36	Further investigation of auroral roar fine structure. Journal of Geophysical Research, 1998, 103, 2219-2229.	3.3	27

#	Article	IF	Citations
37	Quasiâ€thermal fluctuations in a beamâ€plasma system. Physics of Plasmas, 1996, 3, 1234-1240.	1.9	26
38	Observations of auroral medium frequency bursts. Journal of Geophysical Research, 1997, 102, 22221-22231.	3.3	26
39	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
40	Ionization from soft electron precipitation in the auroral F region. Journal of Geophysical Research, 1989, 94, 3791-3798.	3.3	25
41	Poynting vector measurements of electromagnetic ion cyclotron waves in the plasmasphere. Journal of Geophysical Research, 1992, 97, 13789-13797.	3.3	25
42	On quasi-thermal fluctuations near the plasma frequency in the outer plasmasphere: A case study. Journal of Geophysical Research, 1994, 99, 23651.	3.3	24
43	Rocket observations of structured upper hybrid waves at f uh = 2f ce. Geophysical Research Letters, 2004, 31, .	4.0	24
44	On the generation and propagation of auroral electromagnetic ion cyclotron waves. Journal of Geophysical Research, 1997, 102, 17241-17253.	3.3	23
45	Imaging spread-F structures using GPS observations at AlcÃ¢ntara, Brazil. Geophysical Research Letters, 1997, 24, 1703-1706.	4.0	23
46	Ionospheric structure and the generation of auroral roar. Journal of Geophysical Research, 1998, 103, 29253-29266.	3.3	23
47	Rocket and ground-based electron density soundings versus IRI representation. Advances in Space Research, 2003, 31, 569-575.	2.6	23
48	PHAZE II observations of lower hybrid burst structures occurring on density gradients. Geophysical Research Letters, 1998, 25, 3091-3094.	4.0	22
49	The latitude dependence of auroral roar. Journal of Geophysical Research, 1998, 103, 14911-14915.	3.3	22
50	In situ measurement of thermal electrons on the SIERRA nightside auroral sounding rocket. Journal of Geophysical Research, 2006, 111, .	3.3	22
51	Electric field statistics and modulation characteristics of bursty Langmuir waves observed in the cusp. Journal of Geophysical Research, 2010, 115, .	3.3	20
52	Ground-level detection of auroral kilometric radiation. Geophysical Research Letters, 2011, 38, n/a-n/a.	4.0	20
53	Radio noise of auroral origin: 1968â€“1988. Journal of Atmospheric and Solar-Terrestrial Physics, 1989, 51, 197-211.	0.9	19
54	The Brazil/GuarÃ¡ Equatorial Spread F Campaign: Results of the large scale measurements. Geophysical Research Letters, 1997, 24, 1691-1694.	4.0	19

#	Article	IF	Citations
55	Detection of spatial density irregularities with the Viking plasma wave interferometer. Geophysical Research Letters, 1987, 14, 467-470.	4.0	18
56	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
57	IMF Control of AlfvÃ©nic Energy Transport and Deposition at High Latitudes. Journal of Geophysical Research: Space Physics, 2017, 122, 12,189.	2.4	17
58	Band splitting in solar type II radio bursts. Astrophysical Journal, 1992, 399, L167.	4.5	17
59	Natural and manâ€made emissions at 1.0â€“5.6 MHz measured between 10 and 18 R_E. Radio Science, 1989, 24, 725-737.	1.6	16
60	Plasma conditions in auroral roar source regions inferred from radio and radar observations. Journal of Geophysical Research, 2001, 106, 21157-21164.	3.3	16
61	Statistical and case studies of 2fceauroral roar observed with a medium frequency interferometer. Journal of Geophysical Research, 2001, 106, 21147-21155.	3.3	14
62	Experimental tests of the generation mechanism of auroral medium frequency burst radio emissions. Journal of Geophysical Research, 2009, 114, .	3.3	14
63	Anomalous plasma diffusion and the magnetopause boundary layer. IEEE Transactions on Plasma Science, 1992, 20, 833-842.	1.3	13
64	Ground-based observations of MF/HF radio noise in the auroral zone. Journal of Geophysical Research, 1994, 99, 2109.	3.3	13
65	Observation of the reactive component of Langmuir wave phase-bunched electrons. Geophysical Research Letters, 2005, 32, .	4.0	13
66	Fully resolved observations of auroral medium frequency burst radio emissions. Geophysical Research Letters, 2009, 36, .	4.0	13
67	AlfvÃ©n waveâ€driven ionospheric mass outflow and electron precipitation during storms. Journal of Geophysical Research: Space Physics, 2016, 121, 7828-7846.	2.4	13
68	Interferometric phase velocity measurements in the auroral electrojet. Planetary and Space Science, 1986, 34, 1285-1297.	1.7	12
69	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
70	An explanation for the fine structure of MF burst emissions. Geophysical Research Letters, 2011, 38, n/a-n/a.	4.0	12
71	First observations of flickering auroral roar. Geophysical Research Letters, 2001, 28, 123-126.	4.0	11
72	Statistical study of auroral roar emissions observed at South Pole Station. Journal of Geophysical Research, 2002, 107, SIA 17-1.	3.3	11

#	Article	IF	Citations
73	Laboratory Measurements of Xâ€Ray Emissions From Centimeterâ€Long Streamer Corona Discharges. Geophysical Research Letters, 2017, 44, 11,174.	4.0	11
74	Location of Pc 1â€“2 waves relative to the magnetopause. Annales Geophysicae, 2002, 20, 1763-1767.	1.6	11
75	DC electric field measurements with the GuarÃ¡ Spread-F Rocket. Geophysical Research Letters, 1997, 24, 1695-1698.	4.0	10
76	A medium-frequency interferometer for studying auroral radio emissions. Review of Scientific Instruments, 2000, 71, 3200-3206.	1.3	10
77	Discrete Langmuir waves in density structure. Journal of Geophysical Research, 2005, 110, .	3.3	10
78	Auroral medium frequency burst radio emission associated with the 23 March 2007 THEMIS study substorm. Journal of Geophysical Research, 2008, 113, .	3.3	10
79	Bispectral analysis of equatorial spread F density irregularities. Journal of Geophysical Research, 1992, 97, 8643-8651.	3.3	9
80	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
81	Detection of traveling ionospheric disturbances by mediumâ€frequency Doppler sounding using AM radio transmissions. Radio Science, 2015, 50, 249-263.	1.6	9
82	Further evidence for a connection between auroral kilometric radiation and groundâ€level signals measured in Antarctica. Journal of Geophysical Research: Space Physics, 2015, 120, 2061-2075.	2.4	9
83	Structured waves near the plasma frequency observed in three auroral rocket flights. Annales Geophysicae, 2006, 24, 2911-2919.	1.6	8
84	PENGUIn multiâ€instrument observations of dayside highâ€latitude injections during the 23 March 2007 substorm. Journal of Geophysical Research, 2009, 114, .	3.3	8
85	First observations of 5f_{ce} auroral roars. Geophysical Research Letters, 2012, 39, .	4.0	8
86	Storm phaseâ€“partitioned rates and budgets of global AlfvÃ©nic energy deposition, electron precipitation, and ion outflow. Journal of Atmospheric and Solar-Terrestrial Physics, 2018, 167, 1-12.	1.6	8
87	Langmuir Turbulence in the Auroral Ionosphere: Origins and Effects. Frontiers in Astronomy and Space Sciences, 2021, 7, .	2.8	8
88	Interferometric Study of Ionospheric Plasma Irregularities in Regions of Phase Scintillations and HF Backscatter. Geophysical Research Letters, 2022, 49, .	4.0	8
89	Low-frequency impulsive auroral hiss observations at high geomagnetic latitudes. Journal of Geophysical Research, 1998, 103, 20459-20468.	3.3	7
90	Latitudinal dynamics of auroral roar emissions. Journal of Geophysical Research, 1999, 104, 17217-17232.	3.3	7

#	Article	IF	Citations
91	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
92	Ground based observations of low frequency auroral hiss fine structure. Journal of Geophysical Research, 2008, 113, .	3.3	7
93	Dayside auroral hiss observed at South Pole Station. Journal of Geophysical Research: Space Physics, 2013, 118, 1220-1230.	2.4	7
94	A Comparison of Plasma Waves Produced by Ion Accelerators in the F-Region Ionosphere. Geophysical Monograph Series, 0, , 206-208.	0.1	7
95	Rightâ€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
96	Electron plasma waves in the solar wind: AMPTE/IRM and UKS observations. Advances in Space Research, 1986, 6, 93-96.	2.6	6
97	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
98	Further study of flickering auroral roar emission: 1. South Pole observations. Journal of Geophysical Research, 2006, 111, .	3.3	6
99	Mode identification of whistler mode, Zâ€mode, and Langmuir/Upper Hybrid mode waves observed in an auroral sounding rocket experiment. Journal of Geophysical Research, 2008, 113, .	3.3	6
100	Waveform and envelope field statistics for waves with stochastically driven amplitudes. Physics of Plasmas, 2010, 17, 032110.	1.9	6
101	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
102	Phase sorting waveâ€particle correlator. Journal of Geophysical Research: Space Physics, 2017, 122, 2069-2078.	2.4	6
103	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
104	Statistics of auroral Langmuir waves. Annales Geophysicae, 2008, 26, 3885-3895.	1.6	5
105	Experimental tests of a topside generation mechanism for auroral medium frequency radio emissions. Journal of Geophysical Research, 2012, 117, .	3.3	5
106	Zâ€mode maser instability. Journal of Geophysical Research: Space Physics, 2013, 118, 7584-7592.	2.4	5
107	Argon Ions Injected Parallel and Perpendicular to the Magnetic Field. Geophysical Monograph Series, 0, , 201-205.	0.1	5
108	A new natural radio emission observed at South Pole Station. Journal of Geophysical Research: Space Physics, 2014, 119, 566-574.	2.4	5

#	Article	IF	Citations
109	Comparison of fine structures of electron cyclotron harmonic emissions in aurora. Journal of Geophysical Research: Space Physics, 2015, 120, 8861-8871.	2.4	5
110	Polarization measurements of unusual cases of medium frequency burst emissions extending below 1.5ÂMHz. Earth, Planets and Space, 2018, 70, .	2.5	5
111	Statistical Study of Electron Bunching in Auroral Langmuir Waves. Journal of Geophysical Research: Space Physics, 2019, 124, 5956-5975.	2.4	5
112	Are fast atmospheric pulsations optical signatures of lightningâ€induced electron precipitation?. Geophysical Research Letters, 1987, 14, 1023-1026.	4.0	4
113	Quasiperiodic âˆ¼5-60 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
114	Narrow-band extremely low frequency (ELF) wave phenomena observed at South Pole Station. Geophysical Research Letters, 2006, 33, .	4.0	4
115	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
116	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
117	DEMETER observations of bursty MF emissions and their relation to groundâ€level auroral MF burst. Journal of Geophysical Research: Space Physics, 2014, 119, 10,144.	2.4	4
118	TRICE 2 Observations of Lowâ€Energy Magnetospheric Ions Within the Cusp. Journal of Geophysical Research: Space Physics, 2021, 126, e2021JA029382.	2.4	4
119	South Pole Station Groundâ€Based and Cluster Satellite Measurements of Leaked and Escaping Auroral Kilometric Radiation. Journal of Geophysical Research: Space Physics, 2022, 127, .	2.4	4
120	High bandwidth measurements of auroral Langmuir waves with multiple antennas. Annales Geophysicae, 2022, 40, 231-245.	1.6	4
121	High-latitude propagation studies using a meridional chain of LF/MF/HF receivers. Annales Geophysicae, 2004, 22, 1705-1718.	1.6	3
122	Further study of flickering auroral roar emission: 2. Theory and numerical calculations. Journal of Geophysical Research, 2006, 111, .	3.3	3
123	Methods in the study of discrete upper hybrid waves. Journal of Geophysical Research, 2007, 112, .	3.3	3
124	Interpretation of vector electric field measurements of bursty Langmuir waves in the cusp. Journal of Geophysical Research, 2012, 117, .	3.3	3
125	An autonomous receiver/digital signal processor applied to groundâ€based and rocketâ€borne wave experiments. Journal of Geophysical Research: Space Physics, 2016, 121, 7334-7343.	2.4	3
126	On the propagation and mode conversion of auroral medium frequency bursts. Journal of Geophysical Research: Space Physics, 2016, 121, 1706-1721.	2.4	3

#	Article	IF	Citations
127	Inferring Source Properties of Monoenergetic Electron Precipitation From Kappa and Maxwellian Momentâ€Voltage Relationships. Journal of Geophysical Research: Space Physics, 2019, 124, 1548-1567.	2.4	3
128	Estimating Polar Cap Density and Mediumâ€Frequency Burst Source Heights Using 2 f ce Roar Radio Emissions. Journal of Geophysical Research: Space Physics, 2020, 125, e2020JA028166.	2.4	3
129	The Cusp as a VLF Saucer Source: First Rocket Observations of Longâ€Duration VLF Saucers on the Dayside. Geophysical Research Letters, 2021, 48, e2020GL090747.	4.0	3
130	Modulated Upperâ€Hybrid Waves Coincident With Lowerâ€Hybrid Waves in the Cusp. Journal of Geophysical Research: Space Physics, 2021, 126, e2021JA029590.	2.4	3
131	Correction to â€œAre fast atmospheric pulsations optical signatures of lightningâ€induced electron precipitation?â€. Geophysical Research Letters, 1988, 15, 277-282.	4.0	2
132	Reply [to â€œComment on â€˜Are fast atmospheric pulsations optical signatures of lightningâ€induced electron precipitation?â€™â€]. Geophysical Research Letters, 1988, 15, 636-638.	4.0	2
133	The interaction of impulsive solar wind discontinuities with the magnetosphere: A multi-satellite case study. Planetary and Space Science, 1990, 38, 841-850.	1.7	2
134	Rightâ€hand polarized 4 f ce auroral roar emissions: 1. Observations. Journal of Geophysical Research: Space Physics, 2016, 121, 7974-7980.	2.4	2
135	Nonthermal Limit of Monoenergetic Precipitation in the Auroral Acceleration Region. Geophysical Research Letters, 2018, 45, 10,167-10,176.	4.0	2
136	Reply [to â€œComment on â€˜Are fast atmospheric pulsations optical signatures of lightningâ€induced electron precipitation?â€™â€]. Geophysical Research Letters, 1989, 16, 636-638.	4.0	1
137	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
138	Rocket observations of two distinct types of dispersive features of auroral HF waves. Journal of Geophysical Research, 2009, 114, .	3.3	1
139	Further sounding rocket observations of structured whistler mode auroral emissions. Journal of Geophysical Research, 2010, 115, .	3.3	1
140	â€œLong-hisslerâ€•fine structure within auroral hiss: A review and synthesis. Journal of Atmospheric and Solar-Terrestrial Physics, 2017, 156, 72-79.	1.6	1
141	Flickering Low Frequency Auroral Hiss. Journal of Geophysical Research: Space Physics, 2021, 126, e2020JA029098.	2.4	1
142	Medium-Frequency Burst Emissions: A Terrestrial Analog to Solar Type III Bursts?. , 0, , .		1
143	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
144	A Statistical Study of Auroral Medium Frequency Bursts and Anomalous Incoherent Scatter Radar Echoes. Radio Science, 2022, 57, .	1.6	1

#	Article	IF	Citations
145	Correction [to â€œGround-based observations of radio emissions near 2fceand 3fcein the auroral zoneâ€]. Geophysical Research Letters, 1993, 20, 2413-2413.	4.0	0
146	Evaluating the stationarity of equatorial spread-F time series data. Journal of Atmospheric and Solar-Terrestrial Physics, 1997, 59, 439-443.	1.6	0
147	Mode Conversion Radiation in the Terrestrial Ionosphere and Magnetosphere. , 2006, , 211-234.		0
148	Natural cyclotron harmonic radiation from the ionosphere. , 2013, , .		0
149	Special issue â€œThe 13th International Conference on Substormsâ€• Earth, Planets and Space, 2019, 71, .	2.5	0
150	Properties of the Stimulated Electromagnetic Emissions During the Inclined Highâ€Frequency Pumping of the Ionosphere Near the Fourth Electron Gyroharmonic at the Highâ€Frequency Active Auroral Research Program Facility. Geophysical Research Letters, 2019, 46, 5653-5661.	4.0	0