

Richard B. Horne

List of Publications by Year in descending order

Source: <https://exaly.com/author-pdf/2592128/publications.pdf>

Version: 2024-02-01

234
papers

16,931
citations

11608

70
h-index

17055

122
g-index

249
all docs

249
docs citations

249
times ranked

3176
citing authors

#	ARTICLE	IF	CITATIONS
1	Timescale for radiation belt electron acceleration by whistler mode chorus waves. <i>Journal of Geophysical Research</i> , 2005, 110, .	3.3	561
2	Potential waves for relativistic electron scattering and stochastic acceleration during magnetic storms. <i>Geophysical Research Letters</i> , 1998, 25, 3011-3014.	1.5	529
3	Wave acceleration of electrons in the Van Allen radiation belts. <i>Nature</i> , 2005, 437, 227-230.	13.7	505
4	Science Goals and Overview of the Radiation Belt Storm Probes (RBSP) Energetic Particle, Composition, and Thermal Plasma (ECT) Suite on NASA's Van Allen Probes Mission. <i>Space Science Reviews</i> , 2013, 179, 311-336.	3.7	463
5	Substorm dependence of chorus amplitudes: Implications for the acceleration of electrons to relativistic energies. <i>Journal of Geophysical Research</i> , 2001, 106, 13165-13178.	3.3	456
6	Scattering by chorus waves as the dominant cause of diffuse auroral precipitation. <i>Nature</i> , 2010, 467, 943-946.	13.7	432
7	Calculation of pitch angle and energy diffusion coefficients with the PADIE code. <i>Journal of Geophysical Research</i> , 2005, 110, .	3.3	405
8	Statistical analysis of relativistic electron energies for cyclotron resonance with EMIC waves observed on CRRES. <i>Journal of Geophysical Research</i> , 2003, 108, .	3.3	380
9	Electron acceleration in the Van Allen radiation belts by fast magnetosonic waves. <i>Geophysical Research Letters</i> , 2007, 34, .	1.5	341
10	Timescale for MeV electron microburst loss during geomagnetic storms. <i>Journal of Geophysical Research</i> , 2005, 110, .	3.3	296
11	Substorm dependence of plasmaspheric hiss. <i>Journal of Geophysical Research</i> , 2004, 109, .	3.3	281
12	Relativistic electron acceleration and precipitation during resonant interactions with whistler-mode chorus. <i>Geophysical Research Letters</i> , 2003, 30, n/a-n/a.	1.5	259
13	Favored regions for chorus-driven electron acceleration to relativistic energies in the Earth's outer radiation belt. <i>Geophysical Research Letters</i> , 2003, 30, .	1.5	256
14	Evidence for chorus-driven electron acceleration to relativistic energies from a survey of geomagnetically disturbed periods. <i>Journal of Geophysical Research</i> , 2003, 108, .	3.3	234
15	Global model of lower band and upper band chorus from multiple satellite observations. <i>Journal of Geophysical Research</i> , 2012, 117, .	3.3	229
16	Slot region electron loss timescales due to plasmaspheric hiss and lightning-generated whistlers. <i>Journal of Geophysical Research</i> , 2007, 112, .	3.3	228
17	On the preferred source location for the convective amplification of ion cyclotron waves. <i>Journal of Geophysical Research</i> , 1993, 98, 9233-9247.	3.3	225
18	Path-integrated growth of electrostatic waves: The generation of terrestrial myriametric radiation. <i>Journal of Geophysical Research</i> , 1989, 94, 8895-8909.	3.3	217

#	ARTICLE	IF	CITATIONS
19	Outer zone relativistic electron acceleration associated with substorm-enhanced whistler mode chorus. <i>Journal of Geophysical Research</i> , 2002, 107, SMP 29-1.	3.3	206
20	Resonant diffusion of radiation belt electrons by whistler-mode chorus. <i>Geophysical Research Letters</i> , 2003, 30, .	1.5	200
21	Three-dimensional electron radiation belt simulations using the BAS Radiation Belt Model with new diffusion models for chorus, plasmaspheric hiss, and lightning-generated whistlers. <i>Journal of Geophysical Research: Space Physics</i> , 2014, 119, 268-289.	0.8	176
22	Electron scattering by whistler-mode ELF hiss in plasmaspheric plumes. <i>Journal of Geophysical Research</i> , 2008, 113, .	3.3	175
23	Survey of magnetosonic waves and proton ring distributions in the Earth's inner magnetosphere. <i>Journal of Geophysical Research</i> , 2008, 113, .	3.3	174
24	Model of the energization of outer-zone electrons by whistler-mode chorus during the October 9, 1990 geomagnetic storm. <i>Geophysical Research Letters</i> , 2002, 29, 27-1-27-4.	1.5	173
25	Origin of energetic electron precipitation >30 keV into the atmosphere. <i>Journal of Geophysical Research</i> , 2010, 115, .	3.3	171
26	Energetic outer zone electron loss timescales during low geomagnetic activity. <i>Journal of Geophysical Research</i> , 2006, 111, .	3.3	170
27	Proton and electron heating by radially propagating fast magnetosonic waves. <i>Journal of Geophysical Research</i> , 2000, 105, 27597-27610.	3.3	162
28	Diffuse auroral electron scattering by electron cyclotron harmonic and whistler mode waves during an isolated substorm. <i>Journal of Geophysical Research</i> , 2003, 108, .	3.3	161
29	Global morphology and spectral properties of EMIC waves derived from CRRES observations. <i>Journal of Geophysical Research: Space Physics</i> , 2014, 119, 5328-5342.	0.8	161
30	Dynamics of the Earth's Particle Radiation Environment. <i>Space Science Reviews</i> , 2009, 147, 187-231.	3.7	160
31	Three-dimensional diffusion simulation of outer radiation belt electrons during the 9 October 1990 magnetic storm. <i>Journal of Geophysical Research</i> , 2009, 114, .	3.3	160
32	Acceleration mechanism responsible for the formation of the new radiation belt during the 2003 Halloween solar storm. <i>Geophysical Research Letters</i> , 2006, 33, .	1.5	157
33	Global simulation of magnetosonic wave instability in the storm time magnetosphere. <i>Journal of Geophysical Research</i> , 2010, 115, .	3.3	152
34	Space weather impacts on satellites and forecasting the Earth's electron radiation belts with SPACECAST. <i>Space Weather</i> , 2013, 11, 169-186.	1.3	149
35	Radiation Belt Environment model: Application to space weather nowcasting. <i>Journal of Geophysical Research</i> , 2008, 113, .	3.3	140
36	Evolution of energetic electron pitch angle distributions during storm time electron acceleration to megaelectronvolt energies. <i>Journal of Geophysical Research</i> , 2003, 108, SMP 11-1.	3.3	139

#	ARTICLE	IF	CITATIONS
37	Relativistic electron loss timescales in the slot region. <i>Journal of Geophysical Research</i> , 2009, 114, .	3.3	137
38	Survey of upper band chorus and ECH waves: Implications for the diffuse aurora. <i>Journal of Geophysical Research</i> , 2009, 114, .	3.3	134
39	Electron losses from the radiation belts caused by EMIC waves. <i>Journal of Geophysical Research: Space Physics</i> , 2014, 119, 8820-8837.	0.8	132
40	Simulation of the outer radiation belt electrons near geosynchronous orbit including both radial diffusion and resonant interaction with Whistler-mode chorus waves. <i>Geophysical Research Letters</i> , 2005, 32, n/a-n/a.	1.5	131
41	Modulation of electromagnetic ion cyclotron instability due to interaction with ring current O ⁺ during magnetic storms. <i>Journal of Geophysical Research</i> , 1997, 102, 14155-14163.	3.3	129
42	Resonant scattering of plasma sheet electrons leading to diffuse auroral precipitation: 2. Evaluation for whistler mode chorus waves. <i>Journal of Geophysical Research</i> , 2011, 116, n/a-n/a.	3.3	128
43	Van Allen probes, NOAA, GOES, and ground observations of an intense EMIC wave event extending over 12 h in magnetic local time. <i>Journal of Geophysical Research: Space Physics</i> , 2015, 120, 5465-5488.	0.8	127
44	Convective instabilities of electromagnetic ion cyclotron waves in the outer magnetosphere. <i>Journal of Geophysical Research</i> , 1994, 99, 17259.	3.3	123
45	Electron pitch angle diffusion by electrostatic electron cyclotron harmonic waves: The origin of pancake distributions. <i>Journal of Geophysical Research</i> , 2000, 105, 5391-5402.	3.3	123
46	Global simulation of EMIC wave excitation during the 21 April 2001 storm from coupled RCMâ€‘HOTRAY modeling. <i>Journal of Geophysical Research</i> , 2010, 115, .	3.3	120
47	Origins of plasmaspheric hiss. <i>Journal of Geophysical Research</i> , 2006, 111, .	3.3	118
48	Bounce-averaged diffusion coefficients for field-aligned chorus waves. <i>Journal of Geophysical Research</i> , 2006, 111, .	3.3	115
49	Energetic electron precipitation during high-speed solar wind stream driven storms. <i>Journal of Geophysical Research</i> , 2011, 116, .	3.3	110
50	Threeâ€‘dimensional test simulations of the outer radiation belt electron dynamics including electronâ€‘chorus resonant interactions. <i>Journal of Geophysical Research</i> , 2008, 113, .	3.3	109
51	Simulation of EMIC wave excitation in a model magnetosphere including structured highâ€‘density plumes. <i>Journal of Geophysical Research</i> , 2009, 114, .	3.3	109
52	The contribution of ionâ€‘cyclotron waves to electron heating and SARâ€‘arc excitation near the stormâ€‘time plasmapause. <i>Geophysical Research Letters</i> , 1992, 19, 417-420.	1.5	108
53	Modeling the evolution of chorus waves into plasmaspheric hiss. <i>Journal of Geophysical Research</i> , 2011, 116, n/a-n/a.	3.3	106
54	Energetic electron precipitation from the outer radiation belt during geomagnetic storms. <i>Geophysical Research Letters</i> , 2009, 36, .	1.5	105

#	ARTICLE	IF	CITATIONS
55	Quantifying the daily economic impact of extreme space weather due to failure in electricity transmission infrastructure. <i>Space Weather</i> , 2017, 15, 65-83.	1.3	103
56	Evidence for acceleration of outer zone electrons to relativistic energies by whistler mode chorus. <i>Annales Geophysicae</i> , 2002, 20, 967-979.	0.6	100
57	Evolution of electron pitch angle distributions following injection from the plasma sheet. <i>Journal of Geophysical Research</i> , 2011, 116, n/a-n/a.	3.3	99
58	Wave heating of He ⁺ by electromagnetic ion cyclotron waves in the magnetosphere: Heating near the H ⁺ -He ⁺ -bi-ion resonance frequency. <i>Journal of Geophysical Research</i> , 1997, 102, 11457-11471.	3.3	97
59	Pc1 and Pc2 waves and energetic particle precipitation during and after magnetic storms: Superposed epoch analysis and case studies. <i>Journal of Geophysical Research</i> , 2008, 113, .	3.3	96
60	The temporal evolution of electron distributions and associated wave activity following substorm injections in the inner magnetosphere. <i>Journal of Geophysical Research</i> , 2000, 105, 12907-12917.	3.3	89
61	Phase space density analysis of the outer radiation belt energetic electron dynamics. <i>Journal of Geophysical Research</i> , 2006, 111, .	3.3	88
62	Resonant scattering of plasma sheet electrons leading to diffuse auroral precipitation: 1. Evaluation for electrostatic electron cyclotron harmonic waves. <i>Journal of Geophysical Research</i> , 2011, 116, n/a-n/a.	3.3	86
63	Efficient diffuse auroral electron scattering by electrostatic electron cyclotron harmonic waves in the outer magnetosphere: A detailed case study. <i>Journal of Geophysical Research</i> , 2012, 117, .	3.3	85
64	Modeling outer-zone relativistic electron response to whistler-mode chorus activity during substorms. <i>Journal of Atmospheric and Solar-Terrestrial Physics</i> , 2004, 66, 133-146.	0.6	84
65	Solar wind-magnetosphere coupling leading to relativistic electron energization during high-speed streams. <i>Journal of Geophysical Research</i> , 2005, 110, .	3.3	84
66	Cyro-resonant electron acceleration at Jupiter. <i>Nature Physics</i> , 2008, 4, 301-304.	6.5	84
67	Refilling of the slot region between the inner and outer electron radiation belts during geomagnetic storms. <i>Journal of Geophysical Research</i> , 2007, 112, n/a-n/a.	3.3	82
68	Non-Maxwellian ion velocity distributions observed using EISCAT. <i>Geophysical Research Letters</i> , 1987, 14, 111-114.	1.5	78
69	Three-dimensional ray tracing of VLF waves in a magnetospheric environment containing a plasmaspheric plume. <i>Geophysical Research Letters</i> , 2009, 36, .	1.5	76
70	Energy transfer between energetic ring current H ⁺ and O ⁺ by electromagnetic ion cyclotron waves. <i>Journal of Geophysical Research</i> , 1994, 99, 17275.	3.3	74
71	Modeling the properties of plasmaspheric hiss: 1. Dependence on chorus wave emission. <i>Journal of Geophysical Research</i> , 2012, 117, .	3.3	74
72	A new diffusion matrix for whistler mode chorus waves. <i>Journal of Geophysical Research: Space Physics</i> , 2013, 118, 6302-6318.	0.8	70

#	ARTICLE	IF	CITATIONS
73	Quasi-linear simulations of inner radiation belt electron pitch angle and energy distributions. Geophysical Research Letters, 2016, 43, 2381-2388.	1.5	70
74	Low-altitude measurements of 2-6 MeV electron trapping lifetimes at 1.5 L 2.5. Geophysical Research Letters, 2007, 34, .	1.5	68
75	Global Model of Plasmaspheric Hiss From Multiple Satellite Observations. Journal of Geophysical Research: Space Physics, 2018, 123, 4526-4541.	0.8	68
76	Interaction of EMIC Waves With Thermal Plasma and Radiation Belt Particles. Geophysical Monograph Series, 2006, , 213-223.	0.1	66
77	Evaluation of whistler mode chorus amplification during an injection event observed on CRRES. Journal of Geophysical Research, 2008, 113, .	3.3	66
78	"Pancake" electron distributions in the outer radiation belts. Journal of Geophysical Research, 1999, 104, 12431-12444.	3.3	64
79	Magnetosonic wave instability analysis for proton ring distributions observed by the LANL magnetospheric plasma analyzer. Journal of Geophysical Research, 2011, 116, .	3.3	63
80	Recent developments in the radiation belt environment model. Journal of Atmospheric and Solar-Terrestrial Physics, 2011, 73, 1435-1443.	0.6	63
81	Landau damping of magnetospherically reflected whistlers. Journal of Geophysical Research, 1994, 99, 17249.	3.3	62
82	Acceleration of killer electrons. Nature Physics, 2007, 3, 590-591.	6.5	62
83	Modeling the wave power distribution and characteristics of plasmaspheric hiss. Journal of Geophysical Research, 2011, 116, n/a-n/a.	3.3	61
84	The influence of wave-particle interactions on relativistic electron dynamics during storms. Geophysical Monograph Series, 2005, , 101-112.	0.1	56
85	Global statistical evidence for chorus as the embryonic source of plasmaspheric hiss. Geophysical Research Letters, 2013, 40, 2891-2896.	1.5	56
86	Generation of unusually low frequency plasmaspheric hiss. Geophysical Research Letters, 2014, 41, 5702-5709.	1.5	56
87	Diffuse auroral scattering by whistler mode chorus waves: Dependence on wave normal angle distribution. Journal of Geophysical Research, 2011, 116, n/a-n/a.	3.3	53
88	Amplitude variations of electron cyclotron harmonic waves. Nature, 1981, 294, 338-340.	18.7	50
89	Statistical Properties of Plasmaspheric Hiss From Van Allen Probes Observations. Journal of Geophysical Research: Space Physics, 2018, 123, 2605-2619.	0.8	50
90	Gyroresonant interactions between the radiation belt electrons and whistler mode chorus waves in the radiation environments of Earth, Jupiter, and Saturn: A comparative study. Journal of Geophysical Research, 2012, 117, .	3.3	49

#	ARTICLE	IF	CITATIONS
91	Chorus, ECH, and Z mode emissions observed at Jupiter and Saturn and possible electron acceleration. <i>Journal of Geophysical Research</i> , 2012, 117, .	3.3	49
92	Global Model of Whistler Mode Chorus in the Near-Equatorial Region ($ \lambda < 18^\circ$). <i>Geophysical Research Letters</i> , 2020, 47, e2020GL087311.	1.5	47
93	Ion-acoustic resistivity in plasmas with similar ion and electron temperatures. <i>Geophysical Research Letters</i> , 2002, 29, 4-1.	1.5	46
94	The origin of Jupiter's outer radiation belt. <i>Journal of Geophysical Research: Space Physics</i> , 2014, 119, 3490-3502.	0.8	46
95	A 30-Year Simulation of the Outer Electron Radiation Belt. <i>Space Weather</i> , 2018, 16, 1498-1522.	1.3	46
96	Extreme relativistic electron fluxes at geosynchronous orbit: Analysis of GOES-E > 2 MeV electrons. <i>Space Weather</i> , 2015, 13, 170-184.	1.3	44
97	A Risk Assessment Framework for the Socioeconomic Impacts of Electricity Transmission Infrastructure Failure Due to Space Weather: An Application to the United Kingdom. <i>Risk Analysis</i> , 2019, 39, 1022-1043.	1.5	43
98	Development of Space Weather Reasonable Worst-Case Scenarios for the UK National Risk Assessment. <i>Space Weather</i> , 2021, 19, e2020SW002593.	1.3	41
99	A new ionospheric electron precipitation module coupled with RAM-SCB within the geospace general circulation model. <i>Journal of Geophysical Research: Space Physics</i> , 2016, 121, 8554-8575.	0.8	40
100	An Investigation of VLF Transmitter Wave Power in the Inner Radiation Belt and Slot Region. <i>Journal of Geophysical Research: Space Physics</i> , 2019, 124, 5246-5259.	0.8	40
101	A New Code for Electrostatic Simulation by Numerical Integration of the Vlasov and Ampère Equations Using MacCormack's Method. <i>Journal of Computational Physics</i> , 2001, 171, 182-200.	1.9	39
102	Modeling the effects of radial diffusion and plasmaspheric hiss on outer radiation belt electrons. <i>Geophysical Research Letters</i> , 2007, 34, .	1.5	39
103	Global model of low-frequency chorus ($f < f_{LHR}$ and $0.1 f < f_{ce}$) from multiple satellite observations. <i>Geophysical Research Letters</i> , 2014, 41, 280-286.	1.5	39
104	Electromagnetic ion cyclotron wave modeling during the geospace environment modeling challenge event. <i>Journal of Geophysical Research: Space Physics</i> , 2014, 119, 2963-2977.	0.8	39
105	Direct observations of nitric oxide produced by energetic electron precipitation into the Antarctic middle atmosphere. <i>Geophysical Research Letters</i> , 2011, 38, n/a-n/a.	1.5	38
106	Modeling the properties of plasmaspheric hiss: 2. Dependence on the plasma density distribution. <i>Journal of Geophysical Research</i> , 2012, 117, .	3.3	38
107	Anomalous resistivity in non-Maxwellian plasmas. <i>Journal of Geophysical Research</i> , 2003, 108, .	3.3	37
108	Ground observations of chorus following geomagnetic storms. <i>Journal of Geophysical Research</i> , 2004, 109, .	3.3	37

#	ARTICLE	IF	CITATIONS
109	Mechanisms for the acceleration of radiation belt electrons. Geophysical Monograph Series, 2006, , 151-173.	0.1	36
110	Van Allen Probes Observations of Chorus Wave Vector Orientations: Implications for the Chorusâ€”Hiss Mechanism. Geophysical Research Letters, 2019, 46, 2337-2346.	1.5	36
111	FAST observations of ULF waves injected into the magnetosphere by means of modulated RF heating of the auroral electrojet. Geophysical Research Letters, 2000, 27, 3165-3168.	1.5	35
112	Using the Index Over the Last 14 Solar Cycles to Characterize Extreme Geomagnetic Activity. Geophysical Research Letters, 2020, 47, e2019GL086524.	1.5	34
113	Anomalous resistivity and the nonlinear evolution of the ion-acoustic instability. Journal of Geophysical Research, 2006, 111, .	3.3	33
114	Space Weather Concerns for Allâ€”Electric Propulsion Satellites. Space Weather, 2015, 13, 430-433.	1.3	33
115	Kinetics of subâ€”ion scale magnetic holes in the nearâ€”Earth plasma sheet. Journal of Geophysical Research: Space Physics, 2017, 122, 10,304.	0.8	33
116	Effects of VLF Transmitter Waves on the Inner Belt and Slot Region. Journal of Geophysical Research: Space Physics, 2019, 124, 5260-5277.	0.8	33
117	Ion cyclotron absorption at the second harmonic of the oxygen gyrofrequency. Geophysical Research Letters, 1990, 17, 2225-2228.	1.5	32
118	Cyclotron absorption of ionâ€”cyclotron waves at the biâ€”ion frequency. Geophysical Research Letters, 1993, 20, 317-320.	1.5	32
119	Observations of discrete magnetosonic waves off the magnetic equator. Geophysical Research Letters, 2015, 42, 9694-9701.	1.5	32
120	Radiation Effects on Satellites During Extreme Space Weather Events. Space Weather, 2018, 16, 1216-1226.	1.3	32
121	Whistler absorption and electron heating near the plasmopause. Journal of Geophysical Research, 1996, 101, 4917-4928.	3.3	31
122	Probing the relationship between electromagnetic ion cyclotron waves and plasmaspheric plumes near geosynchronous orbit. Journal of Geophysical Research, 2010, 115, .	3.3	31
123	Saturation characteristics of electromagnetic ion cyclotron waves. Journal of Geophysical Research, 2011, 116, n/a-n/a.	3.3	31
124	The dynamics of Van Allen belts revisited. Nature Physics, 2018, 14, 102-103.	6.5	31
125	Specification of the near-Earth space environment with SHIELDS. Journal of Atmospheric and Solar-Terrestrial Physics, 2018, 177, 148-159.	0.6	31
126	EMIC Waves Converted From Equatorial Noise Due to $M/Q = 2$ Ions in the Plasmasphere: Observations From Van Allen Probes and Arase. Geophysical Research Letters, 2019, 46, 5662-5669.	1.5	31

#	ARTICLE	IF	CITATIONS
127	Ground observations and possible source regions of two types of Pc 1-2 micropulsations at very high latitudes. <i>Journal of Geophysical Research</i> , 1997, 102, 27011-27027.	3.3	30
128	Comment on "On the origin of whistler mode radiation in the plasmasphere" by Green et al.. <i>Journal of Geophysical Research</i> , 2006, 111, .	3.3	30
129	Profound change of the near-Earth radiation environment caused by solar superstorms. <i>Space Weather</i> , 2011, 9, .	1.3	30
130	Source of the low-altitude hiss in the ionosphere. <i>Geophysical Research Letters</i> , 2017, 44, 2060-2069.	1.5	30
131	ULF Wave Driven Radial Diffusion During Geomagnetic Storms: A Statistical Analysis of Van Allen Probes Observations. <i>Journal of Geophysical Research: Space Physics</i> , 2021, 126, e2020JA029024.	0.8	30
132	Formation of electron radiation belts at Saturn by Z-mode wave acceleration. <i>Nature Communications</i> , 2018, 9, 5062.	5.8	29
133	Survey of ELF-VLF plasma waves in outer radiation belt observed by Cluster STAFF-SA experiment. <i>Annales Geophysicae</i> , 2008, 26, 3269-3277.	0.6	27
134	Simulating the Earth's radiation belts: Internal acceleration and continuous losses to the magnetopause. <i>Journal of Geophysical Research: Space Physics</i> , 2014, 119, 7444-7463.	0.8	27
135	Observed Propagation Route of VLF Transmitter Signals in the Magnetosphere. <i>Journal of Geophysical Research: Space Physics</i> , 2018, 123, 5528-5537.	0.8	27
136	Variability of Quasilinear Diffusion Coefficients for Plasmaspheric Hiss. <i>Journal of Geophysical Research: Space Physics</i> , 2019, 124, 8488-8506.	0.8	27
137	A survey of Galileo plasma wave instrument observations of Jovian whistler-mode chorus. <i>Annales Geophysicae</i> , 2008, 26, 1819-1828.	0.6	26
138	Energetic Charged Particles Above Thunderclouds. <i>Surveys in Geophysics</i> , 2013, 34, 1-41.	2.1	26
139	Extent of ECH wave emissions in the Earth's magnetotail. <i>Journal of Geophysical Research: Space Physics</i> , 2014, 119, 5561-5574.	0.8	25
140	Identifying the source region of plasmaspheric hiss. <i>Geophysical Research Letters</i> , 2015, 42, 3141-3149.	1.5	25
141	Longitudinal and seasonal variations in plasmaspheric electron density: Implications for electron precipitation. <i>Journal of Geophysical Research</i> , 2007, 112, .	3.3	24
142	The statistics of natural ELF/VLF waves derived from a long continuous set of ground-based observations at high latitude. <i>Journal of Atmospheric and Solar-Terrestrial Physics</i> , 2010, 72, 463-475.	0.6	23
143	What characterizes planetary space weather?. <i>Astronomy and Astrophysics Review</i> , 2014, 22, 1.	9.1	23
144	Survey of whistler mode chorus intensity at Jupiter. <i>Journal of Geophysical Research: Space Physics</i> , 2016, 121, 9758-9770.	0.8	23

#	ARTICLE	IF	CITATIONS
145	Propagation and linear mode conversion of magnetosonic and electromagnetic ion cyclotron waves in the radiation belts. <i>Geophysical Research Letters</i> , 2016, 43, 10,034.	1.5	23
146	Realistic Worst Case for a Severe Space Weather Event Driven by a Fast Solar Wind Stream. <i>Space Weather</i> , 2018, 16, 1202-1215.	1.3	23
147	Space Plasma Exploration by Active Radar (SPEAR): an overview of a future radar facility. <i>Annales Geophysicae</i> , 2000, 18, 1248-1255.	0.6	22
148	High-Speed Solar Wind Streams: A Call for Key Research. <i>Eos</i> , 2008, 89, 62.	0.1	22
149	Simulation of the acceleration of relativistic electrons in the inner magnetosphere using RCM-VERB coupled codes. <i>Journal of Geophysical Research</i> , 2011, 116, n/a-n/a.	3.3	22
150	Forecasting the Earth's radiation belts and modelling solar energetic particle events: Recent results from SPACECAST. <i>Journal of Space Weather and Space Climate</i> , 2013, 3, A20.	1.1	22
151	Three-dimensional stochastic modeling of radiation belts in adiabatic invariant coordinates. <i>Journal of Geophysical Research: Space Physics</i> , 2014, 119, 7615-7635.	0.8	22
152	Strong whistler mode waves observed in the vicinity of Jupiter's moons. <i>Nature Communications</i> , 2018, 9, 3131.	5.8	22
153	Rapid Electron Acceleration in Low-Density Regions of Saturn's Radiation Belt by Whistler Mode Chorus Waves. <i>Geophysical Research Letters</i> , 2019, 46, 7191-7198.	1.5	22
154	A New Approach to Constructing Models of Electron Diffusion by EMIC Waves in the Radiation Belts. <i>Geophysical Research Letters</i> , 2020, 47, e2020GL088976.	1.5	22
155	Quasi-steady, marginally unstable electron cyclotron harmonic wave amplitudes. <i>Journal of Geophysical Research: Space Physics</i> , 2013, 118, 3165-3172.	0.8	21
156	Ground-based evidence of latitude-dependent cyclotron absorption of whistler mode signals originating from VLF transmitters. <i>Journal of Geophysical Research</i> , 1996, 101, 2355-2367.	3.3	20
157	Electron acceleration at Jupiter: input from cyclotron-resonant interaction with whistler-mode chorus waves. <i>Annales Geophysicae</i> , 2013, 31, 1619-1630.	0.6	20
158	EMIC Wave Events During the Four GEM QARBM Challenge Intervals. <i>Journal of Geophysical Research: Space Physics</i> , 2018, 123, 6394-6423.	0.8	20
159	Survey analysis of chorus intensity at Saturn. <i>Journal of Geophysical Research: Space Physics</i> , 2014, 119, 8415-8425.	0.8	19
160	On the Variability of EMIC Waves and the Consequences for the Relativistic Electron Radiation Belt Population. <i>Journal of Geophysical Research: Space Physics</i> , 2021, 126, e2021JA029754.	0.8	19
161	Ducted Chorus Waves Cause Sub-Relativistic and Relativistic Electron Microbursts. <i>Geophysical Research Letters</i> , 2022, 49, .	1.5	19
162	Field-perpendicular and field-aligned plasma flows observed by EISCAT during a prolonged period of northward IMF. <i>Journal of Atmospheric and Solar-Terrestrial Physics</i> , 1984, 46, 473-488.	0.9	18

#	ARTICLE	IF	CITATIONS
163	Excitation of electron cyclotron harmonic waves in the inner Saturn magnetosphere within local plasma injections. <i>Journal of Geophysical Research</i> , 2010, 115, .	3.3	18
164	Extreme energetic electron fluxes in low Earth orbit: Analysis of POES $>E > 30$, $>E > 100$, and $>E > 300$ keV electrons. <i>Space Weather</i> , 2016, 14, 136-150.	1.3	18
165	The magnetic local time distribution of energetic electrons in the radiation belt region. <i>Journal of Geophysical Research: Space Physics</i> , 2017, 122, 8108-8123.	0.8	18
166	Generation of EMIC Waves and Effects on Particle Precipitation During a Solar Wind Pressure Intensification With $B_z < 0$. <i>Journal of Geophysical Research: Space Physics</i> , 2019, 124, 4492-4508.	0.8	17
167	Statistical Investigation of the Frequency Dependence of the Chorus Source Mechanism of Plasmaspheric Hiss. <i>Geophysical Research Letters</i> , 2021, 48, e2021GL092725.	1.5	17
168	Comparing Electron Precipitation Fluxes Calculated From Pitch Angle Diffusion Coefficients to LEO Satellite Observations. <i>Journal of Geophysical Research: Space Physics</i> , 2021, 126, e2020JA028410.	0.8	17
169	Quasielectrostatic and electrostatic approximations for whistler mode waves in the magnetospheric plasma. <i>Planetary and Space Science</i> , 1990, 38, 311-318.	0.9	16
170	Narrow-band structure and amplitude of terrestrial myriametric radiation. <i>Journal of Geophysical Research</i> , 1990, 95, 3925-3932.	3.3	16
171	Atmospheric temperature responses to solar irradiance and geomagnetic activity. <i>Journal of Geophysical Research</i> , 2007, 112, .	3.3	16
172	Extreme relativistic electron fluxes in the Earth's outer radiation belt: Analysis of INTEGRAL IREM data. <i>Space Weather</i> , 2017, 15, 917-933.	1.3	16
173	Electron Microbursts Induced by Nonducted Chorus Waves. <i>Frontiers in Astronomy and Space Sciences</i> , 2021, 8, .	1.1	16
174	Determination of the Equatorial Electron Differential Flux From Observations at Low Earth Orbit. <i>Journal of Geophysical Research: Space Physics</i> , 2018, 123, 9574-9596.	0.8	15
175	Effect of plasma density on diffusion rates due to wave particle interactions with chorus and plasmaspheric hiss: extreme event analysis. <i>Annales Geophysicae</i> , 2014, 32, 1059-1071.	0.6	14
176	On the Importance of Gradients in the Low-Energy Electron Phase Space Density for Relativistic Electron Acceleration. <i>Journal of Geophysical Research: Space Physics</i> , 2019, 124, 2628-2642.	0.8	14
177	Radiation belt electron flux variability during three CIR-driven geomagnetic storms. <i>Journal of Atmospheric and Solar-Terrestrial Physics</i> , 2009, 71, 1145-1156.	0.6	13
178	Introduction to Special Issue on high speed solar wind streams and geospace interactions (HSS@GI). <i>Journal of Atmospheric and Solar-Terrestrial Physics</i> , 2009, 71, 1011-1013.	0.6	13
179	Statistical Characteristics of Ionospheric Hiss Waves. <i>Geophysical Research Letters</i> , 2019, 46, 7147-7156.	1.5	13
180	Direct Evidence Reveals Transmitter Signal Propagation in the Magnetosphere. <i>Geophysical Research Letters</i> , 2021, 48, e2021GL093987.	1.5	13

#	ARTICLE	IF	CITATIONS
181	Weak electrostatic waves near the upper hybrid frequency: A comparison between theory and experiment. <i>Journal of Geophysical Research</i> , 1987, 92, 3243-3259.	3.3	12
182	Ray tracing of electrostatic waves in a hot plasma and its application to the generation of terrestrial myriametric radiation. <i>Geophysical Research Letters</i> , 1988, 15, 553-556.	1.5	12
183	Introduction to the special section on Chorus: Chorus and its role in space weather. <i>Journal of Geophysical Research</i> , 2010, 115, .	3.3	12
184	Survey of Saturn $\langle i \rangle Z \langle /i \rangle$ -mode emission. <i>Journal of Geophysical Research: Space Physics</i> , 2015, 120, 6176-6187.	0.8	12
185	Forecasting GOES 15 $\langle \text{MeV} \rangle$ Electron Fluxes From Solar Wind Data and Geomagnetic Indices. <i>Space Weather</i> , 2020, 18, e2019SW002416.	1.3	12
186	Propagation to the ground at high latitudes of auroral radio noise below the electron gyrofrequency. <i>Journal of Geophysical Research</i> , 1995, 100, 14637.	3.3	11
187	Constraints on Jovian plasma properties from a dispersion analysis of unducted whistlers in the warm Io torus. <i>Journal of Geophysical Research</i> , 1998, 103, 14979-14986.	3.3	11
188	Trapping and acceleration of upflowing ionospheric electrons in the magnetosphere by electrostatic electron cyclotron harmonic waves. <i>Geophysical Research Letters</i> , 2015, 42, 975-980.	1.5	11
189	Particle-in-Cell Simulation of Electron Cyclotron Harmonic Waves Driven by a Loss Cone Distribution. <i>Geophysical Research Letters</i> , 2020, 47, e2020GL087649.	1.5	11
190	The Virtual Space Weather Modelling Centre. <i>Journal of Space Weather and Space Climate</i> , 2020, 10, 14.	1.1	11
191	Solar-wind-magnetosphere coupling, including relativistic electron energization, during high-speed streams. <i>Journal of Atmospheric and Solar-Terrestrial Physics</i> , 2009, 71, 1059-1072.	0.6	10
192	Effects of energy and pitch angle mixed diffusion on radiation belt electrons. <i>Journal of Atmospheric and Solar-Terrestrial Physics</i> , 2011, 73, 785-795.	0.6	10
193	Extreme internal charging currents in medium Earth orbit: Analysis of SURF plate currents on Giove-A. <i>Space Weather</i> , 2016, 14, 578-591.	1.3	10
194	Magnetic Conjugacy of Pc1 Waves and Isolated Proton Precipitation at Subauroral Latitudes: Importance of Ionosphere as Intensity Modulation Region. <i>Geophysical Research Letters</i> , 2021, 48, e2020GL091384.	1.5	10
195	Interplanetary Shock-Induced Magnetopause Motion: Comparison Between Theory and Global Magnetohydrodynamic Simulations. <i>Geophysical Research Letters</i> , 2021, 48, e2021GL092554.	1.5	10
196	Multi-Parameter Chorus and Plasmaspheric Hiss Wave Models. <i>Journal of Geophysical Research: Space Physics</i> , 2021, 126, e2020JA028403.	0.8	10
197	Importance of plasma injection events for energization of relativistic electrons in the Jovian magnetosphere. <i>Journal of Geophysical Research</i> , 2011, 116, n/a-n/a.	3.3	9
198	Observations of nitric oxide in the Antarctic middle atmosphere during recurrent geomagnetic storms. <i>Journal of Geophysical Research: Space Physics</i> , 2013, 118, 7874-7885.	0.8	9

#	ARTICLE	IF	CITATIONS
199	Solar proton events and stratospheric ozone depletion over northern Finland. <i>Journal of Atmospheric and Solar-Terrestrial Physics</i> , 2018, 177, 218-227.	0.6	9
200	Drift Orbit Bifurcations and Cross-Field Transport in the Outer Radiation Belt: Global MHD and Integrated Test-Particle Simulations. <i>Journal of Geophysical Research: Space Physics</i> , 2021, 126, e2021JA029802.	0.8	9
201	The Implications of Temporal Variability in Wave-Particle Interactions in Earth's Radiation Belts. <i>Geophysical Research Letters</i> , 2021, 48, e2020GL089962.	1.5	9
202	Evaluation of SaRIF High-Energy Electron Reconstructions and Forecasts. <i>Space Weather</i> , 2021, 19, e2021SW002822.	1.3	9
203	Cold torus whistlers: An indirect probe of the inner Jovian plasmasphere. <i>Journal of Geophysical Research</i> , 1998, 103, 14987-14994.	3.3	8
204	Detection of artificially generated ULF waves by the FAST spacecraft and its application to the "tagging" of narrow flux tubes. <i>Journal of Geophysical Research</i> , 2003, 108, .	3.3	8
205	Non-stormtime injection of energetic particles into the slot region between Earth's inner and outer electron radiation belts as observed by STSAT-1 and NOAA-POES. <i>Geophysical Research Letters</i> , 2010, 37, .	1.5	8
206	Solar Cell Degradation Due to Proton Belt Enhancements During Electric Orbit Raising to GEO. <i>Space Weather</i> , 2019, 17, 1059-1072.	1.3	8
207	Science Goals and Overview of the Radiation Belt Storm Probes (RBSP) Energetic Particle, Composition, and Thermal Plasma (ECT) Suite on NASA's Van Allen Probes Mission. , 2013, , 311-336.		8
208	The Satellite Risk Prediction and Radiation Forecast System (SaRIF). <i>Space Weather</i> , 2021, 19, .	1.3	8
209	Conjugate Observation of Magnetospheric Chorus Propagating to the Ionosphere by Ducting. <i>Geophysical Research Letters</i> , 2021, 48, e2021GL095933.	1.5	8
210	Comment on <i>Khazanov et al. [2002]</i> and <i>Khazanov et al. [2006]</i>. <i>Journal of Geophysical Research</i> , 2007, 112, .	3.3	7
211	The Contribution of Compressional Magnetic Pumping to the Energization of the Earth's Outer Electron Radiation Belt During High-Speed Stream-Driven Storms. <i>Journal of Geophysical Research: Space Physics</i> , 2017, 122, 12,072.	0.8	7
212	Acceleration of Electrons by Whistler-Mode Hiss Waves at Saturn. <i>Geophysical Research Letters</i> , 2022, 49, .	1.5	7
213	Quasilonitudinal approximation for whistler-mode waves in the magnetospheric plasma. <i>Planetary and Space Science</i> , 1990, 38, 1551-1553.	0.9	6
214	Alpha Transmitter Signal Reflection and Triggered Emissions. <i>Geophysical Research Letters</i> , 2020, 47, e2020GL090165.	1.5	6
215	Wave-Driven Diffusion in Radiation Belt Dynamics. , 2016, , 217-243.		6
216	Ion-cyclotron waves at Jupiter: Possibility of detection by Ulysses. <i>Geophysical Research Letters</i> , 1992, 19, 629-632.	1.5	5

#	ARTICLE	IF	CITATIONS
217	Interactions between energetic electrons and realistic whistler mode waves in the Jovian magnetosphere. <i>Journal of Geophysical Research: Space Physics</i> , 2017, 122, 5355-5364.	0.8	5
218	Frequency-Dependent Modulation of Whistler-Mode Waves by Density Irregularities During the Recovery Phase of a Geomagnetic Storm. <i>Geophysical Research Letters</i> , 2021, 48, e2021GL093095.	1.5	5
219	Cross-Coherence of the Outer Radiation Belt During Storms and the Role of the Plasmopause. <i>Journal of Geophysical Research: Space Physics</i> , 2021, 126, e2021JA029308.	0.8	5
220	Attention-Based Machine Vision Models and Techniques for Solar Wind Speed Forecasting Using Solar EUV Images. <i>Space Weather</i> , 2022, 20, .	1.3	5
221	ECH wave dispersion-the effects of suprathermal electron distributions. <i>Advances in Space Research</i> , 1981, 1, 353-359.	1.2	4
222	The propagation characteristics and Landau damping of Jovian whistlers in the Io torus. <i>Journal of Geophysical Research</i> , 1995, 100, 21709-21716.	3.3	4
223	An investigation into the roles of ECH and whistler mode waves in the formation of "pancake" electron distributions using data from the CRRES satellite. <i>Advances in Space Research</i> , 2000, 25, 2339-2342.	1.2	3
224	Electron Diffusion by Magnetosonic Waves in the Earth's Radiation Belts. <i>Journal of Geophysical Research: Space Physics</i> , 2022, 127, .	0.8	3
225	Origin of Jovian hiss in the extended Io torus. <i>Geophysical Research Letters</i> , 2008, 35, .	1.5	2
226	Optimization of Radial Diffusion Coefficients for the Proton Radiation Belt During the CRRES Era. <i>Journal of Geophysical Research: Space Physics</i> , 2021, 126, e2020JA028486.	0.8	2
227	Modelling Inner Proton Belt Variability at Energies 1 to 10MeV using BAS-PRO. <i>Journal of Geophysical Research: Space Physics</i> , 0, , .	0.8	2
228	Generation of unusually low frequency plasmaspheric hiss. , 2014, , .		1
229	Richard Mansergh Thorne (1942-2019). <i>Eos</i> , 2019, 100, .	0.1	1
230	The effects of differential ion flows on EISCAT observations in the auroral ionosphere. <i>Journal of Atmospheric and Solar-Terrestrial Physics</i> , 1984, 46, 1159-1168.	0.9	0
231	Forecasting the Radiation Belts in Europe. <i>Space Weather</i> , 2012, 10, n/a-n/a.	1.3	0
232	Global Model of Plasmaspheric Hiss from Multiple Satellite Observations. , 2018, , .		0
233	Alan S Rodger (1951-2020). <i>Astronomy and Geophysics</i> , 2020, 61, 2.15-2.15.	0.1	0
234	Whistler Waves above the Lower Hybrid Frequency in the Ionosphere and their Counterparts in the Magnetosphere. <i>Geophysical Research Letters</i> , 0, , .	1.5	0