

# Richard Thorne

## List of Publications by Citations

**Source:** <https://exaly.com/author-pdf/8334858/richard-thorne-publications-by-citations.pdf>

**Version:** 2024-04-20

This document has been generated based on the publications and citations recorded by exaly.com. For the latest version of this publication list, visit the link given above.

The third column is the impact factor (IF) of the journal, and the fourth column is the number of citations of the article.

177  
papers

21,404  
citations

78  
h-index

144  
g-index

177  
ext. papers

23,336  
ext. citations

7.7  
avg, IF

6.74  
L-index

#	Paper	IF	Citations
177	The Electric and Magnetic Field Instrument Suite and Integrated Science (EMFISIS) on RBSP. <i>Space Science Reviews</i> , <b>2013</b> , 179, 127-181	7.5	760
176	Relativistic theory of wave-particle resonant diffusion with application to electron acceleration in the magnetosphere. <i>Journal of Geophysical Research</i> , <b>1998</b> , 103, 20487-20500		657
175	Pitch-angle diffusion of radiation belt electrons within the plasmasphere. <i>Journal of Geophysical Research</i> , <b>1972</b> , 77, 3455-3474		616
174	Relativistic electron pitch-angle scattering by electromagnetic ion cyclotron waves during geomagnetic storms. <i>Journal of Geophysical Research</i> , <b>2003</b> , 108,		532
173	Timescale for radiation belt electron acceleration by whistler mode chorus waves. <i>Journal of Geophysical Research</i> , <b>2005</b> , 110,		501
172	Radiation belt dynamics: The importance of wave-particle interactions. <i>Geophysical Research Letters</i> , <b>2010</b> , 37, n/a-n/a	4.9	486
171	Rapid local acceleration of relativistic radiation-belt electrons by magnetospheric chorus. <i>Nature</i> , <b>2013</b> , 504, 411-4	50.4	481
170	Potential waves for relativistic electron scattering and stochastic acceleration during magnetic storms. <i>Geophysical Research Letters</i> , <b>1998</b> , 25, 3011-3014	4.9	462
169	Equilibrium structure of radiation belt electrons. <i>Journal of Geophysical Research</i> , <b>1973</b> , 78, 2142-2149		441
168	Turbulent loss of ring current protons. <i>Journal of Geophysical Research</i> , <b>1970</b> , 75, 4699-4709		440
167	The terrestrial ring current: Origin, formation, and decay. <i>Reviews of Geophysics</i> , <b>1999</b> , 37, 407-438	23.1	430
166	Wave acceleration of electrons in the Van Allen radiation belts. <i>Nature</i> , <b>2005</b> , 437, 227-30	50.4	429
165	Electron scattering loss in Earth's inner magnetosphere: 1. Dominant physical processes. <i>Journal of Geophysical Research</i> , <b>1998</b> , 103, 2385-2396		385
164	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> , <b>2013</b> , 179, 311-336	7.5	383
163	Electron acceleration in the heart of the Van Allen radiation belts. <i>Science</i> , <b>2013</b> , 341, 991-4	33.3	379
162	Plasmaspheric hiss. <i>Journal of Geophysical Research</i> , <b>1973</b> , 78, 1581-1596		376
161	Scattering by chorus waves as the dominant cause of diffuse auroral precipitation. <i>Nature</i> , <b>2010</b> , 467, 943-6	50.4	347

160	Statistical analysis of relativistic electron energies for cyclotron resonance with EMIC waves observed on CRRES. <i>Journal of Geophysical Research</i> , <b>2003</b> , 108,		342
159	Relativistic electron precipitation during magnetic storm main phase. <i>Journal of Geophysical Research</i> , <b>1971</b> , 76, 4446-4453		340
158	Electron acceleration in the Van Allen radiation belts by fast magnetosonic waves. <i>Geophysical Research Letters</i> , <b>2007</b> , 34,	4.9	296
157	Outward radial diffusion driven by losses at magnetopause. <i>Journal of Geophysical Research</i> , <b>2006</b> , 111,		293
156	Dynamic evolution of energetic outer zone electrons due to wave-particle interactions during storms. <i>Journal of Geophysical Research</i> , <b>2007</b> , 112, n/a-n/a		286
155	Resonant scattering of plasma sheet electrons by whistler-mode chorus: Contribution to diffuse auroral precipitation. <i>Geophysical Research Letters</i> , <b>2008</b> , 35,	4.9	274
154	The unexpected origin of plasmaspheric hiss from discrete chorus emissions. <i>Nature</i> , <b>2008</b> , 452, 62-6	50.4	269
153	Timescale for MeV electron microburst loss during geomagnetic storms. <i>Journal of Geophysical Research</i> , <b>2005</b> , 110,		260
152	Substorm dependence of plasmaspheric hiss. <i>Journal of Geophysical Research</i> , <b>2004</b> , 109,		249
151	Global distribution of whistler-mode chorus waves observed on the THEMIS spacecraft. <i>Geophysical Research Letters</i> , <b>2009</b> , 36,	4.9	245
150	Favored regions for chorus-driven electron acceleration to relativistic energies in the Earth's outer radiation belt. <i>Geophysical Research Letters</i> , <b>2003</b> , 30,	4.9	231
149	Modeling ring current proton precipitation by electromagnetic ion cyclotron waves during the May 14-16, 1997, storm. <i>Journal of Geophysical Research</i> , <b>2001</b> , 106, 7-22		228
148	Identifying the driver of pulsating aurora. <i>Science</i> , <b>2010</b> , 330, 81-4	33.3	208
147	On the preferred source location for the convective amplification of ion cyclotron waves. <i>Journal of Geophysical Research</i> , <b>1993</b> , 98, 9233		208
146	Evidence for chorus-driven electron acceleration to relativistic energies from a survey of geomagnetically disturbed periods. <i>Journal of Geophysical Research</i> , <b>2003</b> , 108,		205
145	Global distribution of wave amplitudes and wave normal angles of chorus waves using THEMIS wave observations. <i>Journal of Geophysical Research</i> , <b>2011</b> , 116, n/a-n/a		196
144	Global model of lower band and upper band chorus from multiple satellite observations. <i>Journal of Geophysical Research</i> , <b>2012</b> , 117, n/a-n/a		188
143	Jupiter's interior and deep atmosphere: The initial pole-to-pole passes with the Juno spacecraft. <i>Science</i> , <b>2017</b> , 356, 821-825	33.3	180

142	Outer zone relativistic electron acceleration associated with substorm-enhanced whistler mode chorus. <i>Journal of Geophysical Research</i> , <b>2002</b> , 107, SMP 29-1		180
141	A long-lived relativistic electron storage ring embedded in Earth's outer Van Allen belt. <i>Science</i> , <b>2013</b> , 340, 186-90	33.3	179
140	Nonlinear interaction of energetic electrons with large amplitude chorus. <i>Geophysical Research Letters</i> , <b>2008</b> , 35,	4.9	169
139	Parasitic pitch angle diffusion of radiation belt particles by ion cyclotron waves. <i>Journal of Geophysical Research</i> , <b>1972</b> , 77, 5608-5616		162
138	Model of the energization of outer-zone electrons by whistler-mode chorus during the October 9, 1990 geomagnetic storm. <i>Geophysical Research Letters</i> , <b>2002</b> , 29, 27-1-27-4	4.9	157
137	Source and seed populations for relativistic electrons: Their roles in radiation belt changes. <i>Journal of Geophysical Research: Space Physics</i> , <b>2015</b> , 120, 7240-7254	2.6	156
136	An observation linking the origin of plasmaspheric hiss to discrete chorus emissions. <i>Science</i> , <b>2009</b> , 324, 775-8	33.3	156
135	Electron scattering by whistler-mode ELF hiss in plasmaspheric plumes. <i>Journal of Geophysical Research</i> , <b>2008</b> , 113, n/a-n/a		154
134	Energetic outer zone electron loss timescales during low geomagnetic activity. <i>Journal of Geophysical Research</i> , <b>2006</b> , 111,		152
133	Resonant scattering and resultant pitch angle evolution of relativistic electrons by plasmaspheric hiss. <i>Journal of Geophysical Research: Space Physics</i> , <b>2013</b> , 118, 7740-7751	2.6	150
132	Radiation belt electron acceleration by chorus waves during the 17 March 2013 storm. <i>Journal of Geophysical Research: Space Physics</i> , <b>2014</b> , 119, 4681-4693	2.6	146
131	Magnetospheric Science Objectives of the Juno Mission. <i>Space Science Reviews</i> , <b>2017</b> , 213, 219-287	7.5	138
130	Evolution and slow decay of an unusual narrow ring of relativistic electrons near L ~ 3.2 following the September 2012 magnetic storm. <i>Geophysical Research Letters</i> , <b>2013</b> , 40, 3507-3511	4.9	137
129	An impenetrable barrier to ultrarelativistic electrons in the Van Allen radiation belts. <i>Nature</i> , <b>2014</b> , 515, 531-4	50.4	135
128	Electron scattering loss in Earth's inner magnetosphere: 2. Sensitivity to model parameters. <i>Journal of Geophysical Research</i> , <b>1998</b> , 103, 2397-2407		135
127	Global simulation of magnetosonic wave instability in the storm time magnetosphere. <i>Journal of Geophysical Research</i> , <b>2010</b> , 115, n/a-n/a		134
126	Statistical properties of plasmaspheric hiss derived from Van Allen Probes data and their effects on radiation belt electron dynamics. <i>Journal of Geophysical Research: Space Physics</i> , <b>2015</b> , 120, 3393-3405	2.6	132
125	Evolution of energetic electron pitch angle distributions during storm time electron acceleration to megaelectronvolt energies. <i>Journal of Geophysical Research</i> , <b>2003</b> , 108, SMP 11-1		128

124	Rapid scattering of radiation belt electrons by storm-time EMIC waves. <i>Geophysical Research Letters</i> , <b>2010</b> , 37, n/a-n/a	4.9	123
123	Constructing the global distribution of chorus wave intensity using measurements of electrons by the POES satellites and waves by the Van Allen Probes. <i>Geophysical Research Letters</i> , <b>2013</b> , 40, 4526-4532	4.9	119
122	Global distribution of equatorial magnetosonic waves observed by THEMIS. <i>Geophysical Research Letters</i> , <b>2013</b> , 40, 1895-1901	4.9	115
121	Modulation of electromagnetic ion cyclotron instability due to interaction with ring current O <sup>+</sup> during magnetic storms. <i>Journal of Geophysical Research</i> , <b>1997</b> , 102, 14155-14163		113
120	Convective instabilities of electromagnetic ion cyclotron waves in the outer magnetosphere. <i>Journal of Geophysical Research</i> , <b>1994</b> , 99, 17259		113
119	Parameterization of radiation belt electron loss timescales due to interactions with chorus waves. <i>Geophysical Research Letters</i> , <b>2007</b> , 34,	4.9	112
118	Electron pitch angle diffusion by electrostatic electron cyclotron harmonic waves: The origin of pancake distributions. <i>Journal of Geophysical Research</i> , <b>2000</b> , 105, 5391-5402		106
117	An unusual enhancement of low-frequency plasmaspheric hiss in the outer plasmasphere associated with substorm-injected electrons. <i>Geophysical Research Letters</i> , <b>2013</b> , 40, 3798-3803	4.9	105
116	Global distributions of suprathermal electrons observed on THEMIS and potential mechanisms for access into the plasmasphere. <i>Journal of Geophysical Research</i> , <b>2010</b> , 115, n/a-n/a		104
115	Gradual diffusion and punctuated phase space density enhancements of highly relativistic electrons: Van Allen Probes observations. <i>Geophysical Research Letters</i> , <b>2014</b> , 41, 1351-1358	4.9	103
114	Origins of plasmaspheric hiss. <i>Journal of Geophysical Research</i> , <b>2006</b> , 111,		102
113	Modeling the propagation characteristics of chorus using CRRES suprathermal electron fluxes. <i>Journal of Geophysical Research</i> , <b>2007</b> , 112, n/a-n/a		96
112	Resonant scattering of energetic electrons by unusual low-frequency hiss. <i>Geophysical Research Letters</i> , <b>2014</b> , 41, 1854-1861	4.9	95
111	Simulation of EMIC wave excitation in a model magnetosphere including structured high-density plumes. <i>Journal of Geophysical Research</i> , <b>2009</b> , 114, n/a-n/a		95
110	Jupiter's magnetosphere and aurorae observed by the Juno spacecraft during its first polar orbits. <i>Science</i> , <b>2017</b> , 356, 826-832	33.3	93
109	Evaluation of whistler-mode chorus intensification on the nightside during an injection event observed on the THEMIS spacecraft. <i>Journal of Geophysical Research</i> , <b>2009</b> , 114, n/a-n/a		93
108	Origins of the Earth's Diffuse Auroral Precipitation. <i>Space Science Reviews</i> , <b>2016</b> , 200, 205-259	7.5	92
107	The contribution of ion-cyclotron waves to electron heating and SAR-arc excitation near the storm-time plasmopause. <i>Geophysical Research Letters</i> , <b>1992</b> , 19, 417-420	4.9	92

106	Characteristics of the Poynting flux and wave normal vectors of whistler-mode waves observed on THEMIS. <i>Journal of Geophysical Research: Space Physics</i> , <b>2013</b> , 118, 1461-1471	2.6	89
105	Ultra-relativistic electrons in Jupiter's radiation belts. <i>Nature</i> , <b>2002</b> , 415, 987-91	50.4	89
104	The controlling effect of ion temperature on EMIC wave excitation and scattering. <i>Geophysical Research Letters</i> , <b>2011</b> , 38, n/a-n/a	4.9	85
103	Typical properties of rising and falling tone chorus waves. <i>Geophysical Research Letters</i> , <b>2011</b> , 38, n/a-n/a	4.9	84
102	Competing source and loss mechanisms due to wave-particle interactions in Earth's outer radiation belt during the 30 September to 3 October 2012 geomagnetic storm. <i>Journal of Geophysical Research: Space Physics</i> , <b>2014</b> , 119, 1960-1979	2.6	83
101	Electron scattering by magnetosonic waves in the inner magnetosphere. <i>Journal of Geophysical Research: Space Physics</i> , <b>2016</b> , 121, 274-285	2.6	82
100	Simulations of pitch angle scattering of relativistic electrons with MLT-dependent diffusion coefficients. <i>Journal of Geophysical Research</i> , <b>2009</b> , 114, n/a-n/a		80
99	Refilling of the slot region between the inner and outer electron radiation belts during geomagnetic storms. <i>Journal of Geophysical Research</i> , <b>2007</b> , 112, n/a-n/a		77
98	Magnetosonic wave excitation by ion ring distributions in the Earth's inner magnetosphere. <i>Journal of Geophysical Research: Space Physics</i> , <b>2014</b> , 119, 844-852	2.6	74
97	Evolution of electron pitch angle distributions following injection from the plasma sheet. <i>Journal of Geophysical Research</i> , <b>2011</b> , 116, n/a-n/a		74
96	Effects of amplitude modulation on nonlinear interactions between electrons and chorus waves. <i>Geophysical Research Letters</i> , <b>2012</b> , 39, n/a-n/a	4.9	73
95	Formation of energetic electron butterfly distributions by magnetosonic waves via Landau resonance. <i>Geophysical Research Letters</i> , <b>2016</b> , 43, 3009-3016	4.9	73
94	New chorus wave properties near the equator from Van Allen Probes wave observations. <i>Geophysical Research Letters</i> , <b>2016</b> , 43, 4725-4735	4.9	70
93	Gyro-resonant electron acceleration at Jupiter. <i>Nature Physics</i> , <b>2008</b> , 4, 301-304	16.2	68
92	Characteristics of hiss-like and discrete whistler-mode emissions. <i>Geophysical Research Letters</i> , <b>2012</b> , 39,	4.9	67
91	Modeling ring current ion and electron dynamics and plasma instabilities during a high-speed stream driven storm. <i>Journal of Geophysical Research</i> , <b>2012</b> , 117, n/a-n/a		65
90	Modeling the wave normal distribution of chorus waves. <i>Journal of Geophysical Research: Space Physics</i> , <b>2013</b> , 118, 1074-1088	2.6	65
89	Three-dimensional ray tracing of VLF waves in a magnetospheric environment containing a plasmaspheric plume. <i>Geophysical Research Letters</i> , <b>2009</b> , 36,	4.9	65

88	Energy transfer between energetic ring current H <sup>+</sup> and O <sup>+</sup> by electromagnetic ion cyclotron waves. <i>Journal of Geophysical Research</i> , <b>1994</b> , 99, 17275		65
87	Amplification of whistler-mode hiss inside the plasmasphere. <i>Geophysical Research Letters</i> , <b>2012</b> , 39, n/a-n/a	4.9	64
86	Modeling inward diffusion and slow decay of energetic electrons in the Earth's outer radiation belt. <i>Geophysical Research Letters</i> , <b>2015</b> , 42, 987-995	4.9	63
85	Microscopic plasma processes in the Jovian magnetosphere <b>1983</b> , 454-488		63
84	Perpendicular propagation of magnetosonic waves. <i>Geophysical Research Letters</i> , <b>2012</b> , 39, n/a-n/a	4.9	61
83	Comparison of bounce-averaged quasi-linear diffusion coefficients for parallel propagating whistler mode waves with test particle simulations. <i>Journal of Geophysical Research</i> , <b>2012</b> , 117, n/a-n/a		60
82	Unraveling the excitation mechanisms of highly oblique lower band chorus waves. <i>Geophysical Research Letters</i> , <b>2016</b> , 43, 8867-8875	4.9	58
81	Modeling the properties of plasmaspheric hiss: 1. Dependence on chorus wave emission. <i>Journal of Geophysical Research</i> , <b>2012</b> , 117, n/a-n/a		58
80	Modeling the wave power distribution and characteristics of plasmaspheric hiss. <i>Journal of Geophysical Research</i> , <b>2011</b> , 116, n/a-n/a		58
79	Nonlinear bounce resonances between magnetosonic waves and equatorially mirroring electrons. <i>Journal of Geophysical Research: Space Physics</i> , <b>2015</b> , 120, 6514-6527	2.6	57
78	Evidence of stronger pitch angle scattering loss caused by oblique whistler-mode waves as compared with quasi-parallel waves. <i>Geophysical Research Letters</i> , <b>2014</b> , 41, 6063-6070	4.9	54
77	A new diffusion matrix for whistler mode chorus waves. <i>Journal of Geophysical Research: Space Physics</i> , <b>2013</b> , 118, 6302-6318	2.6	54
76	Comparison of quasilinear diffusion coefficients for parallel propagating whistler mode waves with test particle simulations. <i>Geophysical Research Letters</i> , <b>2011</b> , 38, n/a-n/a	4.9	54
75	Landau damping of magnetospherically reflected whistlers. <i>Journal of Geophysical Research</i> , <b>1994</b> , 99, 17249		54
74	Quantitative Evaluation of Radial Diffusion and Local Acceleration Processes During GEM Challenge Events. <i>Journal of Geophysical Research: Space Physics</i> , <b>2018</b> , 123, 1938-1952	2.6	53
73	A novel technique to construct the global distribution of whistler mode chorus wave intensity using low-altitude POES electron data. <i>Journal of Geophysical Research: Space Physics</i> , <b>2014</b> , 119, 5685-5699	2.6	52
72	Modulation of whistler mode chorus waves: 1. Role of compressional Pc4B pulsations. <i>Journal of Geophysical Research</i> , <b>2011</b> , 116, n/a-n/a		52
71	Radiation belt electron acceleration during the 17 March 2015 geomagnetic storm: Observations and simulations. <i>Journal of Geophysical Research: Space Physics</i> , <b>2016</b> , 121, 5520-5536	2.6	52

70	Magnetosonic wave instability analysis for proton ring distributions observed by the LANL magnetospheric plasma analyzer. <i>Journal of Geophysical Research</i> , <b>2011</b> , 116,		51
69	Global statistical evidence for chorus as the embryonic source of plasmaspheric hiss. <i>Geophysical Research Letters</i> , <b>2013</b> , 40, 2891-2896	4.9	49
68	Modulation of whistler mode chorus waves: 2. Role of density variations. <i>Journal of Geophysical Research</i> , <b>2011</b> , 116, n/a-n/a		47
67	Ray tracing of penetrating chorus and its implications for the radiation belts. <i>Geophysical Research Letters</i> , <b>2007</b> , 34,	4.9	47
66	New evidence for generation mechanisms of discrete and hiss-like whistler mode waves. <i>Geophysical Research Letters</i> , <b>2014</b> , 41, 4805-4811	4.9	46
65	Diffuse auroral scattering by whistler mode chorus waves: Dependence on wave normal angle distribution. <i>Journal of Geophysical Research</i> , <b>2011</b> , 116, n/a-n/a		45
64	Diffuse Jovian aurora influenced by plasma injection from Io. <i>Geophysical Research Letters</i> , <b>1979</b> , 6, 649-652	4.9	45
63	Direct evidence for EMIC wave scattering of relativistic electrons in space. <i>Journal of Geophysical Research: Space Physics</i> , <b>2016</b> , 121, 6620-6631	2.6	44
62	VLF waves from ground-based transmitters observed by the Van Allen Probes: Statistical model and effects on plasmaspheric electrons. <i>Geophysical Research Letters</i> , <b>2017</b> , 44, 6483-6491	4.9	43
61	The trapping of equatorial magnetosonic waves in the Earth's outer plasmasphere. <i>Geophysical Research Letters</i> , <b>2014</b> , 41, 6307-6313	4.9	41
60	Statistical distribution of EMIC wave spectra: Observations from Van Allen Probes. <i>Geophysical Research Letters</i> , <b>2016</b> , 43, 12,348	4.9	40
59	The relationship between the macroscopic state of electrons and the properties of chorus waves observed by the Van Allen Probes. <i>Geophysical Research Letters</i> , <b>2016</b> , 43, 7804-7812	4.9	40
58	Solar wind conditions leading to efficient radiation belt electron acceleration: A superposed epoch analysis. <i>Geophysical Research Letters</i> , <b>2015</b> , 42, 6906-6915	4.9	39
57	First evidence for chorus at a large geocentric distance as a source of plasmaspheric hiss: Coordinated THEMIS and Van Allen Probes observation. <i>Geophysical Research Letters</i> , <b>2015</b> , 42, 241-248	4.9	39
56	Characteristic energy range of electron scattering due to plasmaspheric hiss. <i>Journal of Geophysical Research: Space Physics</i> , <b>2016</b> , 121, 11,737	2.6	39
55	Properties of Intense Field-Aligned Lower-Band Chorus Waves: Implications for Nonlinear Wave-Particle Interactions. <i>Journal of Geophysical Research: Space Physics</i> , <b>2018</b> , 123, 5379-5393	2.6	37
54	Modulation of plasmaspheric hiss intensity by thermal plasma density structure. <i>Geophysical Research Letters</i> , <b>2012</b> , 39, n/a-n/a	4.9	35
53	Electron Nonlinear Resonant Interaction With Short and Intense Parallel Chorus Wave Packets. <i>Journal of Geophysical Research: Space Physics</i> , <b>2018</b> , 123, 4979-4999	2.6	35

52	Simulation of energy-dependent electron diffusion processes in the Earth's outer radiation belt. <i>Journal of Geophysical Research: Space Physics</i> , <b>2016</b> , 121, 4217-4231	2.6	34
51	Quantifying hiss-driven energetic electron precipitation: A detailed conjunction event analysis. <i>Geophysical Research Letters</i> , <b>2014</b> , 41, 1085-1092	4.9	33
50	The effect of different solar wind parameters upon significant relativistic electron flux dropouts in the magnetosphere. <i>Journal of Geophysical Research: Space Physics</i> , <b>2015</b> , 120, 4324-4337	2.6	33
49	Modeling the properties of plasmaspheric hiss: 2. Dependence on the plasma density distribution. <i>Journal of Geophysical Research</i> , <b>2012</b> , 117, n/a-n/a		32
48	Free energy to drive equatorial magnetosonic wave instability at geosynchronous orbit. <i>Journal of Geophysical Research</i> , <b>2011</b> , 116, n/a-n/a		32
47	Plasmaspheric hiss overview and relation to chorus. <i>Journal of Atmospheric and Solar-Terrestrial Physics</i> , <b>2009</b> , 71, 1636-1646	2	32
46	Analytical approximation of transit time scattering due to magnetosonic waves. <i>Geophysical Research Letters</i> , <b>2015</b> , 42, 1318-1325	4.9	31
45	The Composition of Plasma inside Geostationary Orbit Based on Van Allen Probes Observations. <i>Journal of Geophysical Research: Space Physics</i> , <b>2018</b> , 123, 6478-6493	2.6	31
44	Variability of the pitch angle distribution of radiation belt ultrarelativistic electrons during and following intense geomagnetic storms: Van Allen Probes observations. <i>Journal of Geophysical Research: Space Physics</i> , <b>2015</b> , 120, 4863-4876	2.6	31
43	Ultrarelativistic electron butterfly distributions created by parallel acceleration due to magnetosonic waves. <i>Journal of Geophysical Research: Space Physics</i> , <b>2016</b> , 121, 3212-3222	2.6	31
42	A neural network model of three-dimensional dynamic electron density in the inner magnetosphere. <i>Journal of Geophysical Research: Space Physics</i> , <b>2017</b> , 122, 9183-9197	2.6	30
41	Nonlinear Electron Interaction With Intense Chorus Waves: Statistics of Occurrence Rates. <i>Geophysical Research Letters</i> , <b>2019</b> , 46, 7182-7190	4.9	29
40	Origin of two-band chorus in the radiation belt of Earth. <i>Nature Communications</i> , <b>2019</b> , 10, 4672	17.4	29
39	A unified approach to inner magnetospheric state prediction. <i>Journal of Geophysical Research: Space Physics</i> , <b>2016</b> , 121, 2423-2430	2.6	29
38	On the energy source for diffuse Jovian auroral emissivity. <i>Geophysical Research Letters</i> , <b>2001</b> , 28, 2751-2754	4.9	28
37	Ion cyclotron absorption at the second harmonic of the oxygen gyrofrequency. <i>Geophysical Research Letters</i> , <b>1990</b> , 17, 2225-2228	4.9	28
36	On the parameter dependence of the whistler anisotropy instability. <i>Journal of Geophysical Research: Space Physics</i> , <b>2017</b> , 122, 2001-2009	2.6	27
35	Electron butterfly distribution modulation by magnetosonic waves. <i>Geophysical Research Letters</i> , <b>2016</b> , 43, 3051-3059	4.9	27

34	Contemporaneous EMIC and whistler mode waves: Observations and consequences for MeV electron loss. <i>Geophysical Research Letters</i> , <b>2017</b> , 44, 8113-8121	4.9	26
33	Strong enhancement of 10–100 keV electron fluxes by combined effects of chorus waves and time domain structures. <i>Geophysical Research Letters</i> , <b>2016</b> , 43, 4683-4690	4.9	26
32	Evolution of Electron Distribution Driven by Nonlinear Resonances With Intense Field-Aligned Chorus Waves. <i>Journal of Geophysical Research: Space Physics</i> , <b>2018</b> , 123, 8149-8169	2.6	26
31	Resonant excitation of whistler waves by a helical electron beam. <i>Geophysical Research Letters</i> , <b>2016</b> , 43, 2413-2421	4.9	25
30	Excitation of dayside chorus waves due to magnetic field line compression in response to interplanetary shocks. <i>Journal of Geophysical Research: Space Physics</i> , <b>2015</b> , 120, 8327-8338	2.6	25
29	Ion Heating by Electromagnetic Ion Cyclotron Waves and Magnetosonic Waves in the Earth's Inner Magnetosphere. <i>Geophysical Research Letters</i> , <b>2019</b> , 46, 6258-6267	4.9	24
28	Observations of MeV electrons in Jupiter's innermost radiation belts and polar regions by the Juno radiation monitoring investigation: Perijoves 1 and 3. <i>Geophysical Research Letters</i> , <b>2017</b> , 44, 4481-4488	4.9	23
27	Erosion and refilling of the plasmasphere during a geomagnetic storm modeled by a neural network. <i>Journal of Geophysical Research: Space Physics</i> , <b>2017</b> , 122, 7118-7129	2.6	22
26	Electrostatic and whistler instabilities excited by an electron beam. <i>Physics of Plasmas</i> , <b>2017</b> , 24, 072116	2.1	22
25	The Characteristic Pitch Angle Distributions of 1–600 keV Protons Near the Equator Based On Van Allen Probes Observations. <i>Journal of Geophysical Research: Space Physics</i> , <b>2017</b> , 122, 9464-9473	2.6	21
24	The Characteristic Response of Whistler Mode Waves to Interplanetary Shocks. <i>Journal of Geophysical Research: Space Physics</i> , <b>2017</b> , 122, 10,047	2.6	21
23	Rapid enhancement of low-energy ( $< 100$ keV) electrons by chorus waves. <i>Journal of Geophysical Research: Space Physics</i> , <b>2016</b> , 121, 6430-6443	3.6	20
22	Nonlinear evolution of EMIC waves in a uniform magnetic field: 2. Test-particle scattering. <i>Journal of Geophysical Research</i> , <b>2010</b> , 115, n/a-n/a		20
21	Oxygen Ion Dynamics in the Earth's Ring Current: Van Allen Probes Observations. <i>Journal of Geophysical Research: Space Physics</i> , <b>2019</b> , 124, 7786-7798	2.6	19
20	Modeling Jupiter's synchrotron radiation. <i>Geophysical Research Letters</i> , <b>2001</b> , 28, 903-906	4.9	18
19	Effects of discreteness of chorus waves on quasilinear diffusion-based modeling of energetic electron dynamics. <i>Journal of Geophysical Research: Space Physics</i> , <b>2014</b> , 119, 8848-8857	2.6	17
18	A multispacecraft event study of Pc5 ultralow-frequency waves in the magnetosphere and their external drivers. <i>Journal of Geophysical Research: Space Physics</i> , <b>2017</b> , 122, 5132-5147	2.6	15
17	Chorus Wave Modulation of Langmuir Waves in the Radiation Belts. <i>Geophysical Research Letters</i> , <b>2017</b> , 44, 11,713-11,721	4.9	15

16	Transitional behavior of different energy protons based on Van Allen Probes observations. <i>Geophysical Research Letters</i> , <b>2017</b> , 44, 625-633	4.9	14
15	Physical mechanism causing rapid changes in ultrarelativistic electron pitch angle distributions right after a shock arrival: Evaluation of an electron dropout event. <i>Journal of Geophysical Research: Space Physics</i> , <b>2016</b> , 121, 8300-8316	2.6	14
14	Diffuse auroral precipitation in the jovian upper atmosphere and magnetospheric electron flux variability. <i>Icarus</i> , <b>2005</b> , 178, 406-416	3.8	14
13	Very Oblique Whistler Mode Propagation in the Radiation Belts: Effects of Hot Plasma and Landau Damping. <i>Geophysical Research Letters</i> , <b>2017</b> , 44, 12,057	4.9	13
12	Understanding the Origin of Jupiter's Diffuse Aurora Using Juno's First Perijove Observations. <i>Geophysical Research Letters</i> , <b>2017</b> , 44, 10,162-10,170	4.9	12
11	Zipper-like periodic magnetosonic waves: Van Allen Probes, THEMIS, and magnetospheric multiscale observations. <i>Journal of Geophysical Research: Space Physics</i> , <b>2017</b> , 122, 1600-1610	2.6	11
10	Diffusive Transport of Several Hundred keV Electrons in the Earth's Slot Region. <i>Journal of Geophysical Research: Space Physics</i> , <b>2017</b> , 122, 10,235	2.6	11
9	Comparison of formulas for resonant interactions between energetic electrons and oblique whistler-mode waves. <i>Physics of Plasmas</i> , <b>2015</b> , 22, 052902	2.1	11
8	Artificial Neural Networks for Determining Magnetospheric Conditions <b>2018</b> , 279-300		10
7	Coherently modulated whistler mode waves simultaneously observed over unexpectedly large spatial scales. <i>Journal of Geophysical Research: Space Physics</i> , <b>2017</b> , 122, 1871-1882	2.6	9
6	WaveParticle Interactions in the Earth's Magnetosphere. <i>Geophysical Monograph Series</i> , <b>2021</b> , 93-108	1.1	8
5	Electron butterfly distributions at particular magnetic latitudes observed during Juno's perijove pass. <i>Geophysical Research Letters</i> , <b>2017</b> , 44, 4489-4496	4.9	6
4	Analysis of plasmaspheric hiss wave amplitudes inferred from low-altitude POES electron data: Validation with conjunctive Van Allen Probes observations. <i>Journal of Geophysical Research: Space Physics</i> , <b>2015</b> , 120, 8681-8691	2.6	4
3	Searching for low-altitude magnetic field anomalies by using observations of the energetic particle loss cone on JUNO. <i>Geophysical Research Letters</i> , <b>2017</b> , 44, 4472-4480	4.9	2
2	Electron Flux Enhancements at L = 4.2 Observed by Global Positioning System Satellites: Relationship With Solar Wind and Geomagnetic Activity. <i>Journal of Geophysical Research: Space Physics</i> , <b>2018</b> , 123, 6189-6206	2.6	1
1	Recent Advances in Understanding Radiation Belt Electron Dynamics Due to WaveParticle Interactions. <i>Geophysical Monograph Series</i> , <b>2020</b> , 207-229	1.1	1