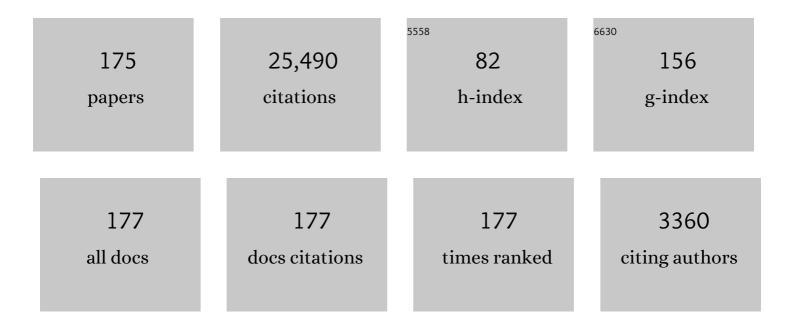
## **Richard Thorne**

List of Publications by Year in descending order

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| #  | Article   | IF   | CITATIONS |
|----|---|------|-----------|
| 1  | The Electric and Magnetic Field Instrument Suite and Integrated Science (EMFISIS) on RBSP. Space<br>Science Reviews, 2013, 179, 127-181.  | 3.7  | 932       |
| 2  | Relativistic theory of wave-particle resonant diffusion with application to electron acceleration in the magnetosphere. Journal of Geophysical Research, 1998, 103, 20487-20500.  | 3.3  | 737       |
| 3  | Pitch-angle diffusion of radiation belt electrons within the plasmasphere. Journal of Geophysical<br>Research, 1972, 77, 3455-3474.   | 3.3  | 688       |
| 4  | Relativistic electron pitch-angle scattering by electromagnetic ion cyclotron waves during geomagnetic storms. Journal of Geophysical Research, 2003, 108, .  | 3.3  | 616       |
| 5  | Rapid local acceleration of relativistic radiation-belt electrons by magnetospheric chorus. Nature, 2013, 504, 411-414.   | 13.7 | 608       |
| 6  | Radiation belt dynamics: The importance of waveâ€particle interactions. Geophysical Research Letters, 2010, 37, .   | 1.5  | 601       |
| 7  | Timescale for radiation belt electron acceleration by whistler mode chorus waves. Journal of<br>Geophysical Research, 2005, 110, .  | 3.3  | 561       |
| 8  | Potential waves for relativistic electron scattering and stochastic acceleration during magnetic storms. Geophysical Research Letters, 1998, 25, 3011-3014.   | 1.5  | 529       |
| 9  | The terrestrial ring current: Origin, formation, and decay. Reviews of Geophysics, 1999, 37, 407-438.   | 9.0  | 523       |
| 10 | Wave acceleration of electrons in the Van Allen radiation belts. Nature, 2005, 437, 227-230.  | 13.7 | 505       |
| 11 | Equilibrium structure of radiation belt electrons. Journal of Geophysical Research, 1973, 78, 2142-2149.  | 3.3  | 493       |
| 12 | Turbulent loss of ring current protons. Journal of Geophysical Research, 1970, 75, 4699-4709.   | 3.3  | 492       |
| 13 | Electron Acceleration in the Heart of the Van Allen Radiation Belts. Science, 2013, 341, 991-994.   | 6.0  | 463       |
| 14 | Science Goals and Overview of the Radiation Belt Storm Probes (RBSP) Energetic Particle,<br>Composition, and Thermal Plasma (ECT) Suite on NASA's Van Allen Probes Mission. Space Science<br>Reviews, 2013, 179, 311-336. | 3.7  | 463       |
| 15 | Electron scattering loss in Earth's inner magnetosphere: 1. Dominant physical processes. Journal of<br>Geophysical Research, 1998, 103, 2385-2396.  | 3.3  | 434       |
| 16 | Scattering by chorus waves as the dominant cause of diffuse auroral precipitation. Nature, 2010, 467, 943-946.  | 13.7 | 432       |
| 17 | Plasmaspheric hiss. Journal of Geophysical Research, 1973, 78, 1581-1596.   | 3.3  | 407       |
| 18 | Relativistic electron precipitation during magnetic storm main phase. Journal of Geophysical<br>Research, 1971, 76, 4446-4453.  | 3.3  | 397       |

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|----|---|------|-----------|
| 19 | Statistical analysis of relativistic electron energies for cyclotron resonance with EMIC waves observed on CRRES. Journal of Geophysical Research, 2003, 108, .             | 3.3  | 380       |
| 20 | Electron acceleration in the Van Allen radiation belts by fast magnetosonic waves. Geophysical Research Letters, 2007, 34, .  | 1.5  | 341       |
| 21 | Outward radial diffusion driven by losses at magnetopause. Journal of Geophysical Research, 2006, 111,  | 3.3  | 328       |
| 22 | Resonant scattering of plasma sheet electrons by whistlerâ€node chorus: Contribution to diffuse<br>auroral precipitation. Geophysical Research Letters, 2008, 35, .         | 1.5  | 323       |
| 23 | The unexpected origin of plasmaspheric hiss from discrete chorus emissions. Nature, 2008, 452, 62-66.   | 13.7 | 313       |
| 24 | Dynamic evolution of energetic outer zone electrons due to waveâ€particle interactions during storms. Journal of Geophysical Research, 2007, 112, .                         | 3.3  | 307       |
| 25 | Timescale for MeV electron microburst loss during geomagnetic storms. Journal of Geophysical Research, 2005, 110, .   | 3.3  | 296       |
| 26 | Global distribution of whistlerâ€mode chorus waves observed on the THEMIS spacecraft. Geophysical<br>Research Letters, 2009, 36, .  | 1.5  | 282       |
| 27 | Substorm dependence of plasmaspheric hiss. Journal of Geophysical Research, 2004, 109, .  | 3.3  | 281       |
| 28 | Modeling ring current proton precipitation by electromagnetic ion cyclotron waves during the May 14-16, 1997, storm. Journal of Geophysical Research, 2001, 106, 7-22.      | 3.3  | 261       |
| 29 | Favored regions for chorus-driven electron acceleration to relativistic energies in the Earth's outer radiation belt. Geophysical Research Letters, 2003, 30, .             | 1.5  | 256       |
| 30 | Identifying the Driver of Pulsating Aurora. Science, 2010, 330, 81-84.  | 6.0  | 249       |
| 31 | Evidence for chorus-driven electron acceleration to relativistic energies from a survey of geomagnetically disturbed periods. Journal of Geophysical Research, 2003, 108, . | 3.3  | 234       |
| 32 | Global distribution of wave amplitudes and wave normal angles of chorus waves using THEMIS wave observations. Journal of Geophysical Research, 2011, 116, n/a-n/a.          | 3.3  | 230       |
| 33 | Global model of lower band and upper band chorus from multiple satellite observations. Journal of Geophysical Research, 2012, 117, .  | 3.3  | 229       |
| 34 | Jupiter's interior and deep atmosphere: The initial pole-to-pole passes with the Juno spacecraft.<br>Science, 2017, 356, 821-825.   | 6.0  | 229       |
| 35 | On the preferred source location for the convective amplification of ion cyclotron waves. Journal of Geophysical Research, 1993, 98, 9233-9247.                             | 3.3  | 225       |
| 36 | A Long-Lived Relativistic Electron Storage Ring Embedded in Earth's Outer Van Allen Belt. Science, 2013,<br>340. 186-190.   | 6.0  | 216       |

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|----|--|------|-----------|
| 37 | Source and seed populations for relativistic electrons: Their roles in radiation belt changes. Journal of Geophysical Research: Space Physics, 2015, 120, 7240-7254.   | 0.8  | 215       |
| 38 | Outer zone relativistic electron acceleration associated with substorm-enhanced whistler mode chorus. Journal of Geophysical Research, 2002, 107, SMP 29-1.  | 3.3  | 206       |
| 39 | Nonlinear interaction of energetic electrons with large amplitude chorus. Geophysical Research<br>Letters, 2008, 35, .   | 1.5  | 201       |
| 40 | Radiation belt electron acceleration by chorus waves during the 17 March 2013 storm. Journal of<br>Geophysical Research: Space Physics, 2014, 119, 4681-4693.  | 0.8  | 182       |
| 41 | Parasitic pitch angle diffusion of radiation belt particles by ion cyclotron waves. Journal of<br>Geophysical Research, 1972, 77, 5608-5616.   | 3.3  | 179       |
| 42 | Electron scattering by whistlerâ€mode ELF hiss in plasmaspheric plumes. Journal of Geophysical<br>Research, 2008, 113, .   | 3.3  | 175       |
| 43 | Resonant scattering and resultant pitch angle evolution of relativistic electrons by plasmaspheric hiss. Journal of Geophysical Research: Space Physics, 2013, 118, 7740-7751.                               | 0.8  | 175       |
| 44 | Model of the energization of outer-zone electrons by whistler-mode chorus during the October 9,<br>1990 geomagnetic storm. Geophysical Research Letters, 2002, 29, 27-1-27-4.                                | 1.5  | 173       |
| 45 | An Observation Linking the Origin of Plasmaspheric Hiss to Discrete Chorus Emissions. Science, 2009, 324, 775-778.   | 6.0  | 173       |
| 46 | Energetic outer zone electron loss timescales during low geomagnetic activity. Journal of<br>Geophysical Research, 2006, 111, .  | 3.3  | 170       |
| 47 | Statistical properties of plasmaspheric hiss derived from Van Allen Probes data and their effects on radiation belt electron dynamics. Journal of Geophysical Research: Space Physics, 2015, 120, 3393-3405. | 0.8  | 164       |
| 48 | Magnetospheric Science Objectives of the Juno Mission. Space Science Reviews, 2017, 213, 219-287.  | 3.7  | 163       |
| 49 | Electron scattering loss in Earth's inner magnetosphere: 2. Sensitivity to model parameters. Journal of Geophysical Research, 1998, 103, 2397-2407.  | 3.3  | 159       |
| 50 | An impenetrable barrier to ultrarelativistic electrons in the Van Allen radiation belts. Nature, 2014, 515, 531-534.   | 13.7 | 159       |
| 51 | Constructing the global distribution of chorus wave intensity using measurements of electrons by the POES satellites and waves by the Van Allen Probes. Geophysical Research Letters, 2013, 40, 4526-4532.   | 1.5  | 153       |
| 52 | Global simulation of magnetosonic wave instability in the storm time magnetosphere. Journal of<br>Geophysical Research, 2010, 115, .   | 3.3  | 152       |
| 53 | Evolution and slow decay of an unusual narrow ring of relativistic electrons near L ~ 3.2 following<br>the September 2012 magnetic storm. Geophysical Research Letters, 2013, 40, 3507-3511.                 | 1.5  | 150       |
| 54 | Evolution of energetic electron pitch angle distributions during storm time electron acceleration to megaelectronvolt energies. Journal of Geophysical Research, 2003, 108, SMP 11-1.                        | 3.3  | 139       |

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|----|--|------|-----------|
| 55 | Global distribution of equatorial magnetosonic waves observed by THEMIS. Geophysical Research<br>Letters, 2013, 40, 1895-1901.   | 1.5  | 137       |
| 56 | Origins of the Earth's Diffuse Auroral Precipitation. Space Science Reviews, 2016, 200, 205-259.   | 3.7  | 136       |
| 57 | Rapid scattering of radiation belt electrons by stormâ€ŧime EMIC waves. Geophysical Research Letters, 2010, 37, .  | 1.5  | 135       |
| 58 | Modulation of electromagnetic ion cyclotron instability due to interaction with ring current O+during magnetic storms. Journal of Geophysical Research, 1997, 102, 14155-14163.          | 3.3  | 129       |
| 59 | Gradual diffusion and punctuated phase space density enhancements of highly relativistic electrons:<br>Van Allen Probes observations. Geophysical Research Letters, 2014, 41, 1351-1358. | 1.5  | 127       |
| 60 | Convective instabilities of electromagnetic ion cyclotron waves in the outer magnetosphere. Journal of Geophysical Research, 1994, 99, 17259.  | 3.3  | 123       |
| 61 | Electron pitch angle diffusion by electrostatic electron cyclotron harmonic waves: The origin of pancake distributions. Journal of Geophysical Research, 2000, 105, 5391-5402.           | 3.3  | 123       |
| 62 | Parameterization of radiation belt electron loss timescales due to interactions with chorus waves.<br>Geophysical Research Letters, 2007, 34, .  | 1.5  | 122       |
| 63 | An unusual enhancement of lowâ€frequency plasmaspheric hiss in the outer plasmasphere associated with substormâ€injected electrons. Geophysical Research Letters, 2013, 40, 3798-3803.   | 1.5  | 120       |
| 64 | Origins of plasmaspheric hiss. Journal of Geophysical Research, 2006, 111, .   | 3.3  | 118       |
| 65 | Global distributions of suprathermal electrons observed on THEMIS and potential mechanisms for access into the plasmasphere. Journal of Geophysical Research, 2010, 115, .               | 3.3  | 118       |
| 66 | Resonant scattering of energetic electrons by unusual low-frequency hiss. Geophysical Research<br>Letters, 2014, 41, 1854-1861.  | 1.5  | 110       |
| 67 | Ultra-relativistic electrons in Jupiter's radiation belts. Nature, 2002, 415, 987-991.   | 13.7 | 109       |
| 68 | Simulation of EMIC wave excitation in a model magnetosphere including structured highâ€density plumes. Journal of Geophysical Research, 2009, 114, .                                     | 3.3  | 109       |
| 69 | Jupiter's magnetosphere and aurorae observed by the Juno spacecraft during its first polar orbits.<br>Science, 2017, 356, 826-832.   | 6.0  | 109       |
| 70 | The contribution of ionâ€cyclotron waves to electron heating and SARâ€arc excitation near the<br>stormâ€time plasmapause. Geophysical Research Letters, 1992, 19, 417-420.               | 1.5  | 108       |
| 71 | Modeling the propagation characteristics of chorus using CRRES suprathermal electron fluxes.<br>Journal of Geophysical Research, 2007, 112, .  | 3.3  | 108       |
| 72 | Evaluation of whistlerâ€mode chorus intensification on the nightside during an injection event<br>observed on the THEMIS spacecraft. Journal of Geophysical Research, 2009, 114, .       | 3.3  | 108       |

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|----|--|-----|-----------|
| 73 | The controlling effect of ion temperature on EMIC wave excitation and scattering. Geophysical Research Letters, 2011, 38, n/a-n/a.   | 1.5 | 104       |
| 74 | Competing source and loss mechanisms due to waveâ€particle interactions in Earth's outer radiation<br>belt during the 30 September to 3 October 2012 geomagnetic storm. Journal of Geophysical Research:<br>Space Physics, 2014, 119, 1960-1979. | 0.8 | 103       |
| 75 | Electron scattering by magnetosonic waves in the inner magnetosphere. Journal of Geophysical<br>Research: Space Physics, 2016, 121, 274-285.   | 0.8 | 102       |
| 76 | Characteristics of the Poynting flux and wave normal vectors of whistlerâ€mode waves observed on THEMIS. Journal of Geophysical Research: Space Physics, 2013, 118, 1461-1471.   | 0.8 | 101       |
| 77 | Typical properties of rising and falling tone chorus waves. Geophysical Research Letters, 2011, 38, n/a-n/a.   | 1.5 | 100       |
| 78 | New chorus wave properties near the equator from Van Allen Probes wave observations. Geophysical<br>Research Letters, 2016, 43, 4725-4735.   | 1.5 | 100       |
| 79 | Evolution of electron pitch angle distributions following injection from the plasma sheet. Journal of<br>Geophysical Research, 2011, 116, n/a-n/a.   | 3.3 | 99        |
| 80 | Modeling the wave normal distribution of chorus waves. Journal of Geophysical Research: Space Physics, 2013, 118, 1074-1088.   | 0.8 | 91        |
| 81 | Simulations of pitch angle scattering of relativistic electrons with MLTâ€dependent diffusion coefficients. Journal of Geophysical Research, 2009, 114, .  | 3.3 | 88        |
| 82 | Formation of energetic electron butterfly distributions by magnetosonic waves via Landau resonance. Geophysical Research Letters, 2016, 43, 3009-3016.   | 1.5 | 88        |
| 83 | Modeling inward diffusion and slow decay of energetic electrons in the Earth's outer radiation belt.<br>Geophysical Research Letters, 2015, 42, 987-995.   | 1.5 | 87        |
| 84 | Quantitative Evaluation of Radial Diffusion and Local Acceleration Processes During GEM Challenge<br>Events. Journal of Geophysical Research: Space Physics, 2018, 123, 1938-1952.   | 0.8 | 86        |
| 85 | Gyro-resonant electron acceleration atÂJupiter. Nature Physics, 2008, 4, 301-304.  | 6.5 | 84        |
| 86 | Magnetosonic wave excitation by ion ring distributions in the Earth's inner magnetosphere. Journal of Geophysical Research: Space Physics, 2014, 119, 844-852.   | 0.8 | 84        |
| 87 | Characteristics of hissâ€like and discrete whistlerâ€mode emissions. Geophysical Research Letters, 2012,<br>39, .  | 1.5 | 83        |
| 88 | Comparison of bounceâ€averaged quasiâ€linear diffusion coefficients for parallel propagating whistler<br>mode waves with test particle simulations. Journal of Geophysical Research, 2012, 117, .  | 3.3 | 83        |
| 89 | Refilling of the slot region between the inner and outer electron radiation belts during geomagnetic storms. Journal of Geophysical Research, 2007, 112, n/a-n/a.  | 3.3 | 82        |
| 90 | Microscopic plasma processes in the Jovian magnetosphere. , 1983, , 454-488.   |     | 81        |

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|-----|--|-----|-----------|
| 91  | Effects of amplitude modulation on nonlinear interactions between electrons and chorus waves.<br>Geophysical Research Letters, 2012, 39, .   | 1.5 | 80        |
| 92  | Radiation belt electron acceleration during the 17 March 2015 geomagnetic storm: Observations and simulations. Journal of Geophysical Research: Space Physics, 2016, 121, 5520-5536.     | 0.8 | 77        |
| 93  | Threeâ€dimensional ray tracing of VLF waves in a magnetospheric environment containing a<br>plasmaspheric plume. Geophysical Research Letters, 2009, 36, .                               | 1.5 | 76        |
| 94  | Unraveling the excitation mechanisms of highly oblique lower band chorus waves. Geophysical<br>Research Letters, 2016, 43, 8867-8875.  | 1.5 | 75        |
| 95  | Energy transfer between energetic ring current H+and O+by electromagnetic ion cyclotron waves.<br>Journal of Geophysical Research, 1994, 99, 17275.                                      | 3.3 | 74        |
| 96  | Modeling the properties of plasmaspheric hiss: 1. Dependence on chorus wave emission. Journal of Geophysical Research, 2012, 117, .  | 3.3 | 74        |
| 97  | Modeling ring current ion and electron dynamics and plasma instabilities during a highâ€speed stream driven storm. Journal of Geophysical Research, 2012, 117, .                         | 3.3 | 73        |
| 98  | Amplification of whistlerâ€mode hiss inside the plasmasphere. Geophysical Research Letters, 2012, 39, .  | 1.5 | 73        |
| 99  | Ray tracing of penetrating chorus and its implications for the radiation belts. Geophysical Research<br>Letters, 2007, 34, .   | 1.5 | 70        |
| 100 | Perpendicular propagation of magnetosonic waves. Geophysical Research Letters, 2012, 39, .   | 1.5 | 70        |
| 101 | A new diffusion matrix for whistler mode chorus waves. Journal of Geophysical Research: Space<br>Physics, 2013, 118, 6302-6318.  | 0.8 | 70        |
| 102 | Statistical distribution of EMIC wave spectra: Observations from Van Allen Probes. Geophysical<br>Research Letters, 2016, 43, 12,348.  | 1.5 | 69        |
| 103 | Modulation of whistler mode chorus waves: 2. Role of density variations. Journal of Geophysical<br>Research, 2011, 116, n/a-n/a.   | 3.3 | 68        |
| 104 | Nonlinear bounce resonances between magnetosonic waves and equatorially mirroring electrons.<br>Journal of Geophysical Research: Space Physics, 2015, 120, 6514-6527.                    | 0.8 | 68        |
| 105 | Modulation of whistler mode chorus waves: 1. Role of compressional Pc4-5 pulsations. Journal of<br>Geophysical Research, 2011, 116, n/a-n/a.   | 3.3 | 67        |
| 106 | Direct evidence for EMIC wave scattering of relativistic electrons in space. Journal of Geophysical<br>Research: Space Physics, 2016, 121, 6620-6631.                                    | 0.8 | 67        |
| 107 | VLF waves from groundâ€based transmitters observed by the Van Allen Probes: Statistical model and effects on plasmaspheric electrons. Geophysical Research Letters, 2017, 44, 6483-6491. | 1.5 | 66        |
| 108 | Magnetosonic wave instability analysis for proton ring distributions observed by the LANL<br>magnetospheric plasma analyzer. Journal of Geophysical Research, 2011, 116, .               | 3.3 | 63        |

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|-----|--|-----|-----------|
| 109 | Comparison of quasilinear diffusion coefficients for parallel propagating whistler mode waves with test particle simulations. Geophysical Research Letters, 2011, 38, n/a-n/a.                                 | 1.5 | 63        |
| 110 | Evidence of stronger pitch angle scattering loss caused by oblique whistlerâ€mode waves as compared with quasiâ€parallel waves. Geophysical Research Letters, 2014, 41, 6063-6070.                             | 1.5 | 63        |
| 111 | A novel technique to construct the global distribution of whistler mode chorus wave intensity using<br>lowâ€altitude POES electron data. Journal of Geophysical Research: Space Physics, 2014, 119, 5685-5699. | 0.8 | 63        |
| 112 | Landau damping of magnetospherically reflected whistlers. Journal of Geophysical Research, 1994, 99,<br>17249.   | 3.3 | 62        |
| 113 | Properties of Intense Fieldâ€Aligned Lowerâ€Band Chorus Waves: Implications for Nonlinear Waveâ€Particle<br>Interactions. Journal of Geophysical Research: Space Physics, 2018, 123, 5379-5393.                | 0.8 | 62        |
| 114 | Modeling the wave power distribution and characteristics of plasmaspheric hiss. Journal of<br>Geophysical Research, 2011, 116, n/a-n/a.  | 3.3 | 61        |
| 115 | Electron Nonlinear Resonant Interaction With Short and Intense Parallel Chorus Wave Packets.<br>Journal of Geophysical Research: Space Physics, 2018, 123, 4979-4999.  | 0.8 | 59        |
| 116 | New evidence for generation mechanisms of discrete and hissâ€like whistler mode waves. Geophysical<br>Research Letters, 2014, 41, 4805-4811.   | 1.5 | 58        |
| 117 | Global statistical evidence for chorus as the embryonic source of plasmaspheric hiss. Geophysical<br>Research Letters, 2013, 40, 2891-2896.  | 1.5 | 56        |
| 118 | Characteristic energy range of electron scattering due to plasmaspheric hiss. Journal of Geophysical<br>Research: Space Physics, 2016, 121, 11,737.  | 0.8 | 54        |
| 119 | Diffuse auroral scattering by whistler mode chorus waves: Dependence on wave normal angle<br>distribution. Journal of Geophysical Research, 2011, 116, n/a-n/a.  | 3.3 | 53        |
| 120 | Nonlinear Electron Interaction With Intense Chorus Waves: Statistics of Occurrence Rates.<br>Geophysical Research Letters, 2019, 46, 7182-7190.  | 1.5 | 53        |
| 121 | A unified approach to inner magnetospheric state prediction. Journal of Geophysical Research: Space<br>Physics, 2016, 121, 2423-2430.  | 0.8 | 52        |
| 122 | Origin of two-band chorus in the radiation belt of Earth. Nature Communications, 2019, 10, 4672.   | 5.8 | 52        |
| 123 | The trapping of equatorial magnetosonic waves in the Earth's outer plasmasphere. Geophysical<br>Research Letters, 2014, 41, 6307-6313.   | 1.5 | 51        |
| 124 | A neural network model of threeâ€dimensional dynamic electron density in the inner magnetosphere.<br>Journal of Geophysical Research: Space Physics, 2017, 122, 9183-9197.                                     | 0.8 | 51        |
| 125 | Simulation of energyâ€dependent electron diffusion processes in the Earth's outer radiation belt.<br>Journal of Geophysical Research: Space Physics, 2016, 121, 4217-4231.                                     | 0.8 | 50        |
| 126 | The relationship between the macroscopic state of electrons and the properties of chorus waves observed by the Van Allen Probes. Geophysical Research Letters, 2016, 43, 7804-7812.                            | 1.5 | 50        |

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|-----|--|-----|-----------|
| 127 | Solar wind conditions leading to efficient radiation belt electron acceleration: A superposed epoch<br>analysis. Geophysical Research Letters, 2015, 42, 6906-6915.  | 1.5 | 48        |
| 128 | First evidence for chorus at a large geocentric distance as a source of plasmaspheric hiss:<br>Coordinated THEMIS and Van Allen Probes observation. Geophysical Research Letters, 2015, 42, 241-248.   | 1.5 | 48        |
| 129 | Ion Heating by Electromagnetic Ion Cyclotron Waves and Magnetosonic Waves in the Earth's Inner<br>Magnetosphere. Geophysical Research Letters, 2019, 46, 6258-6267.  | 1.5 | 48        |
| 130 | Modulation of plasmaspheric hiss intensity by thermal plasma density structure. Geophysical Research<br>Letters, 2012, 39, .   | 1.5 | 47        |
| 131 | Evolution of Electron Distribution Driven by Nonlinear Resonances With Intense Fieldâ€Aligned Chorus<br>Waves. Journal of Geophysical Research: Space Physics, 2018, 123, 8149-8169.   | 0.8 | 47        |
| 132 | The Composition of Plasma inside Geostationary Orbit Based on Van Allen Probes Observations.<br>Journal of Geophysical Research: Space Physics, 2018, 123, 6478-6493.  | 0.8 | 47        |
| 133 | Diffuse Jovian aurora influenced by plasma injection from Io. Geophysical Research Letters, 1979, 6, 649-652.  | 1.5 | 46        |
| 134 | Variability of the pitch angle distribution of radiation belt ultrarelativistic electrons during and<br>following intense geomagnetic storms: Van Allen Probes observations. Journal of Geophysical<br>Research: Space Physics, 2015, 120, 4863-4876.                    | 0.8 | 43        |
| 135 | The effect of different solar wind parameters upon significant relativistic electron flux dropouts in the magnetosphere. Journal of Geophysical Research: Space Physics, 2015, 120, 4324-4337.   | 0.8 | 43        |
| 136 | Contemporaneous EMIC and whistler mode waves: Observations and consequences for MeV electron loss. Geophysical Research Letters, 2017, 44, 8113-8121.  | 1.5 | 40        |
| 137 | Free energy to drive equatorial magnetosonic wave instability at geosynchronous orbit. Journal of<br>Geophysical Research, 2011, 116, n/a-n/a.   | 3.3 | 38        |
| 138 | Modeling the properties of plasmaspheric hiss: 2. Dependence on the plasma density distribution.<br>Journal of Geophysical Research, 2012, 117, .  | 3.3 | 38        |
| 139 | Analytical approximation of transit time scattering due to magnetosonic waves. Geophysical Research<br>Letters, 2015, 42, 1318-1325.   | 1.5 | 38        |
| 140 | Ultrarelativistic electron butterfly distributions created by parallel acceleration due to magnetosonic waves. Journal of Geophysical Research: Space Physics, 2016, 121, 3212-3222.   | 0.8 | 38        |
| 141 | Plasmaspheric hiss overview and relation to chorus. Journal of Atmospheric and Solar-Terrestrial Physics, 2009, 71, 1636-1646.   | 0.6 | 36        |
| 142 | Quantifying hissâ€driven energetic electron precipitation: A detailed conjunction event analysis.<br>Geophysical Research Letters, 2014, 41, 1085-1092.  | 1.5 | 36        |
| 143 | Resonant excitation of whistler waves by a helical electron beam. Geophysical Research Letters, 2016, 43, 2413-2421.   | 1.5 | 35        |
| 144 | Rapid enhancement of lowâ€energy (<100 eV) ion flux in response to interplanetary shocks based on<br>two Van Allen Probes case studies: Implications for source regions and heating mechanisms. Journal<br>of Geophysical Research: Space Physics, 2016, 121, 6430-6443. | 0.8 | 34        |

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|-----|--|-----|-----------|
| 145 | Erosion and refilling of the plasmasphere during a geomagnetic storm modeled by a neural network.<br>Journal of Geophysical Research: Space Physics, 2017, 122, 7118-7129.                                   | 0.8 | 34        |
| 146 | Oxygen Ion Dynamics in the Earth's Ring Current: Van Allen Probes Observations. Journal of<br>Geophysical Research: Space Physics, 2019, 124, 7786-7798.   | 0.8 | 34        |
| 147 | Strong enhancement of 10–100 keV electron fluxes by combined effects of chorus waves and time<br>domain structures. Geophysical Research Letters, 2016, 43, 4683-4690.                                       | 1.5 | 33        |
| 148 | Electron butterfly distribution modulation by magnetosonic waves. Geophysical Research Letters, 2016, 43, 3051-3059.   | 1.5 | 33        |
| 149 | The Characteristic Pitch Angle Distributions of 1ÂeV to 600ÂkeV Protons Near the Equator Based On Van<br>Allen Probes Observations. Journal of Geophysical Research: Space Physics, 2017, 122, 9464-9473.    | 0.8 | 33        |
| 150 | Ion cyclotron absorption at the second harmonic of the oxygen gyrofrequency. Geophysical Research<br>Letters, 1990, 17, 2225-2228.   | 1.5 | 32        |
| 151 | Excitation of dayside chorus waves due to magnetic field line compression in response to interplanetary shocks. Journal of Geophysical Research: Space Physics, 2015, 120, 8327-8338.                        | 0.8 | 32        |
| 152 | On the parameter dependence of the whistler anisotropy instability. Journal of Geophysical Research:<br>Space Physics, 2017, 122, 2001-2009.   | 0.8 | 32        |
| 153 | On the energy source for diffuse Jovian auroral emissivity. Geophysical Research Letters, 2001, 28, 2751-2754.   | 1.5 | 31        |
| 154 | Observations of MeV electrons in Jupiter's innermost radiation belts and polar regions by the Juno radiation monitoring investigation: Perijoves 1 and 3. Geophysical Research Letters, 2017, 44, 4481-4488. | 1.5 | 29        |
| 155 | The Characteristic Response of Whistler Mode Waves to Interplanetary Shocks. Journal of<br>Geophysical Research: Space Physics, 2017, 122, 10,047.   | 0.8 | 29        |
| 156 | Nonlinear evolution of EMIC waves in a uniform magnetic field: 2. Testâ€particle scattering. Journal of<br>Geophysical Research, 2010, 115, .  | 3.3 | 27        |
| 157 | Modeling Jupiter's synchrotron radiation. Geophysical Research Letters, 2001, 28, 903-906.   | 1.5 | 26        |
| 158 | Very Oblique Whistler Mode Propagation in the Radiation Belts: Effects of Hot Plasma and Landau<br>Damping. Geophysical Research Letters, 2017, 44, 12,057.  | 1.5 | 25        |
| 159 | A multispacecraft event study of Pc5 ultralowâ€frequency waves in the magnetosphere and their external drivers. Journal of Geophysical Research: Space Physics, 2017, 122, 5132-5147.                        | 0.8 | 24        |
| 160 | Electrostatic and whistler instabilities excited by an electron beam. Physics of Plasmas, 2017, 24, .  | 0.7 | 24        |
| 161 | Artificial Neural Networks for Determining Magnetospheric Conditions. , 2018, , 279-300.   |     | 24        |
| 162 | Transitional behavior of different energy protons based on Van Allen Probes observations.<br>Geophysical Research Letters, 2017, 44, 625-633.  | 1.5 | 20        |

| #   | Article  | IF  | CITATIONS |
|-----|--|-----|-----------|
| 163 | Effects of discreteness of chorus waves on quasilinear diffusionâ€based modeling of energetic<br>electron dynamics. Journal of Geophysical Research: Space Physics, 2014, 119, 8848-8857.  | 0.8 | 19        |
| 164 | Physical mechanism causing rapid changes in ultrarelativistic electron pitch angle distributions right<br>after a shock arrival: Evaluation of an electron dropout event. Journal of Geophysical Research:<br>Space Physics, 2016, 121, 8300-8316. | 0.8 | 19        |
| 165 | Chorus Wave Modulation of Langmuir Waves in the Radiation Belts. Geophysical Research Letters, 2017, 44, 11,713.   | 1.5 | 18        |
| 166 | Understanding the Origin of Jupiter's Diffuse Aurora Using Juno's First Perijove Observations.<br>Geophysical Research Letters, 2017, 44, 10,162.  | 1.5 | 17        |
| 167 | Diffuse auroral precipitation in the jovian upper atmosphere and magnetospheric electron flux variability. Icarus, 2005, 178, 406-416.   | 1.1 | 15        |
| 168 | Comparison of formulas for resonant interactions between energetic electrons and oblique whistler-mode waves. Physics of Plasmas, 2015, 22, 052902.  | 0.7 | 15        |
| 169 | Diffusive Transport of Several Hundred keV Electrons in the Earth's Slot Region. Journal of<br>Geophysical Research: Space Physics, 2017, 122, 10,235.   | 0.8 | 15        |
| 170 | Coherently modulated whistler mode waves simultaneously observed over unexpectedly large spatial scales. Journal of Geophysical Research: Space Physics, 2017, 122, 1871-1882.   | 0.8 | 12        |
| 171 | "Zipperâ€like―periodic magnetosonic waves: Van Allen Probes, THEMIS, and magnetospheric multiscale<br>observations. Journal of Geophysical Research: Space Physics, 2017, 122, 1600-1610.  | 0.8 | 12        |
| 172 | Analysis of plasmaspheric hiss wave amplitudes inferred from lowâ€altitude POES electron data:<br>Validation with conjunctive Van Allen Probes observations. Journal of Geophysical Research: Space<br>Physics, 2015, 120, 8681-8691.              | 0.8 | 7         |
| 173 | Electron butterfly distributions at particular magnetic latitudes observed during Juno's perijove pass.<br>Geophysical Research Letters, 2017, 44, 4489-4496.  | 1.5 | 6         |
| 174 | Searching for low-altitude magnetic field anomalies by using observations of the energetic particle loss cone on JUNO. Geophysical Research Letters, 2017, 44, 4472-4480.  | 1.5 | 3         |
| 175 | Electron Flux Enhancements at <b><i>L</i> = 4.2</b> Observed by Global Positioning System Satellites:<br>Relationship With Solar Wind and Geomagnetic Activity. Journal of Geophysical Research: Space<br>Physics, 2018, 123, 6189-6206.           | 0.8 | 3         |