

List of Publications by Year in descending order

Source: https://exaly.com/author-pdf/2664642/publications.pdf Version: 2024-02-01

| | | 22099 | 30848 |
|----------|----------------|--------------|----------------|
| 226 | 12,428 | 59 | 102 |
| papers | citations | h-index | g-index |
| | | | |
| | | | |
| | | | 0.400 |
| 233 | 233 | 233 | 3430 |
| all docs | docs citations | times ranked | citing authors |
| | | | |

L P WYCANT

| # | Article | IF | CITATIONS |
|----|---|------|-----------|
| 1 | The FIELDS Instrument Suite for Solar Probe Plus. Space Science Reviews, 2016, 204, 49-82. | 3.7 | 521 |
| 2 | The Electric Field and Waves Instruments on the Radiation Belt Storm Probes Mission. Space Science Reviews, 2013, 179, 183-220. | 3.7 | 421 |
| 3 | Highly structured slow solar wind emerging from an equatorial coronal hole. Nature, 2019, 576, 237-242. | 13.7 | 401 |
| 4 | Electron densities inferred from plasma wave spectra obtained by the Waves instrument on Van Allen Probes. Journal of Geophysical Research: Space Physics, 2015, 120, 904-914. | 0.8 | 395 |
| 5 | Simulation of the prompt energization and transport of radiation belt particles during the March 24, 1991 SSC. Geophysical Research Letters, 1993, 20, 2423-2426. | 1.5 | 393 |
| 6 | Effect of EMIC waves on relativistic and ultrarelativistic electron populations: Groundâ€based and Van Allen Probes observations. Geophysical Research Letters, 2014, 41, 1375-1381. | 1.5 | 294 |
| 7 | THE ELECTRIC FIELD AND WAVE EXPERIMENT FOR THE CLUSTER MISSION. Space Science Reviews, 1997, 79, 137-156. | 3.7 | 282 |
| 8 | Evidence for kinetic Alfvén waves and parallel electron energization at 4-6REaltitudes in the plasma sheet boundary layer. Journal of Geophysical Research, 2002, 107, SMP 24-1-SMP 24-15. | 3.3 | 271 |
| 9 | Cluster observations of electron holes in association with magnetotail reconnection and comparison to simulations. Journal of Geophysical Research, 2005, 110, . | 3.3 | 251 |
| 10 | Polar spacecraft based comparisons of intense electric fields and Poynting flux near and within the plasma sheet-tail lobe boundary to UVI images: An energy source for the aurora. Journal of Geophysical Research, 2000, 105, 18675-18692. | 3.3 | 250 |
| 11 | Cluster observations of an intense normal component of the electric field at a thin reconnecting current sheet in the tail and its role in the shock-like acceleration of the ion fluid into the separatrix region. Journal of Geophysical Research, 2005, 110, . | 3.3 | 249 |
| 12 | Discovery of very large amplitude whistlerâ€mode waves in Earth's radiation belts. Geophysical Research Letters, 2008, 35, . | 1.5 | 249 |
| 13 | Comparison of S3â€3 polar cap potential drops with the interplanetary magnetic field and models of magnetopause reconnection. Journal of Geophysical Research, 1983, 88, 5727-5735. | 3.3 | 236 |
| 14 | Comparisons of Polar satellite observations of solitary wave velocities in the plasma sheet boundary and the high altitude cusp to those in the auroral zone. Geophysical Research Letters, 1999, 26, 425-428. | 1.5 | 183 |
| 15 | The dc and ac electric field, plasma density, plasma temperature, and fieldâ€aligned current experiments on the S3â€3 satellite. Journal of Geophysical Research, 1979, 84, 5875-5884. | 3.3 | 177 |
| 16 | The electric field instrument on the polar satellite. Space Science Reviews, 1995, 71, 583-596. | 3.7 | 168 |
| 17 | Dependence of the large-scale, inner magnetospheric electric field on geomagnetic activity. Journal of Geophysical Research, 1998, 103, 14959-14964. | 3.3 | 162 |
| 18 | Experimental evidence on the role of the large spatial scale electric field in creating the ring current. Journal of Geophysical Research, 1998, 103, 29527-29544. | 3.3 | 161 |

| # | Article | IF | CITATIONS |
|----|--|------|-----------|
| 19 | An impenetrable barrier to ultrarelativistic electrons in the Van Allen radiation belts. Nature, 2014, 515, 531-534. | 13.7 | 159 |
| 20 | Simulations of radiation belt formation during storm sudden commencements. Journal of Geophysical Research, 1997, 102, 14087-14102. | 3.3 | 139 |
| 21 | The Global Morphology of Wave Poynting Flux: Powering the Aurora. Science, 2003, 299, 383-386. | 6.0 | 136 |
| 22 | Excitation of poloidal standing Alfvén waves through drift resonance waveâ€particle interaction. Geophysical Research Letters, 2013, 40, 4127-4132. | 1.5 | 134 |
| 23 | Polar observations of solitary waves at the Earth's magnetopause. Geophysical Research Letters, 2002, 29, 9-1-9-4. | 1.5 | 132 |
| 24 | Van Allen Probes observation of localized drift resonance between poloidal mode ultra″ow frequency waves and 60 keV electrons. Geophysical Research Letters, 2013, 40, 4491-4497. | 1.5 | 127 |
| 25 | Gradual diffusion and punctuated phase space density enhancements of highly relativistic electrons: Van Allen Probes observations. Geophysical Research Letters, 2014, 41, 1351-1358. | 1.5 | 127 |
| 26 | Van Allen probes, NOAA, GOES, and ground observations of an intense EMIC wave event extending over 12 h in magnetic local time. Journal of Geophysical Research: Space Physics, 2015, 120, 5465-5488. | 0.8 | 127 |
| 27 | 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 |
| 28 | Energetic electron injections deep into the inner magnetosphere associated with substorm activity. Geophysical Research Letters, 2015, 42, 2079-2087. | 1.5 | 112 |
| 29 | Correlation of Alfvén wave Poynting flux in the plasma sheet at 4–7REwith ionospheric electron energy flux. Journal of Geophysical Research, 2002, 107, SMP 24-1. | 3.3 | 105 |
| 30 | Shockâ€induced prompt relativistic electron acceleration in the inner magnetosphere. Journal of Geophysical Research: Space Physics, 2015, 120, 1661-1674. | 0.8 | 104 |
| 31 | Chorus acceleration of radiation belt relativistic electrons during March 2013 geomagnetic storm. Journal of Geophysical Research: Space Physics, 2014, 119, 3325-3332. | 0.8 | 101 |
| 32 | Simulation of proton radiation belt formation during the March 24, 1991 SSC. Geophysical Research Letters, 1995, 22, 291-294. | 1.5 | 98 |
| 33 | Large amplitude electric and magnetic field signatures in the inner magnetosphere during injection of 15 MeV electron drift echoes. Geophysical Research Letters, 1994, 21, 1739-1742. | 1.5 | 97 |
| 34 | Observations Directly Linking Relativistic Electron Microbursts to Whistler Mode Chorus: Van Allen Probes and FIREBIRD II. Geophysical Research Letters, 2017, 44, 11,265. | 1.5 | 96 |
| 35 | Highly relativistic radiation belt electron acceleration, transport, and loss: Large solar storm events of March and June 2015. Journal of Geophysical Research: Space Physics, 2016, 121, 6647-6660. | 0.8 | 93 |
| 36 | CRRES Poynting vector observations of electromagnetic ion cyclotron waves near the plasmapause. Journal of Geophysical Research, 1996, 101, 15331-15343. | 3.3 | 89 |

| # | Article | IF | CITATIONS |
|----|--|------|-----------|
| 37 | Prompt energization of relativistic and highly relativistic electrons during a substorm interval: Van Allen Probes observations. Geophysical Research Letters, 2014, 41, 20-25. | 1.5 | 88 |
| 38 | The properties of large amplitude whistler mode waves in the magnetosphere: Propagation and relationship with geomagnetic activity. Geophysical Research Letters, 2011, 38, n/a-n/a. | 1.5 | 83 |
| 39 | Global-scale coherence modulation of radiation-belt electron loss from plasmaspheric hiss. Nature, 2015, 523, 193-195. | 13.7 | 83 |
| 40 | CRRES electric field power spectra and radial diffusion coefficients. Journal of Geophysical Research, 2005, 110, . | 3.3 | 80 |
| 41 | Large Alfvén wave power in the plasma sheet boundary layer during the expansion phase of substorms. Geophysical Research Letters, 2000, 27, 3169-3172. | 1.5 | 78 |
| 42 | The distribution of plasmaspheric hiss wave power with respect to plasmapause location. Geophysical Research Letters, 2016, 43, 7878-7886. | 1.5 | 78 |
| 43 | Nonlinear electric field structures in the inner magnetosphere. Geophysical Research Letters, 2014, 41, 5693-5701. | 1.5 | 76 |
| 44 | Electric field structures and waves at plasma boundaries in the inner magnetosphere. Journal of Geophysical Research: Space Physics, 2015, 120, 4246-4263. | 0.8 | 73 |
| 45 | Statistical characteristics of EMIC waves: Van Allen Probe observations. Journal of Geophysical Research: Space Physics, 2015, 120, 4400-4408. | 0.8 | 72 |
| 46 | Ultra-low-frequency wave-driven diffusion of radiation belt relativistic electrons. Nature Communications, 2015, 6, 10096. | 5.8 | 71 |
| 47 | Observations of kinetic scale field line resonances. Geophysical Research Letters, 2014, 41, 209-215. | 1.5 | 69 |
| 48 | Prompt acceleration of magnetospheric electrons to ultrarelativistic energies by the 17 March 2015 interplanetary shock. Journal of Geophysical Research: Space Physics, 2016, 121, 7622-7635. | 0.8 | 68 |
| 49 | Alfvén waves and Poynting flux observed simultaneously by Polar and FAST in the plasma sheet boundary layer. Journal of Geophysical Research, 2005, 110, . | 3.3 | 66 |
| 50 | Storm time occurrence and spatial distribution of Pc4 poloidal ULF waves in the inner magnetosphere: A Van Allen Probes statistical study. Journal of Geophysical Research: Space Physics, 2015, 120, 4748-4762. | 0.8 | 66 |
| 51 | Electric and magnetic radial diffusion coefficients using the Van Allen probes data. Journal of Geophysical Research: Space Physics, 2016, 121, 9586-9607. | 0.8 | 66 |
| 52 | Storm time observations of plasmasphere erosion flux in the magnetosphere and ionosphere. Geophysical Research Letters, 2014, 41, 762-768. | 1.5 | 65 |
| 53 | Megavolt Parallel Potentials Arising from Double-Layer Streams in the Earth's Outer Radiation Belt. Physical Review Letters, 2013, 111, 235002 | 2.9 | 64 |
| 54 | CRRES electric field/Langmuir probe instrument. Journal of Spacecraft and Rockets, 1992, 29, 601-604. | 1.3 | 63 |

| # | Article | IF | CITATIONS |
|----|---|-----|-----------|
| 55 | The source of O ⁺ in the storm time ring current. Journal of Geophysical Research: Space Physics, 2016, 121, 5333-5349. | 0.8 | 63 |
| 56 | Survey of the frequency dependent latitudinal distribution of the fast magnetosonic wave mode from Van Allen Probes Electric and Magnetic Field Instrument and Integrated Science waveform receiver plasma wave analysis. Journal of Geophysical Research: Space Physics, 2016, 121, 2902-2921. | 0.8 | 63 |
| 57 | Nearâ€Earth injection of MeV electrons associated with intense dipolarization electric fields: Van Allen Probes observations. Geophysical Research Letters, 2015, 42, 6170-6179. | 1.5 | 62 |
| 58 | Some properties of Alfvén waves: Observations in the tail lobes and the plasma sheet boundary layer. Journal of Geophysical Research, 2005, 110, . | 3.3 | 61 |
| 59 | Observation of relativistic electron microbursts in conjunction with intense radiation belt whistler-mode waves. Geophysical Research Letters, 2011, 38, n/a-n/a. | 1.5 | 61 |
| 60 | Spacecraft charging and ion wake formation in the near-Sun environment. Physics of Plasmas, 2010, 17, 072903. | 0.7 | 59 |
| 61 | Interactions of energetic electrons with ULF waves triggered by interplanetary shock: Van Allen Probes observations in the magnetotail. Journal of Geophysical Research: Space Physics, 2014, 119, 8262-8273. | 0.8 | 57 |
| 62 | Properties of large electric fields in the plasma sheet at 4-7REmeasured with Polar. Journal of Geophysical Research, 2001, 106, 5779-5798. | 3.3 | 56 |
| 63 | Broadband lowâ€frequency electromagnetic waves in the inner magnetosphere. Journal of Geophysical Research: Space Physics, 2015, 120, 8603-8615. | 0.8 | 56 |
| 64 | Charged particle behavior in the growth and damping stages of ultralow frequency waves: Theory and Van Allen Probes observations. Journal of Geophysical Research: Space Physics, 2016, 121, 3254-3263. | 0.8 | 55 |
| 65 | Statistical properties of lowâ€frequency plasmaspheric hiss. Journal of Geophysical Research: Space Physics, 2017, 122, 8340-8352. | 0.8 | 55 |
| 66 | Van Allen Probe observations of periodic rising frequencies of the fast magnetosonic mode. Geophysical Research Letters, 2014, 41, 8161-8168. | 1.5 | 52 |
| 67 | Modeling subauroral polarization streams during the 17 March 2013 storm. Journal of Geophysical Research: Space Physics, 2015, 120, 1738-1750. | 0.8 | 52 |
| 68 | In situ observations of EMIC waves in O ⁺ band by the Van Allen Probe A. Geophysical Research Letters, 2015, 42, 1312-1317. | 1.5 | 52 |
| 69 | Correlated Pc4–5 ULF waves, whistlerâ€mode chorus, and pulsating aurora observed by the Van Allen Probes and groundâ€based systems. Journal of Geophysical Research: Space Physics, 2015, 120, 8749-8761. | 0.8 | 50 |
| 70 | Modeling CMEâ€shockâ€driven storms in 2012–2013: MHD test particle simulations. Journal of Geophysical Research: Space Physics, 2015, 120, 1168-1181. | 0.8 | 50 |
| 71 | Intense duskside lower band chorus waves observed by Van Allen Probes: Generation and potential acceleration effect on radiation belt electrons. Journal of Geophysical Research: Space Physics, 2014, 119, 4266-4273. | 0.8 | 49 |
| 72 | Nonstorm time dropout of radiation belt electron fluxes on 24 September 2013. Journal of Geophysical Research: Space Physics, 2016, 121, 6400-6416. | 0.8 | 49 |

J R WYGANT

| # | Article | IF | CITATIONS |
|----|--|-----|-----------|
| 73 | Fast Diffusion of Ultrarelativistic Electrons in the Outer Radiation Belt: 17 March 2015 Storm Event. Geophysical Research Letters, 2018, 45, 10874-10882. | 1.5 | 49 |
| 74 | Spacecraft surface charging within geosynchronous orbit observed by the Van Allen Probes. Space Weather, 2016, 14, 151-164. | 1.3 | 47 |
| 75 | Location of intense electromagnetic ion cyclotron (EMIC) wave events relative to the plasmapause: Van Allen Probes observations. Journal of Geophysical Research: Space Physics, 2017, 122, 4064-4088. | 0.8 | 45 |
| 76 | Lowâ€harmonic magnetosonic waves observed by the Van Allen Probes. Journal of Geophysical Research: Space Physics, 2015, 120, 6230-6257. | 0.8 | 44 |
| 77 | Externally driven plasmaspheric ULF waves observed by the Van Allen Probes. Journal of Geophysical Research: Space Physics, 2015, 120, 526-552. | 0.8 | 44 |
| 78 | Pi2 pulsations observed with the Polar satellite and ground stations: Coupling of trapped and propagating fast mode waves to a midlatitude field line resonance. Journal of Geophysical Research, 2001, 106, 25891-25904. | 3.3 | 43 |
| 79 | Chorus whistler wave source scales as determined from multipoint Van Allen Probe measurements. Geophysical Research Letters, 2017, 44, 2634-2642. | 1.5 | 43 |
| 80 | A Statistical Study of EMIC Waves Associated With and Without Energetic Particle Injection From the Magnetotail. Journal of Geophysical Research: Space Physics, 2019, 124, 433-450. | 0.8 | 43 |
| 81 | Van Allen Probes Observations of Second Harmonic Poloidal Standing Alfvén Waves. Journal of Geophysical Research: Space Physics, 2018, 123, 611-637. | 0.8 | 41 |
| 82 | Spatial localization and ducting of EMIC waves: Van Allen Probes and groundâ€based observations. Geophysical Research Letters, 2014, 41, 785-792. | 1.5 | 40 |
| 83 | lon Injection Triggered EMIC Waves in the Earth's Magnetosphere. Journal of Geophysical Research: Space Physics, 2018, 123, 4921-4938. | 0.8 | 40 |
| 84 | Evidence for injection of relativistic electrons into the Earth's outer radiation belt via intense substorm electric fields. Geophysical Research Letters, 2014, 41, 1133-1141. | 1.5 | 39 |
| 85 | Van Allen Probes investigation of the largeâ€scale duskward electric field and its role in ring current formation and plasmasphere erosion in the 1 June 2013 storm. Journal of Geophysical Research: Space Physics, 2015, 120, 4531-4543. | 0.8 | 39 |
| 86 | Variation in Plasmaspheric Hiss Wave Power With Plasma Density. Geophysical Research Letters, 2018, 45, 9417-9426. | 1.5 | 39 |
| 87 | Extreme ionospheric ion energization and electron heating in Alfvén waves in the storm time inner magnetosphere. Geophysical Research Letters, 2015, 42, 10,531. | 1.5 | 38 |
| 88 | Study of EMIC wave excitation using direct ion measurements. Journal of Geophysical Research: Space Physics, 2015, 120, 2702-2719. | 0.8 | 38 |
| 89 | Rapid Loss of Radiation Belt Relativistic Electrons by EMIC Waves. Journal of Geophysical Research: Space Physics, 2017, 122, 9880-9897. | 0.8 | 38 |
| 90 | Wave properties near the subsolar magnetopause: Pc 3–4 energy coupling for northward interplanetary magnetic field. Journal of Geophysical Research, 1993, 98, 187-196. | 3.3 | 36 |

| # | Article | IF | CITATIONS |
|-----|--|-----|-----------|
| 91 | Weak kinetic Alfvén waves turbulence during the 14ÂNovemberÂ2012 geomagnetic storm: Van Allen Probes observations. Journal of Geophysical Research: Space Physics, 2015, 120, 5504-5523. | 0.8 | 36 |
| 92 | Van Allen Probes observations of oxygen cyclotron harmonic waves in the inner magnetosphere. Geophysical Research Letters, 2016, 43, 8827-8834. | 1.5 | 35 |
| 93 | Identifying STEVE's Magnetospheric Driver Using Conjugate Observations in the Magnetosphere and on the Ground. Geophysical Research Letters, 2019, 46, 12665-12674. | 1.5 | 35 |
| 94 | Observations of large amplitude parallel electric field wave packets at the plasma sheet boundary. Geophysical Research Letters, 1998, 25, 857-860. | 1.5 | 34 |
| 95 | Disappearance of plasmaspheric hiss following interplanetary shock. Geophysical Research Letters, 2015, 42, 3129-3140. | 1.5 | 34 |
| 96 | Rapid enhancement of lowâ€energy (<100 eV) ion flux in response to interplanetary shocks based on two Van Allen Probes case studies: Implications for source regions and heating mechanisms. Journal of Geophysical Research: Space Physics, 2016, 121, 6430-6443. | 0.8 | 34 |
| 97 | Using the cold plasma dispersion relation and whistler mode waves to quantify the antenna sheath impedance of the Van Allen Probes EFW instrument. Journal of Geophysical Research: Space Physics, 2016, 121, 4590-4606. | 0.8 | 33 |
| 98 | Simulated Prompt Acceleration of Multiâ€MeV Electrons by the 17 March 2015 Interplanetary Shock. Journal of Geophysical Research: Space Physics, 2017, 122, 10,036. | 0.8 | 33 |
| 99 | Statistical Occurrence and Distribution of Highâ€Amplitude Whistler Mode Waves in the Outer Radiation Belt. Geophysical Research Letters, 2019, 46, 2328-2336. | 1.5 | 33 |
| 100 | Van Allen Probes observations of direct waveâ€particle interactions. Geophysical Research Letters, 2014, 41, 1869-1875. | 1.5 | 32 |
| 101 | Lowâ€Energy (<keV) O ⁺ Ion Outflow Directly Into the Inner Magnetosphere: Van Allen Probes Observations. Journal of Geophysical Research: Space Physics, 2019, 124, 405-419. | 0.8 | 32 |
| 102 | Van Allen Probes observations of unusually low frequency whistler mode waves observed in association with moderate magnetic storms: Statistical study. Geophysical Research Letters, 2015, 42, 7273-7281. | 1.5 | 31 |
| 103 | Simultaneous disappearances of plasmaspheric hiss, exohiss, and chorus waves triggered by a sudden decrease in solar wind dynamic pressure. Geophysical Research Letters, 2017, 44, 52-61. | 1.5 | 31 |
| 104 | EMIC Waves Converted From Equatorial Noise Due to <i>M</i> / <i>Q</i> = 2 Ions in the Plasmasphere: Observations From Van Allen Probes and Arase. Geophysical Research Letters, 2019, 46, 5662-5669. | 1.5 | 31 |
| 105 | SAPS measurements around the magnetic equator by CRRES. Geophysical Research Letters, 2008, 35, . | 1.5 | 30 |
| 106 | MMS, Van Allen Probes, GOES 13, and Groundâ€Based Magnetometer Observations of EMIC Wave Events Before, During, and After a Modest Interplanetary Shock. Journal of Geophysical Research: Space Physics, 2018, 123, 8331-8357. | 0.8 | 30 |
| 107 | ULF Wave Driven Radial Diffusion During Geomagnetic Storms: A Statistical Analysis of Van Allen Probes Observations. Journal of Geophysical Research: Space Physics, 2021, 126, e2020JA029024. | 0.8 | 30 |
| 108 | FAST/Polar conjunction study of field-aligned auroral acceleration and corresponding magnetotail drivers. Journal of Geophysical Research, 2003, 108, . | 3.3 | 29 |

| # | Article | IF | CITATIONS |
|-----|--|-----|-----------|
| 109 | THEMIS measurements of quasiâ€static electric fields in the inner magnetosphere. Journal of Geophysical Research: Space Physics, 2014, 119, 9939-9951. | 0.8 | 29 |
| 110 | Kinetic Alfvén waves and particle response associated with a shockâ€induced, global ULF perturbation of the terrestrial magnetosphere. Geophysical Research Letters, 2015, 42, 9203-9212. | 1.5 | 29 |
| 111 | Cluster observations of surface waves in the ion jets from magnetotail reconnection. Journal of Geophysical Research, 2011, 116, n/a-n/a. | 3.3 | 28 |
| 112 | Evolution of relativistic outer belt electrons during an extended quiescent period. Journal of Geophysical Research: Space Physics, 2014, 119, 9558-9566. | 0.8 | 28 |
| 113 | Lowâ€Energy (<200 eV) Electron Acceleration by ULF Waves in the Plasmaspheric Boundary Layer: Van Allen Probes Observation. Journal of Geophysical Research: Space Physics, 2017, 122, 9969-9982. | 0.8 | 28 |
| 114 | EMIC wave spatial and coherence scales as determined from multipoint Van Allen Probe measurements. Geophysical Research Letters, 2016, 43, 4799-4807. | 1.5 | 27 |
| 115 | Nonlinear Electrostatic Steepening of Whistler Waves: The Guiding Factors and Dynamics in Inhomogeneous Systems. Geophysical Research Letters, 2018, 45, 2168-2176. | 1.5 | 27 |
| 116 | Outer radiation belt dropout dynamics following the arrival of two interplanetary coronal mass ejections. Geophysical Research Letters, 2016, 43, 978-987. | 1.5 | 26 |
| 117 | Excitation of nightside magnetosonic waves observed by Van Allen Probes. Journal of Geophysical Research: Space Physics, 2014, 119, 9125-9133. | 0.8 | 25 |
| 118 | In situ statistical observations of Pc1 pearl pulsations and unstructured EMIC waves by the Van Allen Probes. Journal of Geophysical Research: Space Physics, 2017, 122, 105-119. | 0.8 | 25 |
| 119 | Crossâ€scale observations of the 2015 St. Patrick's day storm: THEMIS, Van Allen Probes, and TWINS. Journal of Geophysical Research: Space Physics, 2017, 122, 368-392. | 0.8 | 25 |
| 120 | Very Oblique Whistler Mode Propagation in the Radiation Belts: Effects of Hot Plasma and Landau Damping. Geophysical Research Letters, 2017, 44, 12,057. | 1.5 | 25 |
| 121 | Modeling gradual diffusion changes in radiation belt electron phase space density for the March 2013 Van Allen Probes case study. Journal of Geophysical Research: Space Physics, 2014, 119, 8396-8403. | 0.8 | 24 |
| 122 | Prompt enhancement of the Earth's outer radiation belt due to substorm electron injections. Journal of Geophysical Research: Space Physics, 2016, 121, 11,826. | 0.8 | 24 |
| 123 | An improved sheath impedance model for the Van Allen Probes EFW instrument: Effects of the spin axis antenna. Journal of Geophysical Research: Space Physics, 2017, 122, 4420-4429. | 0.8 | 24 |
| 124 | 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 |
| 125 | Parker Solar Probe Evidence for Scattering of Electrons in the Young Solar Wind by Narrowband Whistler-mode Waves. Astrophysical Journal Letters, 2021, 911, L29. | 3.0 | 24 |
| 126 | A Census of Plasma Waves and Structures Associated With an Injection Front in the Inner Magnetosphere. Journal of Geophysical Research: Space Physics, 2018, 123, 2566-2587. | 0.8 | 23 |

| # | Article | IF | CITATIONS |
|-----|---|-----|-----------|
| 127 | Dispersive Alfvén Wave Control of O ⁺ Ion Outflow and Energy Densities in the Inner Magnetosphere. Geophysical Research Letters, 2019, 46, 8597-8606. | 1.5 | 23 |
| 128 | Assessing the global Alfvén wave power flow into and out of the auroral acceleration region during geomagnetic storms. Science Advances, 2019, 5, eaav8411. | 4.7 | 23 |
| 129 | The Modulation of Plasma and Waves by Background Electron Density Irregularities in the Inner Magnetosphere. Geophysical Research Letters, 2020, 47, e2020GL088855. | 1.5 | 23 |
| 130 | The Electric Field and Waves Instruments on the Radiation Belt Storm Probes Mission. , 2013, , 183-220. | | 23 |
| 131 | Numerical modeling of Alfvén waves observed by the Polar spacecraft in the nightside plasma sheet boundary layer. Journal of Geophysical Research, 2002, 107, SMP 9-1-SMP 9-8. | 3.3 | 21 |
| 132 | Response of convection electric fields in the magnetosphere to IMF orientation change. Journal of Geophysical Research, 2009, 114, . | 3.3 | 21 |
| 133 | Pitch Angle Scattering and Loss of Radiation Belt Electrons in Broadband Electromagnetic Waves. Geophysical Research Letters, 2018, 45, 9344-9352. | 1.5 | 21 |
| 134 | A Comparative Study of ULF Waves' Role in the Dynamics of Charged Particles in the Plasmasphere: Van Allen Probes Observation. Journal of Geophysical Research: Space Physics, 2018, 123, 5334-5343. | 0.8 | 21 |
| 135 | Cold Plasmaspheric Electrons Affected by ULF Waves in the Inner Magnetosphere: A Van Allen Probes Statistical Study. Journal of Geophysical Research: Space Physics, 2019, 124, 7954-7965. | 0.8 | 21 |
| 136 | First Direct Observations of Propagation of Discrete Chorus Elements From the Equatorial Source to Higher Latitudes, Using the Van Allen Probes and Arase Satellites. Journal of Geophysical Research: Space Physics, 2020, 125, e2020JA028315. | 0.8 | 21 |
| 137 | Seasonal variations along auroral field lines: Measurements from the Polar spacecraft. Geophysical Research Letters, 2003, 30, . | 1.5 | 20 |
| 138 | Large-amplitude transmitter-associated and lightning-associated whistler waves in the Earth's inner plasmasphere at <i>L</i> < 2. Journal of Geophysical Research, 2011, 116, n/a-n/a. | 3.3 | 20 |
| 139 | Van Allen Probes observations linking radiation belt electrons to chorus waves during 2014 multiple storms. Journal of Geophysical Research: Space Physics, 2015, 120, 938-948. | 0.8 | 20 |
| 140 | EMIC Wave Events During the Four GEM QARBM Challenge Intervals. Journal of Geophysical Research: Space Physics, 2018, 123, 6394-6423. | 0.8 | 20 |
| 141 | Nonlinear Drift Resonance Between Charged Particles and Ultralow Frequency Waves: Theory and Observations. Geophysical Research Letters, 2018, 45, 8773-8782. | 1.5 | 20 |
| 142 | Electrodynamics of a substorm-related field line resonance observed by the Polar satellite in comparison with ground Pi2 pulsations. Journal of Geophysical Research, 2003, 108, . | 3.3 | 19 |
| 143 | Pc5 wave power in the quietâ€ŧime plasmasphere and trough: CRRES observations. Geophysical Research Letters, 2010, 37, | 1.5 | 19 |
| 144 | Global Survey and Empirical Model of Fast Magnetosonic Waves Over Their Full Frequency Range in Earth's Inner Magnetosphere. Journal of Geophysical Research: Space Physics, 2019, 124, 10270-10282. | 0.8 | 19 |

| # | Article | IF | CITATIONS |
|-----|---|-----|-----------|
| 145 | Eastward Propagating Second Harmonic Poloidal Waves Triggered by Temporary Outward Gradient of Proton Phase Space Density: Van Allen Probe A Observation. Journal of Geophysical Research: Space Physics, 2019, 124, 9904-9923. | 0.8 | 19 |
| 146 | Direct measurements of the Poynting flux associated with convection electric fields in the magnetosphere. Journal of Geophysical Research, 2010, 115, . | 3.3 | 18 |
| 147 | A statistical study of whistler waves observed by Van Allen Probes (RBSP) and lightning detected by WWLLN. Journal of Geophysical Research: Space Physics, 2016, 121, 2067-2079. | 0.8 | 18 |
| 148 | In situ evidence of the modification of the parallel propagation of EMIC waves by heated He ⁺ ions. Journal of Geophysical Research: Space Physics, 2016, 121, 6711-6717. | 0.8 | 18 |
| 149 | Radial transport of radiation belt electrons in kinetic fieldâ€line resonances. Geophysical Research Letters, 2017, 44, 8140-8148. | 1.5 | 18 |
| 150 | Excitation of O + Band EMIC Waves Through H + Ring Velocity Distributions: Van Allen Probe Observations. Geophysical Research Letters, 2018, 45, 1271-1276. | 1.5 | 18 |
| 151 | Correlations Between Dispersive Alfvén Wave Activity, Electron Energization, and Ion Outflow in the Inner Magnetosphere. Geophysical Research Letters, 2020, 47, e2020GL088985. | 1.5 | 18 |
| 152 | Postmidnight depletion of the highâ€energy tail of the quiet plasmasphere. Journal of Geophysical Research: Space Physics, 2015, 120, 1646-1660. | 0.8 | 17 |
| 153 | Van Allen Probes observations of structured whistler mode activity and coincident electron Landau acceleration inside a remnant plasmaspheric plume. Journal of Geophysical Research: Space Physics, 2017, 122, 3073-3086. | 0.8 | 17 |
| 154 | The enhancement of cosmic radio noise absorption due to hissâ€driven energetic electron precipitation during substorms. Journal of Geophysical Research: Space Physics, 2015, 120, 5393-5407. | 0.8 | 16 |
| 155 | Evolution of chorus emissions into plasmaspheric hiss observed by Van Allen Probes. Journal of Geophysical Research: Space Physics, 2016, 121, 4518-4529. | 0.8 | 16 |
| 156 | Observations of Impulsive Electric Fields Induced by Interplanetary Shock. Geophysical Research Letters, 2018, 45, 7287-7296. | 1.5 | 16 |
| 157 | Temperature Dependence of Plasmaspheric Ion Composition. Journal of Geophysical Research: Space Physics, 2019, 124, 6585-6595. | 0.8 | 16 |
| 158 | Simultaneous Pi2 observations by the Van Allen Probes inside and outside the plasmasphere. Journal of Geophysical Research: Space Physics, 2015, 120, 4567-4575. | 0.8 | 15 |
| 159 | Van Allen Probe observations of drift-bounce resonances with Pc 4 pulsations and wave–particle interactions in the pre-midnight inner magnetosphere. Annales Geophysicae, 2015, 33, 955-964. | 0.6 | 15 |
| 160 | Magnetohydrodynamic modeling of three Van Allen Probes storms in 2012 and 2013. Annales Geophysicae, 2015, 33, 1037-1050. | 0.6 | 15 |
| 161 | Multipoint spacecraft observations of long-lasting poloidal Pc4 pulsations in the dayside magnetosphere on 1–2 May 2014. Annales Geophysicae, 2016, 34, 985-998. | 0.6 | 15 |
| 162 | Van Allen Probes observation of a 360° phase shift in the flux modulation of injected electrons by ULF waves. Geophysical Research Letters, 2017, 44, 1614-1624. | 1.5 | 15 |

| # | Article | IF | CITATIONS |
|-----|--|-----|-----------|
| 163 | Dayside response of the magnetosphere to a small shock compression: Van Allen Probes, Magnetospheric MultiScale, and GOESâ€13. Geophysical Research Letters, 2017, 44, 8712-8720. | 1.5 | 15 |
| 164 | Rapid Enhancements of the Seed Populations in the Heart of the Earth's Outer Radiation Belt: A Multicase Study. Journal of Geophysical Research: Space Physics, 2018, 123, 4895-4907. | 0.8 | 15 |
| 165 | Link between premidnight second harmonic poloidal waves and auroral undulations: Conjugate observations with a Van Allen Probe spacecraft and a THEMIS all-sky imager. Journal of Geophysical Research: Space Physics, 2015, 120, 1814-1831. | 0.8 | 14 |
| 166 | Radiation Belt "Dropouts―and Driftâ€Bounce Resonances in Broadband Electromagnetic Waves. Geophysical Research Letters, 2018, 45, 2128-2137. | 1.5 | 14 |
| 167 | The correlation of plasma density distributions over 5000 km with solar illumination of the ionosphere: Solar cycle and zenith angle observations. Geophysical Research Letters, 2003, 30, . | 1.5 | 13 |
| 168 | Chorus waves and spacecraft potential fluctuations: Evidence for wave-enhanced photoelectron escape. Geophysical Research Letters, 2014, 41, 236-243. | 1.5 | 13 |
| 169 | Response of Different Ion Species to Local Magnetic Dipolarization Inside Geosynchronous Orbit. Journal of Geophysical Research: Space Physics, 2018, 123, 5420-5434. | 0.8 | 13 |
| 170 | Simulation of Prompt Acceleration of Radiation Belt Electrons During the 16 July 2017 Storm. Geophysical Research Letters, 2019, 46, 7222-7229. | 1.5 | 13 |
| 171 | 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 |
| 172 | "Zipperâ€like―periodic magnetosonic waves: Van Allen Probes, THEMIS, and magnetospheric multiscale observations. Journal of Geophysical Research: Space Physics, 2017, 122, 1600-1610. | 0.8 | 12 |
| 173 | Relation Between Shockâ€Related Impulse and Subsequent ULF Wave in the Earth's Magnetosphere. Geophysical Research Letters, 2020, 47, e2020GL090027. | 1.5 | 12 |
| 174 | Local time variations of highâ€energy plasmaspheric ion pitch angle distributions. Journal of Geophysical Research: Space Physics, 2016, 121, 6234-6244. | 0.8 | 11 |
| 175 | Transport and Loss of Ring Current Electrons Inside Geosynchronous Orbit During the 17 March 2013 Storm. Journal of Geophysical Research: Space Physics, 2019, 124, 915-933. | 0.8 | 11 |
| 176 | Statistical Distribution of Whistler Mode Waves in the Radiation Belts With Large Magnetic Field Amplitudes and Comparison to Large Electric Field Amplitudes. Journal of Geophysical Research: Space Physics, 2019, 124, 6541-6552. | 0.8 | 11 |
| 177 | Multiâ€instrument Observations of Mesoscale Enhancement of Subauroral Polarization Stream Associated With an Injection. Journal of Geophysical Research: Space Physics, 2019, 124, 1770-1784. | 0.8 | 11 |
| 178 | Analysis of Electric and Magnetic Lightningâ€Generated Wave Amplitudes Measured by the Van Allen Probes. Geophysical Research Letters, 2020, 47, e2020GL087503. | 1.5 | 11 |
| 179 | Relativistic Electron Enhancements Through Successive Dipolarizations During a CIRâ€Driven Storm. Journal of Geophysical Research: Space Physics, 2022, 127, . | 0.8 | 11 |
| 180 | Response of Banded Whistler Mode Waves to the Enhancement of Solar Wind Dynamic Pressure in the Inner Earth's Magnetosphere. Geophysical Research Letters, 2018, 45, 8755-8763. | 1.5 | 10 |

| # | Article | IF | CITATIONS |
|-----|--|-----|-----------|
| 181 | Multiharmonic Toroidal Standing Alfvén Waves in the Midnight Sector Observed During a Geomagnetically Quiet Period. Journal of Geophysical Research: Space Physics, 2020, 125, e2019JA027370. | 0.8 | 10 |
| 182 | Determining Plasmaspheric Density From the Upper Hybrid Resonance and From the Spacecraft Potential: How Do They Compare?. Journal of Geophysical Research: Space Physics, 2020, 125, no. | 0.8 | 10 |
| 183 | Investigation of Smallâ€Scale Electron Density Irregularities Observed by the Arase and Van Allen Probes Satellites Inside and Outside the Plasmasphere. Journal of Geophysical Research: Space Physics, 2021, 126, e2020JA027917. | 0.8 | 10 |
| 184 | Quantifying the Sheath Impedance of the Electric Double Probe Instrument on the Van Allen Probes. Journal of Geophysical Research: Space Physics, 2022, 127, . | 0.8 | 10 |
| 185 | Collaborative Research Activities of the Arase and Van Allen Probes. Space Science Reviews, 2022, 218, . | 3.7 | 10 |
| 186 | Largeâ€ a mplitude wave electric field in the inner magnetosphere during substorms. Journal of Geophysical Research, 2008, 113, . | 3.3 | 9 |
| 187 | Electromagnetic power of lightning superbolts from Earth to space. Nature Communications, 2021, 12, 3553. | 5.8 | 9 |
| 188 | Chorus and Hiss Scales in the Inner Magnetosphere: Statistics From Highâ€Resolution Filter Bank (FBK) Van Allen Proves Multiâ€Point Measurements. Journal of Geophysical Research: Space Physics, 2021, 126, e2020JA028998. | 0.8 | 9 |
| 189 | Observation and simulation of the rapid formation of a new electron radiation belt during March 24, 1991 SSC. AIP Conference Proceedings, 1996, , . | 0.3 | 8 |
| 190 | Cluster observations of fast magnetosonic waves in the heliosphere current sheet. Geophysical Research Letters, 2014, 41, 1398-1405. | 1.5 | 8 |
| 191 | Simulations of Van Allen Probes Plasmaspheric Electron Density Observations. Journal of Geophysical Research: Space Physics, 2018, 123, 9453-9475. | 0.8 | 8 |
| 192 | Filamentary Currents and Alfvénic Vortices in the Inner Magnetosphere. Geophysical Research Letters, 2020, 47, e2019GL086318. | 1.5 | 8 |
| 193 | How whistler mode hiss waves and the plasmasphere drive the quiet decay of radiation belts electrons following a geomagnetic storm. Journal of Physics: Conference Series, 2020, 1623, 012005. | 0.3 | 8 |
| 194 | Simultaneous measurements of waves and precipitating electrons near the equator in the outer radiation belt. Journal of Geophysical Research, 1994, 99, 2415. | 3.3 | 7 |
| 195 | Explaining polarization reversals in STEREO wave data. Journal of Geophysical Research, 2012, 117, . | 3.3 | 7 |
| 196 | Van Allen Probes observations of crossâ€scale coupling between electromagnetic ion cyclotron waves and higherâ€frequency wave modes. Geophysical Research Letters, 2016, 43, 11,510. | 1.5 | 7 |
| 197 | Partitioning of integrated energy fluxes in four tail reconnection events observed by Cluster. Journal of Geophysical Research: Space Physics, 2016, 121, 11,798. | 0.8 | 7 |
| 198 | The Role of Solar Wind Structures in the Generation of ULF Waves in the Inner Magnetosphere. Solar Physics, 2017, 292, 1. | 1.0 | 7 |

J R WYGANT

| # | Article | IF | CITATIONS |
|-----|---|-----|-----------|
| 199 | Van Allen Probes observation of plasmaspheric hiss modulated by injected energetic electrons. Annales Geophysicae, 2018, 36, 781-791. | 0.6 | 7 |
| 200 | Multiâ€Event Analysis of Plasma and Field Variations in Source of Stable Auroral Red (SAR) Arcs in Inner Magnetosphere During Nonâ€5tormâ€Time Substorms. Journal of Geophysical Research: Space Physics, 2021, 126, e2020JA029081. | 0.8 | 7 |
| 201 | Simultaneous Observation of Two Isolated Proton Auroras at Subauroral Latitudes by a Highly Sensitive Allâ€6ky Camera and Van Allen Probes. Journal of Geophysical Research: Space Physics, 2021, 126, e2020JA029078. | 0.8 | 7 |
| 202 | Efficacy of Electric Field Models in Reproducing Observed Ring Current Ion Spectra During Two Geomagnetic Storms. Journal of Geophysical Research: Space Physics, 2019, 124, 8974-8991. | 0.8 | 6 |
| 203 | Solar Rotation Period Driven Modulations of Plasmaspheric Density and Convective Electric Field in the Inner Magnetosphere. Journal of Geophysical Research: Space Physics, 2019, 124, 1726-1737. | 0.8 | 6 |
| 204 | Evidence of Alfvenic Poynting Flux as the Primary Driver of Auroral Motion During a Geomagnetic Substorm. Journal of Geophysical Research: Space Physics, 2021, 126, e2020JA029019. | 0.8 | 6 |
| 205 | Polar observations of transverse magnetic pulsations initiated at substorm onset in the high-latitude plasma sheet. Journal of Geophysical Research, 2003, 108, . | 3.3 | 5 |
| 206 | Observations of a high-latitude stable electron auroral emission at â^1⁄416 MLT during a large substorm. Journal of Geophysical Research, 2011, 116, n/a-n/a. | 3.3 | 5 |
| 207 | O ⁺ ion conic and plasma sheet dynamics observed by Van Allen Probe satellites during the 1 June 2013 magnetic storm. Journal of Geophysical Research: Space Physics, 2016, 121, 4072-4091. | 0.8 | 5 |
| 208 | Global Alfvén Wave Power in the Auroral Zone in Relation to the AE Index. Journal of Geophysical Research: Space Physics, 2019, 124, 8637-8646. | 0.8 | 5 |
| 209 | Temporal Evolution of Substormâ€Driven Global Alfvén Wave Power Above the Auroral Acceleration Region. Journal of Geophysical Research: Space Physics, 2020, 125, e2019JA027444. | 0.8 | 5 |
| 210 | Testing the Organization of Lowerâ€Band Whistlerâ€Mode Chorus Wave Properties by Plasmapause Location. Journal of Geophysical Research: Space Physics, 2021, 126, e2020JA028458. | 0.8 | 5 |
| 211 | Reconciliation of the substorm onset determined on the ground and at the Polar spacecraft. Geophysical Research Letters, 2001, 28, 107-110. | 1.5 | 4 |
| 212 | Large-Amplitude Whistler Waves and Electron Acceleration in the Earth's Radiation Belts: A Review of Stereo and Wind Observations. Geophysical Monograph Series, 0, , 41-52. | 0.1 | 4 |
| 213 | Multipoint Observations of Quasiperiodic Emission Intensification and Effects on Energetic Electron Precipitation. Journal of Geophysical Research: Space Physics, 2021, 126, e2020JA028484. | 0.8 | 4 |
| 214 | Auroral Beads in Conjunction With Kinetic Alfvén Waves in the Equatorial Innerâ€Magnetosphere. Geophysical Research Letters, 2022, 49, . | 1.5 | 4 |
| 215 | Hiss or equatorial noise? Ambiguities in analyzing suprathermal ion plasma wave resonance. Journal of Geophysical Research: Space Physics, 2016, 121, 9619-9631. | 0.8 | 3 |
| 216 | Characteristics of Sudden Commencements Observed by Van Allen Probes in the Inner Magnetosphere. Journal of Geophysical Research: Space Physics, 2018, 123, 1295-1304. | 0.8 | 3 |

J R WYGANT

| # | Article | IF | CITATIONS |
|-----|---|-----|-----------|
| 217 | SCâ€Associated Electric Field Variations in the Magnetosphere and Ionospheric Convective Flows. Journal of Geophysical Research: Space Physics, 2017, 122, 11,044. | 0.8 | 2 |
| 218 | Modeling advective transport of radiation belt electrons. Journal of Atmospheric and Solar-Terrestrial Physics, 2021, 214, 105509. | 0.6 | 2 |
| 219 | Propagation and Dispersion of Lightning-Generated Whistlers Measured From the Van Allen Probes. Frontiers in Physics, 2021, 9, . | 1.0 | 2 |
| 220 | Detection of Hertz Frequency Multiharmonic Field Line Resonances at Low‣ (L Â=Â1.1–1.5) During Van Allen Probe Perigee Passes. Geophysical Research Letters, 2021, 48, 2020GL090632. | 1.5 | 2 |
| 221 | Maximizing the Accuracy of Double Probe Electric Field Measurements Near Perigee: The Case of the Van Allen Probes Instruments. Journal of Geophysical Research: Space Physics, 2022, 127, . | 0.8 | 2 |
| 222 | Calculation of the Atomic Oxygen Fluence on the Van Allen Probes. Journal of Geophysical Research: Space Physics, 2020, 125, e2020JA027944. | 0.8 | 1 |
| 223 | The Outer Radiation Belt Injection, Transport, Acceleration and Loss Satellite (ORBITALS): A Proposed Canadian Small Satellite Mission for ILWS. , 2009, , . | | 0 |
| 224 | Energetics and Alfvénic Coupling of a Poleward Boundary Intensification: A Polar Case Study. Journal of Geophysical Research: Space Physics, 2020, 125, e2020JA028041. | 0.8 | 0 |
| 225 | A Multiâ€Instrument Study of a Dipolarization Event in the Inner Magnetosphere. Journal of Geophysical Research: Space Physics, 2021, 126, e2021JA029294. | 0.8 | 0 |
| 226 | From the Electromagnetic Power of Lightning on Earth to Lightning-Generated Whistlers in Space. , 2022, , . | | 0 |