A N Jaynes

List of Publications by Year
in descending order

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103 papers	4,476 citations	109321 35 h-index	114465 63 g-index
122 all docs	122 docs citations	122 times ranked	2474 citing authors

#	Article	IF	Citations
1	Phase Space Density Analysis of Outer Radiation Belt Electron Energization and Loss During Geoeffective and Nongeoeffective Sheath Regions. Journal of Geophysical Research: Space Physics, 2022, 127, .	2.4	2
2	Radial Transport Versus Local Acceleration: The Longâ€Standing Debate. Earth and Space Science, 2022, 9, .	2.6	7
3	Statistics of Multiâ€MeV Electron Driftâ€Periodic Flux Oscillations Using Van Allen Probes Observations. Geophysical Research Letters, 2022, 49, .	4.0	2
4	Van Allen Belt Punctures and Their Correlation With Solar Wind, Geomagnetic Activity, and ULF Waves. Journal of Geophysical Research: Space Physics, 2021, 126, .	2.4	1
5	RBSPâ€ECT Combined Pitch Angle Resolved Electron Flux Data Product. Journal of Geophysical Research: Space Physics, 2021, 126, e2020JA028637.	2.4	11
6	The Diffuse Auroral Eraser. Journal of Geophysical Research: Space Physics, 2021, 126, e2020JA028805.	2.4	0
7	Prompt Response of the Dayside Magnetosphere to Discrete Structures Within the Sheath Region of a Coronal Mass Ejection. Geophysical Research Letters, 2021, 48, e2021GL092700.	4.0	7
8	The Relativistic Electron-Proton Telescope (REPT) Investigation: Design, Operational Properties, and Science Highlights. Space Science Reviews, 2021, 217, 1.	8.1	23
9	Van Allen Probes Observations of Multiâ€MeV Electron Driftâ€Periodic Flux Oscillations in Earth's Outer Radiation Belt During the March 2017 Event. Journal of Geophysical Research: Space Physics, 2021, 126, e2021JA029284.	2.4	7
10	Swarm Observations of Dawn/Dusk Asymmetries Between Pedersen Conductance in Upward and Downward Fieldâ€Aligned Current Regions. Earth and Space Science, 2021, 8, e2020EA001167.	2.6	2
11	Can Earth's Magnetotail Plasma Sheet Produce a Source of Relativistic Electrons for the Radiation Belts?. Geophysical Research Letters, 2021, 48, e2021GL095495.	4.0	11
12	Testing the Organization of Lowerâ€Band Whistlerâ€Mode Chorus Wave Properties by Plasmapause Location. Journal of Geophysical Research: Space Physics, 2021, 126, e2020JA028458.	2.4	5
13	MHDâ€Test Particles Simulations of Moderate CME and CIRâ€Driven Geomagnetic Storms at Solar Minimum. Space Weather, 2021, 19, e2021SW002882.	3.7	6
14	Multiâ€MeV Electron Dynamics Near the Inner Edge of the Outer Radiation Belt. Geophysical Research Letters, 2021, 48, .	4.0	3
15	Relativistic Electron Microbursts as Highâ€Energy Tail of Pulsating Aurora Electrons. Geophysical Research Letters, 2020, 47, e2020GL090360.	4.0	66
16	The AEPEX mission: Imaging energetic particle precipitation in the atmosphere through its bremsstrahlung X-ray signatures. Advances in Space Research, 2020, 66, 66-82.	2.6	13
17	Solar Energetic Proton Access to the Nearâ€Equatorial Inner Magnetosphere. Journal of Geophysical Research: Space Physics, 2020, 125, e2019JA027584.	2.4	5
18	Raytracing Study of Source Regions of Whistler Mode Wave Power Distribution Relative to the Plasmapause. Journal of Geophysical Research: Space Physics, 2020, 125, e2019JA027154.	2.4	2

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19	Simultaneous Observations of Electromagnetic Ion Cyclotron (EMIC) Waves and Pitch Angle Scattering During a Van Allen Probes Conjunction. Journal of Geophysical Research: Space Physics, 2020, 125, e2019JA027424.	2.4	10
20	The Role of the Dynamic Plasmapause in Outer Radiation Belt Electron Flux Enhancement. Geophysical Research Letters, 2020, 47, e2020GL086991.	4.0	3
21	Outer radiation belt and inner magnetospheric response to sheath regions of coronal mass ejections: a statistical analysis. Annales Geophysicae, 2020, 38, 683-701.	1.6	17
22	Daedalus: a low-flying spacecraft for in situ exploration of the lower thermosphereâ€“ionosphere. Geoscientific Instrumentation, Methods and Data Systems, 2020, 9, 153-191.	1.6	25
23	Driftâ€Dispersed Flux Dropouts of Energetic Electrons Observed in Earth's Middle Magnetosphere by the Magnetospheric Multiscale (MMS) Mission. Geophysical Research Letters, 2019, 46, 3069-3078.	4.0	7
24	RBSPâ€ECT Combined Spinâ€Averaged Electron Flux Data Product. Journal of Geophysical Research: Space Physics, 2019, 124, 9124-9136.	2.4	34
25	Plasmaspheric hiss waves generate a reversed energy spectrum of radiation belt electrons. Nature Physics, 2019, 15, 367-372.	16.7	66
26	Characteristics of Highâ€Energy Proton Responses to Geomagnetic Activities in the Inner Radiation Belt Observed by the RBSP Satellite. Journal of Geophysical Research: Space Physics, 2019, 124, 7581-7591.	2.4	4
27	Characterization and Evolution of Radiation Belt Electron Energy Spectra Based on the Van Allen Probes Measurements. Journal of Geophysical Research: Space Physics, 2019, 124, 4217-4232.	2.4	25
28	Investigating Loss of Relativistic Electrons Associated With EMIC Waves at Low L Values on 22 June 2015. Journal of Geophysical Research: Space Physics, 2019, 124, 4022-4036.	2.4	28
29	Multiyear Measurements of Radiation Belt Electrons: Acceleration, Transport, and Loss. Journal of Geophysical Research: Space Physics, 2019, 124, 2588-2602.	2.4	48
30	Outer Van Allen Radiation Belt Response to Interacting Interplanetary Coronal Mass Ejections. Journal of Geophysical Research: Space Physics, 2019, 124, 1927-1947.	2.4	14
31	The Effects of Geomagnetic Storms and Solar Wind Conditions on the Ultrarelativistic Electron Flux Enhancements. Journal of Geophysical Research: Space Physics, 2019, 124, 1948-1965.	2.4	25
32	The Space Physics Environment Data Analysis System (SPEDAS). Space Science Reviews, 2019, 215, 9.	8.1	332
33	Comparison of Van Allen Probes Energetic Electron Data With Corresponding GOESâ€15 Measurements: 2012â€“2018. Journal of Geophysical Research: Space Physics, 2019, 124, 9924-9942.	2.4	16
34	On the Acceleration Mechanism of Ultrarelativistic Electrons in the Center of the Outer Radiation Belt: A Statistical Study. Journal of Geophysical Research: Space Physics, 2019, 124, 8590-8599.	2.4	27
35	The Response of Earth's Electron Radiation Belts to Geomagnetic Storms: Statistics From the Van Allen Probes Era Including Effects From Different Storm Drivers. Journal of Geophysical Research: Space Physics, 2019, 124, 1013-1034.	2.4	84
36	Statistical Similarities Between WSAâ€ENLIL+Cone Model and MAVEN in Situ Observations From November 2014 to March 2016. Space Weather, 2018, 16, 157-171.	3.7	2

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37	Wave Phenomena and Beamâ€Plasma Interactions at the Magnetopause Reconnection Region. Journal of Geophysical Research: Space Physics, 2018, 123, 1118-1133.	2.4	19
38	Space Weather Effects in the Earthâ€™s Radiation Belts. Space Science Reviews, 2018, 214, 1.	8.1	121
39	Multiscale Currents Observed by MMS in the Flow Braking Region. Journal of Geophysical Research: Space Physics, 2018, 123, 1260-1278.	2.4	32
40	Electron-scale dynamics of the diffusion region during symmetric magnetic reconnection in space. Science, 2018, 362, 1391-1395.	12.6	221
41	The Acceleration of Ultrarelativistic Electrons During a Small to Moderate Storm of 21 April 2017. Geophysical Research Letters, 2018, 45, 5818-5825.	4.0	25
42	Fast Diffusion of Ultrarelativistic Electrons in the Outer Radiation Belt: 17 March 2015 Storm Event. Geophysical Research Letters, 2018, 45, 10874-10882.	4.0	49
43	Frequency Dependent Source Locations of Whistler Mode Waves in the Plasmasphere: A Raytracing Approach. , 2018, , .		0
44	The origin of pulsating auroras. Nature, 2018, 554, 302-303.	27.8	1
45	Autogenous and efficient acceleration of energetic ions upstream of Earthâ€™s bow shock. Nature, 2018, 561, 206-210.	27.8	47
46	An Empirical Model of Radiation Belt Electron Pitch Angle Distributions Based On Van Allen Probes Measurements. Journal of Geophysical Research: Space Physics, 2018, 123, 3493-3511.	2.4	41
47	On the relation between radiation belt electrons and solar wind parameters/geomagnetic indices: Dependence on the first adiabatic invariant and L[*]. Journal of Geophysical Research: Space Physics, 2017, 122, 1624-1642.	2.4	38
48	The role of the convection electric field in filling the slot region between the inner and outer radiation belts. Journal of Geophysical Research: Space Physics, 2017, 122, 2051-2068.	2.4	25
49	Radiation belt electron dynamics at low L (<4): Van Allen Probes era versus previous two solar cycles. Journal of Geophysical Research: Space Physics, 2017, 122, 5224-5234.	2.4	33
50	The nonlinear behavior of whistler waves at the reconnecting dayside magnetopause as observed by the Magnetospheric Multiscale mission: A case study. Journal of Geophysical Research: Space Physics, 2017, 122, 5487-5501.	2.4	22
51	Investigating the source of nearâ€relativistic and relativistic electrons in Earth's inner radiation belt. Journal of Geophysical Research: Space Physics, 2017, 122, 695-710.	2.4	48
52	Multipoint Observations of Energetic Particle Injections and Substorm Activity During a Conjunction Between Magnetospheric Multiscale (MMS) and Van Allen Probes. Journal of Geophysical Research: Space Physics, 2017, 122, 11,481.	2.4	42
53	Simulated Prompt Acceleration of Multiâ€MeV Electrons by the 17 March 2015 Interplanetary Shock. Journal of Geophysical Research: Space Physics, 2017, 122, 10,036.	2.4	33
54	Examining Coherency Scales, Substructure, and Propagation of Whistler Mode Chorus Elements With Magnetospheric Multiscale (MMS). Journal of Geophysical Research: Space Physics, 2017, 122, 11,201.	2.4	18

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55	Lower Hybrid Drift Waves and Electromagnetic Electron Spaceâ€Phase Holes Associated With Dipolarization Fronts and Fieldâ€Aligned Currents Observed by the Magnetospheric Multiscale Mission During a Substorm. Journal of Geophysical Research: Space Physics, 2017, 122, 12,236.	2.4	31
56	Dominance of highâ€energy (>150ÂkeV) heavy ion intensities in Earth's middle to outer magnetosphere. Journal of Geophysical Research: Space Physics, 2017, 122, 9282-9293.	2.4	18
57	Statistical properties of lowâ€frequency plasmaspheric hiss. Journal of Geophysical Research: Space Physics, 2017, 122, 8340-8352.	2.4	55
58	Statistical study of the storm time radiation belt evolution during Van Allen Probes era: CMEâ€versus CIRâ€driven storms. Journal of Geophysical Research: Space Physics, 2017, 122, 8327-8339.	2.4	50
59	Statistical analysis of MMS observations of energetic electron escape observed at/beyond the dayside magnetopause. Journal of Geophysical Research: Space Physics, 2017, 122, 9440-9463.	2.4	14
60	Van Allen Probes Measurements of Energetic Particle Deep Penetration Into the Low L Region (LÂ<Â4) During the Storm on 8 April 2016. Journal of Geophysical Research: Space Physics, 2017, 122, 12,140.	2.4	22
61	Space Weather Effects Produced by the Ring Current Particles. Space Science Reviews, 2017, 212, 1315-1344.	8.1	38
62	Power distribution of magnetospheric whistler mode waves with finite electron and ion temperature. , 2017, , .		0
63	Near-Earth plasma sheet boundary dynamics during substorm dipolarization. Earth, Planets and Space, 2017, 69, 129.	2.5	15
64	Space Weather Effects Produced by the Ring Current Particles. Space Sciences Series of ISSI, 2017, , 431-460.	0.0	0
65	Space Weather Effects in the Earthâ€™s Radiation Belts. Space Sciences Series of ISSI, 2017, , 371-430.	0.0	0
66	Electron jet of asymmetric reconnection. Geophysical Research Letters, 2016, 43, 5571-5580.	4.0	66
67	Energetic electron acceleration observed by MMS in the vicinity of an Xâ€line crossing. Geophysical Research Letters, 2016, 43, 7356-7363.	4.0	21
68	Inward diffusion and loss of radiation belt protons. Journal of Geophysical Research: Space Physics, 2016, 121, 1969-1978.	2.4	26
69	Electron-scale measurements of magnetic reconnection in space. Science, 2016, 352, aaf2939.	12.6	545
70	The relationship between the plasmapause and outer belt electrons. Journal of Geophysical Research: Space Physics, 2016, 121, 8392-8416.	2.4	18
71	Observations of energetic particle escape at the magnetopause: Early results from the MMS Energetic Ion Spectrometer (EIS). Geophysical Research Letters, 2016, 43, 5960-5968.	4.0	23
72	Transient, smallâ€scale fieldâ€aligned currents in the plasma sheet boundary layer during storm time substorms. Geophysical Research Letters, 2016, 43, 4841-4849.	4.0	30

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73	Kinetic evidence of magnetic reconnection due to Kelvinâ€Helmholtz waves. Geophysical Research Letters, 2016, 43, 5635-5643.	4.0	47
74	Van Allen Probes observations of oxygen cyclotron harmonic waves in the inner magnetosphere. Geophysical Research Letters, 2016, 43, 8827-8834.	4.0	35
75	The distribution of plasmaspheric hiss wave power with respect to plasmapause location. Geophysical Research Letters, 2016, 43, 7878-7886.	4.0	78
76	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.	2.4	93
77	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.	2.4	68
78	Energy limits of electron acceleration in the plasma sheet during substorms: A case study with the Magnetospheric Multiscale (MMS) mission. Geophysical Research Letters, 2016, 43, 7785-7794.	4.0	51
79	Large-amplitude electric fields in the inner magnetosphere: Van Allen Probes observations of subauroral polarization streams. Journal of Geophysical Research: Space Physics, 2016, 121, 5294-5306.	2.4	32
80	Observations of whistler mode waves with nonlinear parallel electric fields near the dayside magnetic reconnection separatrix by the Magnetospheric Multiscale mission. Geophysical Research Letters, 2016, 43, 5909-5917.	4.0	61
81	Electric and magnetic radial diffusion coefficients using the Van Allen probes data. Journal of Geophysical Research: Space Physics, 2016, 121, 9586-9607.	2.4	66
82	Microinjections observed by MMS FEEPS in the dusk to midnight region. Geophysical Research Letters, 2016, 43, 6078-6086.	4.0	13
83	Prompt injections of highly relativistic electrons induced by interplanetary shocks: A statistical study of Van Allen Probes observations. Geophysical Research Letters, 2016, 43, 12,317.	4.0	32
84	A telescopic and microscopic examination of acceleration in the June 2015 geomagnetic storm: Magnetospheric Multiscale and Van Allen Probes study of substorm particle injection. Geophysical Research Letters, 2016, 43, 6051-6059.	4.0	30
85	Observations of the impenetrable barrier, the plasmapause, and the VLF bubble during the 17 March 2015 storm. Journal of Geophysical Research: Space Physics, 2016, 121, 5537-5548.	2.4	59
86	The Flyâ€™s Eye Energetic Particle Spectrometer (FEEPS) Sensors for the Magnetospheric Multiscale (MMS) Mission. Space Science Reviews, 2016, 199, 309-329.	8.1	89
87	Source and seed populations for relativistic electrons: Their roles in radiation belt changes. Journal of Geophysical Research: Space Physics, 2015, 120, 7240-7254.	2.4	215
88	Correlated Pc4â€“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.	2.4	50
89	Kinetic AlfvÃ©n waves and particle response associated with a shockâ€induced, global ULF perturbation of the terrestrial magnetosphere. Geophysical Research Letters, 2015, 42, 9203-9212.	4.0	29
90	Relativistic electron response to the combined magnetospheric impact of a coronal mass ejection overlapping with a highâ€speed stream: Van Allen Probes observations. Journal of Geophysical Research: Space Physics, 2015, 120, 7629-7641.	2.4	17

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91	Upper limit on the inner radiation belt MeV electron intensity. Journal of Geophysical Research: Space Physics, 2015, 120, 1215-1228.	2.4	77
92	Evolution of relativistic outer belt electrons during an extended quiescent period. Journal of Geophysical Research: Space Physics, 2014, 119, 9558-9566.	2.4	28
93	Observations of the inner radiation belt: CRAND and trapped solar protons. Journal of Geophysical Research: Space Physics, 2014, 119, 6541-6552.	2.4	50
94	Characteristics of pitch angle distributions of hundreds of keV electrons in the slot region and inner radiation belt. Journal of Geophysical Research: Space Physics, 2014, 119, 9543-9557.	2.4	41
95	THEMIS measurements of quasiâ€static electric fields in the inner magnetosphere. Journal of Geophysical Research: Space Physics, 2014, 119, 9939-9951.	2.4	29
96	An impenetrable barrier to ultrarelativistic electrons in the Van Allen radiation belts. Nature, 2014, 515, 531-534.	27.8	159
97	Peculiar pitch angle distribution of relativistic electrons in the inner radiation belt and slot region. Geophysical Research Letters, 2014, 41, 2250-2257.	4.0	53
98	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.	2.4	24
99	Gradual diffusion and punctuated phase space density enhancements of highly relativistic electrons: Van Allen Probes observations. Geophysical Research Letters, 2014, 41, 1351-1358.	4.0	127
100	Pulsating auroral electron flux modulations in the equatorial magnetosphere. Journal of Geophysical Research: Space Physics, 2013, 118, 4884-4894.	2.4	46
101	James Van Allen and His Namesake <scp>NASA</scp> Mission. Eos, 2013, 94, 469-470.	0.1	4
102	Persistent, widespread pulsating aurora: A case study. Journal of Geophysical Research: Space Physics, 2013, 118, 2998-3006.	2.4	40
103	A Statistical Study of Magnetopause Boundary Layer Energetic Electron Enhancements Using MMS. Frontiers in Astronomy and Space Sciences, 0, 9, .	2.8	1