

# Huinan Zheng

## List of Publications by Year in descending order

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Version: 2024-02-01

60  
papers

2,279  
citations

159358

30  
h-index

214527

47  
g-index

60  
all docs

60  
docs citations

60  
times ranked

930  
citing authors

#	ARTICLE	IF	CITATIONS
1	Modeling of outer radiation belt electrons by multidimensional diffusion process. Journal of Geophysical Research, 2009, 114, .	3.3	181
2	Three-dimensional simulations of outer radiation belt electron dynamics including cross-diffusion terms. Journal of Geophysical Research, 2010, 115, .	3.3	121
3	Energetic electron distributions fitted with a relativistic kappa-type function at geosynchronous orbit. Journal of Geophysical Research, 2008, 113, .	3.3	111
4	STEERB: A three-dimensional code for storm-time evolution of electron radiation belt. Journal of Geophysical Research, 2010, 115, .	3.3	105
5	CRRES observation and STEERB simulation of the 9 October 1990 electron radiation belt dropout event. Geophysical Research Letters, 2011, 38, n/a-n/a.	1.5	85
6	Radiation belt electron dynamics driven by adiabatic transport, radial diffusion, and wave-particle interactions. Journal of Geophysical Research, 2011, 116, n/a-n/a.	3.3	73
7	Ultra-low-frequency wave-driven diffusion of radiation belt relativistic electrons. Nature Communications, 2015, 6, 10096.	5.8	71
8	Evolution of electron pitch angle distribution due to interactions with whistler mode chorus following substorm injections. Journal of Geophysical Research, 2009, 114, .	3.3	69
9	Large-Amplitude Extremely Low Frequency Hiss Waves in Plasmaspheric Plumes. Geophysical Research Letters, 2018, 45, 565-577.	1.5	69
10	Nonstorm time dynamics of electron radiation belts observed by the Van Allen Probes. Geophysical Research Letters, 2014, 41, 229-235.	1.5	60
11	Electromagnetic ion cyclotron waves instability threshold condition of suprathermal protons by kappa distribution. Journal of Geophysical Research, 2007, 112, .	3.3	57
12	Magnetohydrodynamic simulation of the interaction between two interplanetary magnetic clouds and its consequent geoeffectiveness. Journal of Geophysical Research, 2007, 112, .	3.3	55
13	Whistler instability threshold condition of energetic electrons by kappa distribution in space plasmas. Journal of Geophysical Research, 2006, 111, .	3.3	53
14	A parametric ray tracing study of superluminous auroral kilometric radiation wave modes. Journal of Geophysical Research, 2007, 112, .	3.3	50
15	Bounce-averaged advection and diffusion coefficients for monochromatic electromagnetic ion cyclotron wave: Comparison between test-particle and quasi-linear models. Journal of Geophysical Research, 2012, 117, .	3.3	49
16	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
17	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
18	A parametric study on the diffuse auroral precipitation by resonant interaction with whistler mode chorus. Journal of Geophysical Research, 2010, 115, .	3.3	43

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19	Combined radial diffusion and adiabatic transport of radiation belt electrons with arbitrary pitch angles. <i>Journal of Geophysical Research</i> , 2010, 115, .	3.3	43
20	Prompt Disappearance and Emergence of Radiation Belt Magnetosonic Waves Induced by Solar Wind Dynamic Pressure Variations. <i>Geophysical Research Letters</i> , 2018, 45, 585-594.	1.5	42
21	Numerical simulations of storm-time outer radiation belt dynamics by wave-particle interactions including cross diffusion. <i>Journal of Atmospheric and Solar-Terrestrial Physics</i> , 2011, 73, 95-105.	0.6	41
22	Plasmatrough exohiss waves observed by Van Allen Probes: Evidence for leakage from plasmasphere and resonant scattering of radiation belt electrons. <i>Geophysical Research Letters</i> , 2015, 42, 1012-1019.	1.5	40
23	Magnetohydrodynamic simulation of the interaction between two interplanetary magnetic clouds and its consequent geoeffectiveness: 2. Oblique collision. <i>Journal of Geophysical Research</i> , 2009, 114, .	3.3	39
24	Magnetohydrodynamic simulation of the interaction between interplanetary strong shock and magnetic cloud and its consequent geoeffectiveness. <i>Journal of Geophysical Research</i> , 2006, 111, .	3.3	38
25	Rapid Loss of Radiation Belt Relativistic Electrons by EMIC Waves. <i>Journal of Geophysical Research: Space Physics</i> , 2017, 122, 9880-9897.	0.8	38
26	Quantifying the relative contributions of substorm injections and chorus waves to the rapid outward extension of electron radiation belt. <i>Journal of Geophysical Research: Space Physics</i> , 2014, 119, 10,023.	0.8	37
27	Disappearance of plasmaspheric hiss following interplanetary shock. <i>Geophysical Research Letters</i> , 2015, 42, 3129-3140.	1.5	34
28	Multipoint Observations of Nightside Plasmaspheric Hiss Generated by Substorm-Injected Electrons. <i>Geophysical Research Letters</i> , 2018, 45, 10,921.	1.5	34
29	Magnetohydrodynamic simulation of the interaction between interplanetary strong shock and magnetic cloud and its consequent geoeffectiveness: 2. Oblique collision. <i>Journal of Geophysical Research</i> , 2006, 111, .	3.3	32
30	Three-dimensional simulation of energetic outer zone electron dynamics due to wave-particle interaction and azimuthal advection. <i>Journal of Geophysical Research</i> , 2010, 115, .	3.3	31
31	Simultaneous disappearances of plasmaspheric hiss, exohiss, and chorus waves triggered by a sudden decrease in solar wind dynamic pressure. <i>Geophysical Research Letters</i> , 2017, 44, 52-61.	1.5	31
32	Dynamic evolution of energetic outer zone electrons due to whistler mode chorus based on a realistic density model. <i>Journal of Geophysical Research</i> , 2009, 114, .	3.3	30
33	Intense low-frequency chorus waves observed by Van Allen Probes: Fine structures and potential effect on radiation belt electrons. <i>Geophysical Research Letters</i> , 2016, 43, 967-977.	1.5	30
34	Direct observation of generation and propagation of magnetosonic waves following substorm injection. <i>Geophysical Research Letters</i> , 2017, 44, 7587-7597.	1.5	30
35	Latitudinal dependence of nonlinear interaction between electromagnetic ion cyclotron wave and radiation belt relativistic electrons. <i>Journal of Geophysical Research: Space Physics</i> , 2013, 118, 3188-3202.	0.8	28
36	A positive correlation between energetic electron butterfly distributions and magnetosonic waves in the radiation belt slot region. <i>Geophysical Research Letters</i> , 2017, 44, 3980-3990.	1.5	27

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37	A parametric study on outer radiation belt electron evolution by superluminous $\chi$ mode waves. <i>Journal of Geophysical Research</i> , 2010, 115, .	3.3	26
38	Nonlinear interaction between ring current protons and electromagnetic ion cyclotron waves. <i>Journal of Geophysical Research</i> , 2012, 117, .	3.3	25
39	Latitudinal dependence of nonlinear interaction between electromagnetic ion cyclotron wave and terrestrial ring current ions. <i>Physics of Plasmas</i> , 2014, 21, .	0.7	25
40	Rapid flattening of butterfly pitch angle distributions of radiation belt electrons by whistler-mode chorus. <i>Geophysical Research Letters</i> , 2016, 43, 8339-8347.	1.5	23
41	Magnetosonic Harmonic Falling and Rising Frequency Emissions Potentially Generated by Nonlinear Wave-Wave Interactions in the Van Allen Radiation Belts. <i>Geophysical Research Letters</i> , 2018, 45, 7985-7995.	1.5	22
42	Comprehensive Observations of Substorm-Enhanced Plasmaspheric Hiss Generation, Propagation, and Dissipation. <i>Geophysical Research Letters</i> , 2020, 47, e2019GL086040.	1.5	21
43	Nonlinear fundamental and harmonic cyclotron resonant scattering of radiation belt ultrarelativistic electrons by oblique monochromatic EMIC waves. <i>Journal of Geophysical Research: Space Physics</i> , 2017, 122, 1928-1945.	0.8	19
44	Shock-Induced Disappearance and Subsequent Recovery of Plasmaspheric Hiss: Coordinated Observations of RBSP, THEMIS, and POES Satellites. <i>Journal of Geophysical Research: Space Physics</i> , 2017, 122, 10,421.	0.8	19
45	Nonlinear Coupling Between Whistler-Mode Chorus and Electron Cyclotron Harmonic Waves in the Magnetosphere. <i>Geophysical Research Letters</i> , 2018, 45, 12,685.	1.5	15
46	A three-dimensional analysis of global propagation of magnetohydrodynamic (MHD) waves in a structured solar atmosphere. <i>Journal of Geophysical Research</i> , 2005, 110, .	3.3	14
47	Off-Equatorial Source of Magnetosonic Waves Extending Above the Lower Hybrid Resonance Frequency in the Inner Magnetosphere. <i>Geophysical Research Letters</i> , 2021, 48, e2020GL091830.	1.5	14
48	Can Solar Wind Decompressive Discontinuities Suppress Magnetospheric Electromagnetic Ion Cyclotron Waves Associated With Fresh Proton Injections?. <i>Geophysical Research Letters</i> , 2020, 47, e2020GL090296.	1.5	12
49	Quenching of Equatorial Magnetosonic Waves by Substorm Proton Injections. <i>Geophysical Research Letters</i> , 2019, 46, 6156-6167.	1.5	10
50	Suprathermal Electron Evolution Under the Competition Between Plasmaspheric Plume Hiss Wave Heating and Collisional Cooling. <i>Geophysical Research Letters</i> , 2020, 47, e2020GL089649.	1.5	10
51	Exohiss wave enhancement following substorm electron injection in the dayside magnetosphere. <i>Earth and Planetary Physics</i> , 2018, 2, 1-12.	0.4	9
52	Magnetospheric Chorus, Exohiss, and Magnetosonic Emissions Simultaneously Modulated by Fundamental Toroidal Standing Alfvén Waves Following Solar Wind Dynamic Pressure Fluctuations. <i>Geophysical Research Letters</i> , 2019, 46, 1900-1910.	1.5	9
53	Proton auroral intensification induced by interplanetary shock on 7 November 2004. <i>Journal of Geophysical Research</i> , 2011, 116, n/a-n/a.	3.3	8
54	Van Allen Probes observations of whistler-mode chorus with long-lived oscillating tones. <i>Geophysical Research Letters</i> , 2017, 44, 5909-5919.	1.5	8

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55	Rapid Landau Heating of Martian Topside Ionospheric Electrons by Large-Amplitude Magnetosonic Waves. <i>Geophysical Research Letters</i> , 2020, 47, e2020GL090190.	1.5	5
56	Immediate Impact of Solar Wind Dynamic Pressure Pulses on Whistler-Mode Chorus Waves in the Inner Magnetosphere. <i>Geophysical Research Letters</i> , 2022, 49, .	1.5	5
57	Generation of Lower <i>L</i> Shell Dayside Chorus by Energetic Electrons From the Plasma Sheet. <i>Journal of Geophysical Research: Space Physics</i> , 2018, 123, 8109-8121.	0.8	4
58	A Rapid Localized Deceleration of Earth's Radiation Belt Relativistic Electrons Driven by Storm Proton Injection. <i>Geophysical Research Letters</i> , 2022, 49, .	1.5	1
59	Eigenmodes of quasi-static magnetic islands in current sheet. <i>Physics of Plasmas</i> , 2011, 18, 122110.	0.7	0
60	Three-dimensional ray-tracing simulation of fast magnetoacoustic waves in a stratified solar atmosphere. <i>Science China Technological Sciences</i> , 2017, 60, 1570-1576.	2.0	0