Zhigang Yuan

List of Publications by Year
in descending order

116	2,780	159585	214800
papers	citations	30 h-index	47 g-index

116	116	116	1325
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Kinetic structure and wave properties associated with sharp dipolarization front observed by Cluster. Annales Geophysicae, 2012, 30, 97-107.	1.6	124
2	Electron acceleration in the reconnection diffusion region: Cluster observations. Geophysical Research Letters, 2012, 39, .	4.0	95
3	On the Existence of the Kolmogorov Inertial Range in the Terrestrial Magnetosheath Turbulence. Astrophysical Journal Letters, 2017, 836, L10.	8.3	90
4	Electromagnetic energy conversion at dipolarization fronts: Multispacecraft results. Journal of Geophysical Research: Space Physics, 2015, 120, 4496-4502.	2.4	86
5	Magnetospheric Multiscale Observations of Electron Vortex Magnetic Hole in the Turbulent Magnetosheath Plasma. Astrophysical Journal Letters, 2017, 836, L27.	8.3	85
6	Observations of turbulence within reconnection jet in the presence of guide field. Geophysical Research Letters, 2012, 39, .	4.0	78
7	KINETIC TURBULENCE IN THE TERRESTRIAL MAGNETOSHEATH: CLUSTER OBSERVATIONS. Astrophysical Journal Letters, 2014, 789, L28.	8.3	74
8	Statistical characteristics of EMIC waves: Van Allen Probe observations. Journal of Geophysical Research: Space Physics, 2015, 120, 4400-4408.	2.4	72
9	Observation of waves near lower hybrid frequency in the reconnection region with thin current sheet. Journal of Geophysical Research, 2009, 114, .	3.3	69
10	Cluster observations of kinetic structures and electron acceleration within a dynamic plasma bubble. Journal of Geophysical Research: Space Physics, 2013, 118, 674-684.	2.4	66
11	A statistical study of kineticâ€size magnetic holes in turbulent magnetosheath: MMS observations. Journal of Geophysical Research: Space Physics, 2017, 122, 8577-8588.	2.4	64
12	Link between EMIC waves in a plasmaspheric plume and a detached subâ€auroral proton arc with observations of Cluster and IMAGE satellites. Geophysical Research Letters, 2010, 37, .	4.0	61
13	Cold electron heating by EMIC waves in the plasmaspheric plume with observations of the Cluster satellite. Geophysical Research Letters, 2014, 41, 1830-1837.	4.0	57
14	Two types of whistler waves in the hall reconnection region. Journal of Geophysical Research: Space Physics, 2016, 121, 6639-6646.	2.4	57
15	Observation of largeâ€amplitude magnetosonic waves at dipolarization fronts. Journal of Geophysical Research: Space Physics, 2014, 119, 4335-4347.	2.4	53
16	MMS observations of ionâ€scale magnetic island in the magnetosheath turbulent plasma. Geophysical Research Letters, 2016, 43, 7850-7858.	4.0	53
17	In situ observations of EMIC waves in O⁺ band by the Van Allen Probe A. Geophysical Research Letters, 2015, 42, 1312-1317.	4.0	52
18	Wave properties in the magnetic reconnection diffusion region with high Î²: Application of the kâ€filtering method to Cluster multispacecraft data. Journal of Geophysical Research, 2010, 115, .	3.3	48

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19	Observations of Whistler Waves Correlated with Electron-scale Coherent Structures in the Magnetosheath Turbulent Plasma. Astrophysical Journal, 2018, 861, 29.	4.5	46
20	Waveâ€particle interaction in a plasmaspheric plume observed by a Cluster satellite. Journal of Geophysical Research, 2012, 117, .	3.3	44
21	Simultaneous observations of precipitating radiation belt electrons and ring current ions associated with the plasmaspheric plume. Journal of Geophysical Research: Space Physics, 2013, 118, 4391-4399.	2.4	43
22	Observations of the Electron Jet Generated by Secondary Reconnection in the Terrestrial Magnetotail. Astrophysical Journal, 2018, 862, 144.	4.5	43
23	In situ observations of magnetosonic waves modulated by background plasma density. Geophysical Research Letters, 2017, 44, 7628-7633.	4.0	42
24	Characteristics of precipitating energetic ions/electrons associated with the waveâ€particle interaction in the plasmaspheric plume. Journal of Geophysical Research, 2012, 117, .	3.3	38
25	Dynamics and waves near multiple magnetic null points in reconnection diffusion region. Journal of Geophysical Research, 2009, 114, .	3.3	37
26	Characteristic distribution and possible roles of waves around the lower hybrid frequency in the magnetotail reconnection region. Journal of Geophysical Research: Space Physics, 2014, 119, 8228-8242.	2.4	34
27	Cold Ion Heating by Magnetosonic Waves in a Density Cavity of the Plasmasphere. Journal of Geophysical Research: Space Physics, 2018, 123, 1242-1250.	2.4	34
28	Precipitation of Radiation Belt Electrons by EMIC Waves With Conjugated Observations of NOAA and Van Allen Satellites. Geophysical Research Letters, 2018, 45, 12,694.	4.0	31
29	Observations of Flux Ropes With Strong Energy Dissipation in the Magnetotail. Geophysical Research Letters, 2019, 46, 580-589.	4.0	31
30	Kinetic simulations of secondary reconnection in the reconnection jet. Journal of Geophysical Research: Space Physics, 2015, 120, 6188-6198.	2.4	30
31	In situ observations of flux rope at the separatrix region of magnetic reconnection. Journal of Geophysical Research: Space Physics, 2016, 121, 205-213.	2.4	30
32	Occurrence rate of whistler waves in the magnetotail reconnection region. Journal of Geophysical Research: Space Physics, 2017, 122, 7188-7196.	2.4	30
33	Statistical characteristics of EMIC waveâ€driven relativistic electron precipitation with observations of POES satellites: Revisit. Journal of Geophysical Research: Space Physics, 2014, 119, 5509-5519.	2.4	29
34	Excitation of oblique O⁺ band EMIC waves in the inner magnetosphere driven by hot H⁺ with ring velocity distributions. Journal of Geophysical Research: Space Physics, 2016, 121, 11,101.	2.4	29
35	Kinetic Scale Slow Solar Wind Turbulence in the Inner Heliosphere: Coexistence of Kinetic AlfvÃ©n Waves and AlfvÃ©n Ion Cyclotron Waves. Astrophysical Journal Letters, 2020, 897, L3.	8.3	28
36	Kinetic simulations of electric field structure within magnetic island during magnetic reconnection and their applications to the satellite observations. Journal of Geophysical Research: Space Physics, 2014, 119, 7402-7412.	2.4	26

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37	A statistical study on the whistler waves behind dipolarization fronts. Journal of Geophysical Research: Space Physics, 2015, 120, 1086-1095.	2.4	25
38	Global Distribution of Proton Rings and Associated Magnetosonic Wave Instability in the Inner Magnetosphere. Geophysical Research Letters, 2018, 45, 10,160.	4.0	25
39	An Automatic Detection Algorithm Applied to Fast Magnetosonic Waves With Observations of the Van Allen Probes. Journal of Geophysical Research: Space Physics, 2019, 124, 3501-3511.	2.4	25
40	Compression-amplified EMIC waves and their effects on relativistic electrons. Physics of Plasmas, 2016, 23, .	1.9	24
41	Geomagnetic storms and EMIC waves: Van Allen Probe observations. Journal of Geophysical Research: Space Physics, 2016, 121, 6444-6457.	2.4	24
42	Evidence of deflected superâ€AlfvÃ©nic electron jet in a reconnection region with weak guide field. Journal of Geophysical Research: Space Physics, 2014, 119, 1541-1548.	2.4	23
43	Dawn-dusk scale of dipolarization front in the Earthâ€™s magnetotail: multi-cases study. Astrophysics and Space Science, 2015, 357, 1.	1.4	23
44	The Role of Upper Hybrid Waves in the Magnetotail Reconnection Electron Diffusion Region. Astrophysical Journal Letters, 2019, 881, L28.	8.3	22
45	Simultaneous Trapping of Electromagnetic Ion Cyclotron and Magnetosonic Waves by Background Plasmas. Journal of Geophysical Research: Space Physics, 2019, 124, 1635-1643.	2.4	22
46	MMS Observations of Kinetic-size Magnetic Holes in the Terrestrial Magnetotail Plasma Sheet. Astrophysical Journal, 2019, 875, 113.	4.5	21
47	Analysis of Turbulence Properties in the Mercury Plasma Environment Using MESSENGER Observations. Astrophysical Journal, 2020, 891, 159.	4.5	19
48	Intermittent Dissipation at Kinetic Scales in the Turbulent Reconnection Outflow. Geophysical Research Letters, 2022, 49, .	4.0	19
49	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.	2.4	18
50	Excitation of O + Band EMIC Waves Through H + Ring Velocity Distributions: Van Allen Probe Observations. Geophysical Research Letters, 2018, 45, 1271-1276.	4.0	18
51	Revisit the Analytical Approximation of Transitâ€Time Scattering for Fast Magnetosonic Waves. Geophysical Research Letters, 2020, 47, e2020GL088434.	4.0	18
52	Observations of Electron Vortex at the Dipolarization Front. Geophysical Research Letters, 2020, 47, e2020GL088448.	4.0	18
53	Periodical Dipolarization Processes in Earth's Magnetotail. Geophysical Research Letters, 2019, 46, 13640-13648.	4.0	17
54	Prompt Emergence and Disappearance of EMIC Waves Driven by the Sequentially Enhanced Solar Wind Dynamic Pressure. Geophysical Research Letters, 2021, 48, e2020GL091479.	4.0	17

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55	Electron-only Reconnection in an Ion-scale Current Sheet at the Magnetopause. Astrophysical Journal, 2021, 922, 54.	4.5	17
56	Influence of precipitating energetic ions caused by EMIC waves on the subauroral ionospheric E region during a geomagnetic storm. Journal of Geophysical Research: Space Physics, 2014, 119, 8462-8471.	2.4	16
57	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.	2.4	16
58	Observations of Magnetic Field Line Curvature and Its Role in the Space Plasma Turbulence. Astrophysical Journal Letters, 2020, 898, L18.	8.3	16
59	Energetic particle precipitation and the influence on the sub-ionosphere in the SED plume during a super geomagnetic storm. Journal of Geophysical Research, 2011, 116, n/a-n/a.	3.3	15
60	Compression-related EMIC waves drive relativistic electron precipitation. Science China Technological Sciences, 2014, 57, 2418-2425.	4.0	15
61	EMIC waves covering wide L shells: MMS and Van Allen Probes observations. Journal of Geophysical Research: Space Physics, 2017, 122, 7387-7395.	2.4	15
62	Characteristics of Magnetic Holes in the Solar Wind Revealed by Parker Solar Probe. Astrophysical Journal, 2021, 908, 56.	4.5	15
63	Oxygen cyclotron harmonic waves observed using Van Allen Probes. Science China Earth Sciences, 2017, 60, 1310-1316.	5.2	14
64	Statistical Properties of Current, Energy Conversion, and Electron Acceleration in Flux Ropes in the Terrestrial Magnetotail. Geophysical Research Letters, 2021, 48, e2021GL093458.	4.0	14
65	Observation of directional change of core field inside flux ropes within one reconnection diffusion region in the Earthâ€™s magnetotail. Science Bulletin, 2014, 59, 4797-4803.	1.7	13
66	First Observations of Magnetosonic Waves With Nonlinear Harmonics. Journal of Geophysical Research: Space Physics, 2020, 125, e2019JA027724.	2.4	13
67	Excitation of Whistler Waves Through the Bidirectional Fieldâ€Aligned Electron Beams With Electron Temperature Anisotropy: MMS Observations. Geophysical Research Letters, 2020, 47, e2020GL087515.	4.0	13
68	A new method for determining the meridional wind velocity during an ionospheric storm. Geophysical Research Letters, 2003, 30, .	4.0	11
69	Global Spatial Distribution of Dipolarization Fronts in the Saturn's Magnetosphere: Cassini Observations. Geophysical Research Letters, 2021, 48, e2021GL092701.	4.0	11
70	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.	4.0	10
71	Saturation Characteristics of Parallel EMIC Waves in the Inner Magnetosphere. Geophysical Research Letters, 2019, 46, 7902-7910.	4.0	10
72	Observations of whistler waves in two sequential flux ropes at the magnetopause. Astrophysics and Space Science, 2019, 364, 1.	1.4	10

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73	Secondâ€Harmonic Generation of Electromagnetic Emissions in a Magnetized Plasma: Kinetic Theory Approach. Geophysical Research Letters, 2021, 48, e2020GL091762.	4.0	10
74	Simultaneous Generation of EMIC and MS Waves During the Magnetic Dip in the Inner Magnetosphere. Geophysical Research Letters, 2021, 48, e2021GL094842.	4.0	10
75	Observational Evidence of Magnetic Reconnection in the Terrestrial Foreshock Region. Astrophysical Journal, 2021, 922, 56.	4.5	10
76	Anisotropy of Magnetic Field Spectra at Kinetic Scales of Solar Wind Turbulence as Revealed by the Parker Solar Probe in the Inner Heliosphere. Astrophysical Journal Letters, 2022, 929, L6.	8.3	10
77	A subauroral polarization stream driven by fieldâ€aligned currents associated with precipitating energetic ions caused by EMIC waves: A case study. Journal of Geophysical Research: Space Physics, 2016, 121, 1696-1705.	2.4	9
78	Narrowband Magnetosonic Waves Near the Lower Hybrid Resonance Frequency in the Inner Magnetosphere: Wave Properties and Excitation Conditions. Journal of Geophysical Research: Space Physics, 2021, 126, .	2.4	9
79	Electron Jets in the Terrestrial Magnetotail: A Statistical Overview. Astrophysical Journal, 2020, 896, 67.	4.5	9
80	In Situ Detection of Kinetic-size Magnetic Holes in the Martian Magnetosheath. Astrophysical Journal, 2021, 922, 107.	4.5	9
81	Formation of Negative J â‹… Eâ€² in the Outer Electron Diffusion Region During Magnetic Reconnection. Journal of Geophysical Research: Space Physics, 2022, 127, .	2.4	9
82	Statistical characteristics of potentially chorusâ€driven energetic electron precipitation from POES observations. Journal of Geophysical Research: Space Physics, 2016, 121, 9531-9546.	2.4	8
83	Electromagnetic Characteristics of Fast Magnetosonic Waves in the Inner Magnetosphere. Journal of Geophysical Research: Space Physics, 2021, 126, e2021JA029759.	2.4	8
84	First Observations of O²⁺ Band EMIC Waves in the Terrestrial Magnetosphere. Geophysical Research Letters, 2021, 48, e2021GL094681.	4.0	8
85	Distribution of Negative JÂ·Eâ€² in the Inflow Edge of the Inner Electron Diffusion Region During Tail Magnetic Reconnection: Simulations Vs. Observations. Geophysical Research Letters, 2022, 49, .	4.0	8
86	Statistical height-dependent relative importance of the Lorentz force and Joule heating in generating atmospheric gravity waves in the auroral electrojets. Journal of Geophysical Research, 2005, 110, .	3.3	7
87	Energetic ions scattered into the loss cone with observations of the ClusterÂsatellite. Annales Geophysicae, 2016, 34, 249-257.	1.6	7
88	Effects of the Plasmapause on the Radial Propagation of Fast Magnetosonic Waves: An Analytical Approach. Journal of Geophysical Research: Space Physics, 2021, 126, e2020JA028330.	2.4	7
89	Electromagnetic Ion Cyclotron Harmonic Waves Generated via Nonlinear Waveâ€Wave Couplings. Geophysical Research Letters, 2022, 49, .	4.0	7
90	Effects of TADs on the F region of the mid-latitude ionosphere during an intense geomagnetic storm. Advances in Space Research, 2009, 44, 1013-1018.	2.6	6

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91	Ionospheric Signatures of Ring Current Ions Scattered by Magnetosonic Waves. Geophysical Research Letters, 2020, 47, e2020GL089032.	4.0	6
92	Multiâ€Spacecraft Measurement of Anisotropic Spatial Correlation Functions at Kinetic Range in the Magnetosheath Turbulence. Journal of Geophysical Research: Space Physics, 2021, 126, e2020JA028780.	2.4	6
93	Radially Full Reflection of Fast Magnetosonic Waves Near the Cutâ€Off Frequency. Journal of Geophysical Research: Space Physics, 2021, 126, e2021JA029508.	2.4	6
94	Observation of Highâ€Frequency Electrostatic Waves in the Dip Region Ahead of Dipolarization Front. Journal of Geophysical Research: Space Physics, 2021, 126, e2021JA029408.	2.4	6
95	Observations of Pitch Angle Changes of Electrons and Highâ€Frequency Wave Activities in the Magnetotail Plasma Bubble. Journal of Geophysical Research: Space Physics, 2022, 127, e2021JA029761.	2.4	5
96	Successive Dipolarization Fronts With a Stepwise Electron Acceleration During a Substorm in Saturn's Magnetotail. Geophysical Research Letters, 2022, 49, .	4.0	5
97	EMIC Waves Observed Throughout the Inner Magnetosphere Driven by Abrupt Enhancement of the Solar Wind Pressure. Geophysical Research Letters, 2022, 49, .	4.0	5
98	Kineticâ€Size Magnetic Holes in the Terrestrial Foreshock Region. Geophysical Research Letters, 2022, 49, .	4.0	5
99	Direct Observation of Acceleration and Thermalization of Beam Electrons Caused by Double Layers in the Earth's Plasma Sheet. Geophysical Research Letters, 2022, 49, .	4.0	5
100	Statistical characteristics of the polar ionospheric scale height around the peak height of F2 layer with observations of the ESR radar: Quiet days. Science China Technological Sciences, 2015, 58, 687-694.	4.0	4
101	Subauroral polarization stream on the outer boundary of the ring current during an energetic ion injection event. Journal of Geophysical Research: Space Physics, 2017, 122, 4837-4845.	2.4	4
102	A new method to identify flux ropes in space plasmas. Annales Geophysicae, 2018, 36, 1275-1283.	1.6	4
103	Analytical Fast Magnetosonic Wave Model Based on Observations of Van Allen Probe. Journal of Geophysical Research: Space Physics, 2020, 125, e2020JA028527.	2.4	4
104	Attenuation of plasmaspheric hiss associated with the enhanced magnetospheric electric field. Annales Geophysicae, 2021, 39, 461-470.	1.6	4
105	Proton Ring Evolution and Its Effect on Magnetosonic Wave Excitation: Particleâ€Inâ€Cell Simulation and Linear Theory. Geophysical Research Letters, 2021, 48, e2021GL092747.	4.0	4
106	Excitation of extremely low-frequency chorus emissions: The role of background plasma density. Earth and Planetary Physics, 2019, 3, 1-7.	1.1	4
107	Subâ€Structures of the Separatrix Region During Magnetic Reconnection. Geophysical Research Letters, 2022, 49, .	4.0	4
108	A Simulation of the Fieldâ€Aligned Plasma Transport in the Plasmaspheric Plume During the 2015 St. Patrick's Day Storm. Journal of Geophysical Research: Space Physics, 2019, 124, 8617-8628.	2.4	3

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109	Fast Magnetosonic Waves in a Dipolarizing Flux Bundle Inside the Geosynchronous Orbit. Geophysical Research Letters, 2022, 49, .	4.0	3
110	Secondâ€Harmonic Generation of EMIC Waves in the Inner Magnetosphere: Theoretical Analyses and Hybrid Simulations. Geophysical Research Letters, 2022, 49, .	4.0	3
111	Ionospheric characteristics associated with waveâ€“particle interactions in a SED plume during a super geomagnetic storm. Journal of Atmospheric and Solar-Terrestrial Physics, 2013, 95-96, 96-101.	1.6	2
112	Evolutions of equatorial ring current ions during a magnetic storm. Earth and Planetary Physics, 2020, 4, 1-7.	1.1	2
113	Nonlinear Interaction Between H⁺ Band and He⁺ Band EMIC Waves: Van Allen Probe Observations and Hybrid Simulations. Geophysical Research Letters, 2022, 49, .	4.0	2
114	Statistical characteristics of the polar ionospheric scale height around the peak height of F2 layer with observations of the ESR radar: Disturbed days. Advances in Space Research, 2017, 60, 1516-1523.	2.6	1
115	Characteristics of Energetic Oxygen Ions Escaping From Mars: MAVEN Observations. Journal of Geophysical Research: Space Physics, 2021, 126, e2021JA029507.	2.4	1
116	Simulation of Cold Ion Transport Originating from the SED Plume into Dayside Magnetosphere. Journal of Geophysical Research: Space Physics, 0, , .	2.4	0