

Shiyong Huang

List of Publications by Year in descending order

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122
papers

4,442
citations

81900

39
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123424

61
g-index

123
all docs

123
docs citations

123
times ranked

1565
citing authors

#	ARTICLE	IF	CITATIONS
1	Dipolarization fronts as a consequence of transient reconnection: In situ evidence. <i>Geophysical Research Letters</i> , 2013, 40, 6023-6027.	4.0	168
2	Electric structure of dipolarization front at sub- ϵ proton scale. <i>Geophysical Research Letters</i> , 2012, 39, .	4.0	160
3	Occurrence rate of earthward- ϵ propagating dipolarization fronts. <i>Geophysical Research Letters</i> , 2012, 39, .	4.0	141
4	Pitch angle distribution of suprathermal electrons behind dipolarization fronts: A statistical overview. <i>Journal of Geophysical Research</i> , 2012, 117, .	3.3	136
5	SCALING OF THE ELECTRON DISSIPATION RANGE OF SOLAR WIND TURBULENCE. <i>Astrophysical Journal</i> , 2013, 777, 15.	4.5	134
6	Kinetic structure and wave properties associated with sharp dipolarization front observed by Cluster. <i>Annales Geophysicae</i> , 2012, 30, 97-107.	1.6	124
7	Whistler- ϵ mode waves inside flux pileup region: Structured or unstructured?. <i>Journal of Geophysical Research: Space Physics</i> , 2014, 119, 9089-9100.	2.4	112
8	How to find magnetic nulls and reconstruct field topology with MMS data?. <i>Journal of Geophysical Research: Space Physics</i> , 2015, 120, 3758-3782.	2.4	111
9	Electron acceleration in the reconnection diffusion region: Cluster observations. <i>Geophysical Research Letters</i> , 2012, 39, .	4.0	95
10	On the Existence of the Kolmogorov Inertial Range in the Terrestrial Magnetosheath Turbulence. <i>Astrophysical Journal Letters</i> , 2017, 836, L10.	8.3	90
11	MMS observations of whistler waves in electron diffusion region. <i>Geophysical Research Letters</i> , 2017, 44, 3954-3962.	4.0	89
12	Electromagnetic energy conversion at dipolarization fronts: Multispacecraft results. <i>Journal of Geophysical Research: Space Physics</i> , 2015, 120, 4496-4502.	2.4	86
13	Magnetospheric Multiscale Observations of Electron Vortex Magnetic Hole in the Turbulent Magnetosheath Plasma. <i>Astrophysical Journal Letters</i> , 2017, 836, L27.	8.3	85
14	Observations of turbulence within reconnection jet in the presence of guide field. <i>Geophysical Research Letters</i> , 2012, 39, .	4.0	78
15	Electron Jet Detected by MMS at Dipolarization Front. <i>Geophysical Research Letters</i> , 2018, 45, 556-564.	4.0	75
16	KINETIC TURBULENCE IN THE TERRESTRIAL MAGNETOSHEATH: <i>CLUSTER</i> OBSERVATIONS. <i>Astrophysical Journal Letters</i> , 2014, 789, L28.	8.3	74
17	Statistical characteristics of EMIC waves: Van Allen Probe observations. <i>Journal of Geophysical Research: Space Physics</i> , 2015, 120, 4400-4408.	2.4	72
18	Observations of kinetic- ϵ size magnetic holes in the magnetosheath. <i>Journal of Geophysical Research: Space Physics</i> , 2017, 122, 1990-2000.	2.4	70

#	ARTICLE	IF	CITATIONS
19	Identifying magnetic reconnection events using the FOTE method. Journal of Geophysical Research: Space Physics, 2016, 121, 1263-1272.	2.4	69
20	Compressible Magnetohydrodynamic Turbulence in the Earth's Magnetosheath: Estimation of the Energy Cascade Rate Using <i>In Situ</i> Spacecraft Data. Physical Review Letters, 2018, 120, 055102.	7.8	68
21	Magnetohydrodynamic and kinetic scale turbulence in the near-Earth space plasmas: a (short) biased review. Reviews of Modern Plasma Physics, 2020, 4, 1.	4.1	68
22	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
23	First observation of rising-tone magnetosonic waves. Geophysical Research Letters, 2014, 41, 7419-7426.	4.0	66
24	A statistical study of kinetic-scale magnetic holes in turbulent magnetosheath: MMS observations. Journal of Geophysical Research: Space Physics, 2017, 122, 8577-8588.	2.4	64
25	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
26	Two types of whistler waves in the hall reconnection region. Journal of Geophysical Research: Space Physics, 2016, 121, 6639-6646.	2.4	57
27	Electric field structure inside the secondary island in the reconnection diffusion region. Physics of Plasmas, 2012, 19, .	1.9	53
28	Field-aligned currents associated with dipolarization fronts. Geophysical Research Letters, 2013, 40, 4503-4508.	4.0	53
29	Observation of large-amplitude magnetosonic waves at dipolarization fronts. Journal of Geophysical Research: Space Physics, 2014, 119, 4335-4347.	2.4	53
30	MMS observations of ion-scale magnetic island in the magnetosheath turbulent plasma. Geophysical Research Letters, 2016, 43, 7850-7858.	4.0	53
31	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
32	Wave properties in the magnetic reconnection diffusion region with high β^2 : Application of the k -filtering method to Cluster multispacecraft data. Journal of Geophysical Research, 2010, 115, .	3.3	48
33	Energy Cascade Rate Measured in a Collisionless Space Plasma with MMS Data and Compressible Hall Magnetohydrodynamic Turbulence Theory. Physical Review Letters, 2019, 123, 245101.	7.8	47
34	Observations of Whistler Waves Correlated with Electron-scale Coherent Structures in the Magnetosheath Turbulent Plasma. Astrophysical Journal, 2018, 861, 29.	4.5	46
35	Evidence of Magnetic Nulls in Electron Diffusion Region. Geophysical Research Letters, 2019, 46, 48-54.	4.0	45
36	The occurrence and wave properties of EMIC waves observed by the Magnetospheric Multiscale (MMS) mission. Journal of Geophysical Research: Space Physics, 2017, 122, 8228-8240.	2.4	44

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37	Simultaneous observations of precipitating radiation belt electrons and ring current ions associated with the plasmaspheric plume. <i>Journal of Geophysical Research: Space Physics</i> , 2013, 118, 4391-4399.	2.4	43
38	Observations of the Electron Jet Generated by Secondary Reconnection in the Terrestrial Magnetotail. <i>Astrophysical Journal</i> , 2018, 862, 144.	4.5	43
39	In situ observations of magnetosonic waves modulated by background plasma density. <i>Geophysical Research Letters</i> , 2017, 44, 7628-7633.	4.0	42
40	Quadrupolar pattern of the asymmetric guide-field reconnection. <i>Journal of Geophysical Research: Space Physics</i> , 2017, 122, 6349-6356.	2.4	40
41	Density cavity in magnetic reconnection diffusion region in the presence of guide field. <i>Journal of Geophysical Research</i> , 2011, 116, n/a-n/a.	3.3	36
42	Electron-Driven Dissipation in a Tailward Flow Burst. <i>Geophysical Research Letters</i> , 2019, 46, 5698-5706.	4.0	35
43	Plasma physics of magnetic island coalescence during magnetic reconnection. <i>Journal of Geophysical Research: Space Physics</i> , 2014, 119, 6177-6189.	2.4	34
44	Characteristic distribution and possible roles of waves around the lower hybrid frequency in the magnetotail reconnection region. <i>Journal of Geophysical Research: Space Physics</i> , 2014, 119, 8228-8242.	2.4	34
45	Cold Ion Heating by Magnetosonic Waves in a Density Cavity of the Plasmasphere. <i>Journal of Geophysical Research: Space Physics</i> , 2018, 123, 1242-1250.	2.4	34
46	Precipitation of Radiation Belt Electrons by EMIC Waves With Conjugated Observations of NOAA and Van Allen Satellites. <i>Geophysical Research Letters</i> , 2018, 45, 12,694.	4.0	31
47	Observations of Flux Ropes With Strong Energy Dissipation in the Magnetotail. <i>Geophysical Research Letters</i> , 2019, 46, 580-589.	4.0	31
48	Kinetic simulations of secondary reconnection in the reconnection jet. <i>Journal of Geophysical Research: Space Physics</i> , 2015, 120, 6188-6198.	2.4	30
49	In situ observations of flux rope at the separatrix region of magnetic reconnection. <i>Journal of Geophysical Research: Space Physics</i> , 2016, 121, 205-213.	2.4	30
50	Occurrence rate of whistler waves in the magnetotail reconnection region. <i>Journal of Geophysical Research: Space Physics</i> , 2017, 122, 7188-7196.	2.4	30
51	Statistical characteristics of EMIC wave-driven relativistic electron precipitation with observations of POES satellites: Revisit. <i>Journal of Geophysical Research: Space Physics</i> , 2014, 119, 5509-5519.	2.4	29
52	Excitation of oblique O band EMIC waves in the inner magnetosphere driven by hot H with ring velocity distributions. <i>Journal of Geophysical Research: Space Physics</i> , 2016, 121, 11,101.	2.4	29
53	Kinetic Scale Slow Solar Wind Turbulence in the Inner Heliosphere: Coexistence of Kinetic Alfvén Waves and Alfvén Ion Cyclotron Waves. <i>Astrophysical Journal Letters</i> , 2020, 897, L3.	8.3	28
54	Kinetic simulations of electric field structure within magnetic island during magnetic reconnection and their applications to the satellite observations. <i>Journal of Geophysical Research: Space Physics</i> , 2014, 119, 7402-7412.	2.4	26

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55	A statistical study on the whistler waves behind dipolarization fronts. <i>Journal of Geophysical Research: Space Physics</i> , 2015, 120, 1086-1095.	2.4	25
56	Observation of Three-dimensional Magnetic Reconnection in the Terrestrial Magnetotail. <i>Journal of Geophysical Research: Space Physics</i> , 2017, 122, 9513-9520.	2.4	25
57	Global Distribution of Proton Rings and Associated Magnetosonic Wave Instability in the Inner Magnetosphere. <i>Geophysical Research Letters</i> , 2018, 45, 10,160.	4.0	25
58	An Automatic Detection Algorithm Applied to Fast Magnetosonic Waves With Observations of the Van Allen Probes. <i>Journal of Geophysical Research: Space Physics</i> , 2019, 124, 3501-3511.	2.4	25
59	Geomagnetic storms and EMIC waves: Van Allen Probe observations. <i>Journal of Geophysical Research: Space Physics</i> , 2016, 121, 6444-6457.	2.4	24
60	Three-dimensional Simulations and Spacecraft Observations of Sub-ion Scale Turbulence in the Solar Wind: Influence of Landau Damping. <i>Astrophysical Journal</i> , 2017, 839, 122.	4.5	24
61	Testing of the Taylor Frozen-in-flow Hypothesis at Electron Scales in the Solar Wind Turbulence. <i>Astrophysical Journal</i> , 2019, 876, 138.	4.5	24
62	Evidence of deflected super-Alfvénic electron jet in a reconnection region with weak guide field. <i>Journal of Geophysical Research: Space Physics</i> , 2014, 119, 1541-1548.	2.4	23
63	Dawn-dusk scale of dipolarization front in the Earth's magnetotail: multi-cases study. <i>Astrophysics and Space Science</i> , 2015, 357, 1.	1.4	23
64	New Insights into the Nature of Turbulence in the Earth's Magnetosheath Using Magnetospheric MultiScale Mission Data. <i>Astrophysical Journal</i> , 2018, 859, 127.	4.5	23
65	The Role of Upper Hybrid Waves in the Magnetotail Reconnection Electron Diffusion Region. <i>Astrophysical Journal Letters</i> , 2019, 881, L28.	8.3	22
66	Observations of a Kinetic-scale Magnetic Hole in a Reconnection Diffusion Region. <i>Geophysical Research Letters</i> , 2019, 46, 6248-6257.	4.0	22
67	Simultaneous Trapping of Electromagnetic Ion Cyclotron and Magnetosonic Waves by Background Plasmas. <i>Journal of Geophysical Research: Space Physics</i> , 2019, 124, 1635-1643.	2.4	22
68	MMS Observations of Kinetic-size Magnetic Holes in the Terrestrial Magnetotail Plasma Sheet. <i>Astrophysical Journal</i> , 2019, 875, 113.	4.5	21
69	First Topology of Electron-scale Magnetic Hole. <i>Geophysical Research Letters</i> , 2020, 47, e2020GL088374.	4.0	21
70	The Evolution of Compressible Solar Wind Turbulence in the Inner Heliosphere: PSP, THEMIS, and MAVEN Observations. <i>Astrophysical Journal</i> , 2021, 919, 19.	4.5	21
71	The Ion Transition Range of Solar Wind Turbulence in the Inner Heliosphere: Parker Solar Probe Observations. <i>Astrophysical Journal Letters</i> , 2021, 909, L7.	8.3	20
72	Interactions between magnetosonic waves and ring current protons: Gyroaveraged test particle simulations. <i>Journal of Geophysical Research: Space Physics</i> , 2016, 121, 8537-8553.	2.4	19

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73	Analysis of Turbulence Properties in the Mercury Plasma Environment Using MESSENGER Observations. <i>Astrophysical Journal</i> , 2020, 891, 159.	4.5	19
74	Intermittent Dissipation at Kinetic Scales in the Turbulent Reconnection Outflow. <i>Geophysical Research Letters</i> , 2022, 49, .	4.0	19
75	Revealing the sub-structures of the magnetic reconnection separatrix via particle-in-cell simulation. <i>Physics of Plasmas</i> , 2012, 19, .	1.9	18
76	In situ evidence of the modification of the parallel propagation of EMIC waves by heated He ⁺ ions. <i>Journal of Geophysical Research: Space Physics</i> , 2016, 121, 6711-6717.	2.4	18
77	Excitation of O ⁺ Band EMIC Waves Through H ⁺ Ring Velocity Distributions: Van Allen Probe Observations. <i>Geophysical Research Letters</i> , 2018, 45, 1271-1276.	4.0	18
78	Observations of Electron Vortex at the Dipolarization Front. <i>Geophysical Research Letters</i> , 2020, 47, e2020GL088448.	4.0	18
79	Periodical Dipolarization Processes in Earth's Magnetotail. <i>Geophysical Research Letters</i> , 2019, 46, 13640-13648.	4.0	17
80	Prediction of the Dst Index with Bagging Ensemble-learning Algorithm. <i>Astrophysical Journal, Supplement Series</i> , 2020, 248, 14.	7.7	17
81	Electron-only Reconnection in an Ion-scale Current Sheet at the Magnetopause. <i>Astrophysical Journal</i> , 2021, 922, 54.	4.5	17
82	Influence of precipitating energetic ions caused by EMIC waves on the subauroral ionospheric E region during a geomagnetic storm. <i>Journal of Geophysical Research: Space Physics</i> , 2014, 119, 8462-8471.	2.4	16
83	Observations of Magnetic Field Line Curvature and Its Role in the Space Plasma Turbulence. <i>Astrophysical Journal Letters</i> , 2020, 898, L18.	8.3	16
84	Compression-related EMIC waves drive relativistic electron precipitation. <i>Science China Technological Sciences</i> , 2014, 57, 2418-2425.	4.0	15
85	EMIC waves covering wide L shells: MMS and Van Allen Probes observations. <i>Journal of Geophysical Research: Space Physics</i> , 2017, 122, 7387-7395.	2.4	15
86	Characteristics of Magnetic Holes in the Solar Wind Revealed by Parker Solar Probe. <i>Astrophysical Journal</i> , 2021, 908, 56.	4.5	15
87	Oxygen cyclotron harmonic waves observed using Van Allen Probes. <i>Science China Earth Sciences</i> , 2017, 60, 1310-1316.	5.2	14
88	Observations of Short-period Current Sheet Flapping Events in the Earth's Magnetotail. <i>Astrophysical Journal Letters</i> , 2019, 874, L18.	8.3	14
89	Statistical Properties of Current, Energy Conversion, and Electron Acceleration in Flux Ropes in the Terrestrial Magnetotail. <i>Geophysical Research Letters</i> , 2021, 48, e2021GL093458.	4.0	14
90	Observation of directional change of core field inside flux ropes within one reconnection diffusion region in the Earth's magnetotail. <i>Science Bulletin</i> , 2014, 59, 4797-4803.	1.7	13

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91	First Observations of Magnetosonic Waves With Nonlinear Harmonics. <i>Journal of Geophysical Research: Space Physics</i> , 2020, 125, e2019JA027724.	2.4	13
92	Excitation of Whistler Waves Through the Bidirectional Field-Aligned Electron Beams With Electron Temperature Anisotropy: MMS Observations. <i>Geophysical Research Letters</i> , 2020, 47, e2020GL087515.	4.0	13
93	Three-Dimensional Anisotropy and Scaling Properties of Solar Wind Turbulence at Kinetic Scales in the Inner Heliosphere: Parker Solar Probe Observations. <i>Astrophysical Journal Letters</i> , 2022, 924, L21.	8.3	13
94	Global Spatial Distribution of Dipolarization Fronts in the Saturn's Magnetosphere: Cassini Observations. <i>Geophysical Research Letters</i> , 2021, 48, e2021GL092701.	4.0	11
95	Response of Banded Whistler Mode Waves to the Enhancement of Solar Wind Dynamic Pressure in the Inner Earth's Magnetosphere. <i>Geophysical Research Letters</i> , 2018, 45, 8755-8763.	4.0	10
96	Observations of whistler waves in two sequential flux ropes at the magnetopause. <i>Astrophysics and Space Science</i> , 2019, 364, 1.	1.4	10
97	Observational Evidence of Magnetic Reconnection in the Terrestrial Foreshock Region. <i>Astrophysical Journal</i> , 2021, 922, 56.	4.5	10
98	Anisotropy of Magnetic Field Spectra at Kinetic Scales of Solar Wind Turbulence as Revealed by the Parker Solar Probe in the Inner Heliosphere. <i>Astrophysical Journal Letters</i> , 2022, 929, L6.	8.3	10
99	A subauroral polarization stream driven by field-aligned currents associated with precipitating energetic ions caused by EMIC waves: A case study. <i>Journal of Geophysical Research: Space Physics</i> , 2016, 121, 1696-1705.	2.4	9
100	Sub-ion-scale Dynamics of the Ion Diffusion Region in the Magnetotail: MMS Observations. <i>Journal of Geophysical Research: Space Physics</i> , 2019, 124, 7898-7911.	2.4	9
101	Electron Jets in the Terrestrial Magnetotail: A Statistical Overview. <i>Astrophysical Journal</i> , 2020, 896, 67.	4.5	9
102	In Situ Detection of Kinetic-size Magnetic Holes in the Martian Magnetosheath. <i>Astrophysical Journal</i> , 2021, 922, 107.	4.5	9
103	Formation of Negative $\langle J \rangle$... $\langle E \rangle$ in the Outer Electron Diffusion Region During Magnetic Reconnection. <i>Journal of Geophysical Research: Space Physics</i> , 2022, 127, .	2.4	9
104	Tripolar electric field Structure in guide field magnetic reconnection. <i>Annales Geophysicae</i> , 2018, 36, 373-379.	1.6	8
105	Distribution of Negative $\langle J \rangle$... $\langle E \rangle$ in the Inflow Edge of the Inner Electron Diffusion Region During Tail Magnetic Reconnection: Simulations Vs. Observations. <i>Geophysical Research Letters</i> , 2022, 49, .	4.0	8
106	Electromagnetic Ion Cyclotron Harmonic Waves Generated via Nonlinear Wave-Wave Couplings. <i>Geophysical Research Letters</i> , 2022, 49, .	4.0	7
107	Deformation of plasma bubbles and the associated field aligned current system during substorm recovery phase. <i>Journal of Geophysical Research</i> , 2012, 117, .	3.3	6
108	Ionospheric Signatures of Ring Current Ions Scattered by Magnetosonic Waves. <i>Geophysical Research Letters</i> , 2020, 47, e2020GL089032.	4.0	6

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109	Multi-Spacecraft Measurement of Anisotropic Spatial Correlation Functions at Kinetic Range in the Magnetosheath Turbulence. <i>Journal of Geophysical Research: Space Physics</i> , 2021, 126, e2020JA028780.	2.4	6
110	Observation of High-Frequency Electrostatic Waves in the Dip Region Ahead of Dipolarization Front. <i>Journal of Geophysical Research: Space Physics</i> , 2021, 126, e2021JA029408.	2.4	6
111	Observations of Pitch Angle Changes of Electrons and High-Frequency Wave Activities in the Magnetotail Plasma Bubble. <i>Journal of Geophysical Research: Space Physics</i> , 2022, 127, e2021JA029761.	2.4	5
112	Successive Dipolarization Fronts With a Stepwise Electron Acceleration During a Substorm in Saturn's Magnetotail. <i>Geophysical Research Letters</i> , 2022, 49, .	4.0	5
113	Kinetic-Size Magnetic Holes in the Terrestrial Foreshock Region. <i>Geophysical Research Letters</i> , 2022, 49, .	4.0	5
114	Direct Observation of Acceleration and Thermalization of Beam Electrons Caused by Double Layers in the Earth's Plasma Sheet. <i>Geophysical Research Letters</i> , 2022, 49, .	4.0	5
115	Subauroral polarization stream on the outer boundary of the ring current during an energetic ion injection event. <i>Journal of Geophysical Research: Space Physics</i> , 2017, 122, 4837-4845.	2.4	4
116	A new method to identify flux ropes in space plasmas. <i>Annales Geophysicae</i> , 2018, 36, 1275-1283.	1.6	4
117	Excitation of extremely low-frequency chorus emissions: The role of background plasma density. <i>Earth and Planetary Physics</i> , 2019, 3, 1-7.	1.1	4
118	Sub-Structures of the Separatrix Region During Magnetic Reconnection. <i>Geophysical Research Letters</i> , 2022, 49, .	4.0	4
119	Fast Magnetosonic Waves in a Dipolarizing Flux Bundle Inside the Geosynchronous Orbit. <i>Geophysical Research Letters</i> , 2022, 49, .	4.0	3
120	Selection of the Main Control Parameters for the Dst Index Prediction Model Based on a Layer-wise Relevance Propagation Method. <i>Astrophysical Journal, Supplement Series</i> , 2022, 260, 6.	7.7	2
121	Nonlinear Interaction Between H ⁺ Band and He ⁺ Band EMIC Waves: Van Allen Probe Observations and Hybrid Simulations. <i>Geophysical Research Letters</i> , 2022, 49, .	4.0	2
122	Characteristics of Energetic Oxygen Ions Escaping From Mars: MAVEN Observations. <i>Journal of Geophysical Research: Space Physics</i> , 2021, 126, e2021JA029507.	2.4	1