

# Shiyong Huang

## List of Publications by Year in descending order

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122  
papers

4,442  
citations

81900

39  
h-index

123424

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123  
docs citations

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times ranked

1565  
citing authors

#	ARTICLE	IF	CITATIONS
1	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
2	Formation of Negative $\langle b \rangle J \langle /b \rangle \hat{\cdot} \langle b \rangle E \langle /b \rangle \hat{\cdot}$ in the Outer Electron Diffusion Region During Magnetic Reconnection. <i>Journal of Geophysical Research: Space Physics</i> , 2022, 127, .	2.4	9
3	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
4	Electromagnetic Ion Cyclotron Harmonic Waves Generated via Nonlinear Wave-Wave Couplings. <i>Geophysical Research Letters</i> , 2022, 49, .	4.0	7
5	Fast Magnetosonic Waves in a Dipolarizing Flux Bundle Inside the Geosynchronous Orbit. <i>Geophysical Research Letters</i> , 2022, 49, .	4.0	3
6	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
7	Sub-Structures of the Separatrix Region During Magnetic Reconnection. <i>Geophysical Research Letters</i> , 2022, 49, .	4.0	4
8	Intermittent Dissipation at Kinetic Scales in the Turbulent Reconnection Outflow. <i>Geophysical Research Letters</i> , 2022, 49, .	4.0	19
9	Kinetic-Size Magnetic Holes in the Terrestrial Foreshock Region. <i>Geophysical Research Letters</i> , 2022, 49, .	4.0	5
10	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
11	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
12	Distribution of Negative $\langle i \rangle J \langle /i \rangle \hat{\cdot} \langle i \rangle E \langle /i \rangle \hat{\cdot}$ 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
13	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
14	Nonlinear Interaction Between H <sup>+</sup> Band and He <sup>+</sup> Band EMIC Waves: Van Allen Probe Observations and Hybrid Simulations. <i>Geophysical Research Letters</i> , 2022, 49, .	4.0	2
15	Characteristics of Magnetic Holes in the Solar Wind Revealed by Parker Solar Probe. <i>Astrophysical Journal</i> , 2021, 908, 56.	4.5	15
16	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
17	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
18	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

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19	Characteristics of Energetic Oxygen Ions Escaping From Mars: MAVEN Observations. <i>Journal of Geophysical Research: Space Physics</i> , 2021, 126, e2021JA029507.	2.4	1
20	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
21	Global Spatial Distribution of Dipolarization Fronts in the Saturn's Magnetosphere: Cassini Observations. <i>Geophysical Research Letters</i> , 2021, 48, e2021GL092701.	4.0	11
22	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
23	Observational Evidence of Magnetic Reconnection in the Terrestrial Foreshock Region. <i>Astrophysical Journal</i> , 2021, 922, 56.	4.5	10
24	Electron-only Reconnection in an Ion-scale Current Sheet at the Magnetopause. <i>Astrophysical Journal</i> , 2021, 922, 54.	4.5	17
25	In Situ Detection of Kinetic-size Magnetic Holes in the Martian Magnetosheath. <i>Astrophysical Journal</i> , 2021, 922, 107.	4.5	9
26	Ionospheric Signatures of Ring Current Ions Scattered by Magnetosonic Waves. <i>Geophysical Research Letters</i> , 2020, 47, e2020GL089032.	4.0	6
27	First Topology of Electron-Scale Magnetic Hole. <i>Geophysical Research Letters</i> , 2020, 47, e2020GL088374.	4.0	21
28	First Observations of Magnetosonic Waves With Nonlinear Harmonics. <i>Journal of Geophysical Research: Space Physics</i> , 2020, 125, e2019JA027724.	2.4	13
29	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
30	Observations of Electron Vortex at the Dipolarization Front. <i>Geophysical Research Letters</i> , 2020, 47, e2020GL088448.	4.0	18
31	Analysis of Turbulence Properties in the Mercury Plasma Environment Using MESSENGER Observations. <i>Astrophysical Journal</i> , 2020, 891, 159.	4.5	19
32	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
33	Magnetohydrodynamic and kinetic scale turbulence in the near-Earth space plasmas: a (short) biased review. <i>Reviews of Modern Plasma Physics</i> , 2020, 4, 1.	4.1	68
34	Prediction of the Dst Index with Bagging Ensemble-learning Algorithm. <i>Astrophysical Journal, Supplement Series</i> , 2020, 248, 14.	7.7	17
35	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
36	Electron Jets in the Terrestrial Magnetotail: A Statistical Overview. <i>Astrophysical Journal</i> , 2020, 896, 67.	4.5	9

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37	Observations of whistler waves in two sequential flux ropes at the magnetopause. <i>Astrophysics and Space Science</i> , 2019, 364, 1.	1.4	10
38	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
39	The Role of Upper Hybrid Waves in the Magnetotail Reconnection Electron Diffusion Region. <i>Astrophysical Journal Letters</i> , 2019, 881, L28.	8.3	22
40	Observations of a Kinetic-scale Magnetic Hole in a Reconnection Diffusion Region. <i>Geophysical Research Letters</i> , 2019, 46, 6248-6257.	4.0	22
41	Electron-Driven Dissipation in a Tailward Flow Burst. <i>Geophysical Research Letters</i> , 2019, 46, 5698-5706.	4.0	35
42	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
43	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
44	MMS Observations of Kinetic-size Magnetic Holes in the Terrestrial Magnetotail Plasma Sheet. <i>Astrophysical Journal</i> , 2019, 875, 113.	4.5	21
45	Observations of Short-period Current Sheet Flapping Events in the Earth's Magnetotail. <i>Astrophysical Journal Letters</i> , 2019, 874, L18.	8.3	14
46	Evidence of Magnetic Nulls in Electron Diffusion Region. <i>Geophysical Research Letters</i> , 2019, 46, 48-54.	4.0	45
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	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
49	Periodical Dipolarization Processes in Earth's Magnetotail. <i>Geophysical Research Letters</i> , 2019, 46, 13640-13648.	4.0	17
50	Energy Cascade Rate Measured in a Collisionless Space Plasma with MMS Data and Compressible Hall Magnetohydrodynamic Turbulence Theory. <i>Physical Review Letters</i> , 2019, 123, 245101.	7.8	47
51	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
52	Compressible Magnetohydrodynamic Turbulence in the Earth's Magnetosheath: Estimation of the Energy Cascade Rate Using <i>in situ</i> Spacecraft Data. <i>Physical Review Letters</i> , 2018, 120, 055102.	7.8	68
53	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
54	Electron Jet Detected by MMS at Dipolarization Front. <i>Geophysical Research Letters</i> , 2018, 45, 556-564.	4.0	75

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55	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
56	A new method to identify flux ropes in space plasmas. <i>Annales Geophysicae</i> , 2018, 36, 1275-1283.	1.6	4
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	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
59	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
60	Observations of Whistler Waves Correlated with Electron-scale Coherent Structures in the Magnetosheath Turbulent Plasma. <i>Astrophysical Journal</i> , 2018, 861, 29.	4.5	46
61	Tripolar electric field Structure in guide field magnetic reconnection. <i>Annales Geophysicae</i> , 2018, 36, 373-379.	1.6	8
62	Observations of the Electron Jet Generated by Secondary Reconnection in the Terrestrial Magnetotail. <i>Astrophysical Journal</i> , 2018, 862, 144.	4.5	43
63	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
64	Magnetospheric Multiscale Observations of Electron Vortex Magnetic Hole in the Turbulent Magnetosheath Plasma. <i>Astrophysical Journal Letters</i> , 2017, 836, L27.	8.3	85
65	Observations of kinetic-size magnetic holes in the magnetosheath. <i>Journal of Geophysical Research: Space Physics</i> , 2017, 122, 1990-2000.	2.4	70
66	On the Existence of the Kolmogorov Inertial Range in the Terrestrial Magnetosheath Turbulence. <i>Astrophysical Journal Letters</i> , 2017, 836, L10.	8.3	90
67	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
68	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
69	MMS observations of whistler waves in electron diffusion region. <i>Geophysical Research Letters</i> , 2017, 44, 3954-3962.	4.0	89
70	Quadrupolar pattern of the asymmetric guide-field reconnection. <i>Journal of Geophysical Research: Space Physics</i> , 2017, 122, 6349-6356.	2.4	40
71	In situ observations of magnetosonic waves modulated by background plasma density. <i>Geophysical Research Letters</i> , 2017, 44, 7628-7633.	4.0	42
72	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

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73	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
74	Oxygen cyclotron harmonic waves observed using Van Allen Probes. <i>Science China Earth Sciences</i> , 2017, 60, 1310-1316.	5.2	14
75	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
76	A statistical study of kinetic-size magnetic holes in turbulent magnetosheath: MMS observations. <i>Journal of Geophysical Research: Space Physics</i> , 2017, 122, 8577-8588.	2.4	64
77	The occurrence and wave properties of EMIC waves observed by the Magnetospheric Multiscale (MMS) mission. <i>Journal of Geophysical Research: Space Physics</i> , 2017, 122, 8228-8240.	2.4	44
78	Geomagnetic storms and EMIC waves: Van Allen Probe observations. <i>Journal of Geophysical Research: Space Physics</i> , 2016, 121, 6444-6457.	2.4	24
79	Excitation of oblique O <sup>+</sup> band EMIC waves in the inner magnetosphere driven by hot H <sup>+</sup> with ring velocity distributions. <i>Journal of Geophysical Research: Space Physics</i> , 2016, 121, 11,101.	2.4	29
80	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
81	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
82	MMS observations of ion-scale magnetic island in the magnetosheath turbulent plasma. <i>Geophysical Research Letters</i> , 2016, 43, 7850-7858.	4.0	53
83	In situ evidence of the modification of the parallel propagation of EMIC waves by heated He <sup>+</sup> ions. <i>Journal of Geophysical Research: Space Physics</i> , 2016, 121, 6711-6717.	2.4	18
84	Two types of whistler waves in the hall reconnection region. <i>Journal of Geophysical Research: Space Physics</i> , 2016, 121, 6639-6646.	2.4	57
85	Identifying magnetic reconnection events using the FOTE method. <i>Journal of Geophysical Research: Space Physics</i> , 2016, 121, 1263-1272.	2.4	69
86	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
87	Kinetic simulations of secondary reconnection in the reconnection jet. <i>Journal of Geophysical Research: Space Physics</i> , 2015, 120, 6188-6198.	2.4	30
88	Statistical characteristics of EMIC waves: Van Allen Probe observations. <i>Journal of Geophysical Research: Space Physics</i> , 2015, 120, 4400-4408.	2.4	72
89	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
90	Electromagnetic energy conversion at dipolarization fronts: Multispacecraft results. <i>Journal of Geophysical Research: Space Physics</i> , 2015, 120, 4496-4502.	2.4	86

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91	In situ observations of EMIC waves in O <sup>+</sup> band by the Van Allen Probe A. Geophysical Research Letters, 2015, 42, 1312-1317.	4.0	52
92	A statistical study on the whistler waves behind dipolarization fronts. Journal of Geophysical Research: Space Physics, 2015, 120, 1086-1095.	2.4	25
93	Dawn-dusk scale of dipolarization front in the Earth's magnetotail: multi-cases study. Astrophysics and Space Science, 2015, 357, 1.	1.4	23
94	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
95	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
96	Plasma physics of magnetic island coalescence during magnetic reconnection. Journal of Geophysical Research: Space Physics, 2014, 119, 6177-6189.	2.4	34
97	KINETIC TURBULENCE IN THE TERRESTRIAL MAGNETOSHEATH: CLUSTER OBSERVATIONS. Astrophysical Journal Letters, 2014, 789, L28.	8.3	74
98	Compression-related EMIC waves drive relativistic electron precipitation. Science China Technological Sciences, 2014, 57, 2418-2425.	4.0	15
99	First observation of rising-tone magnetosonic waves. Geophysical Research Letters, 2014, 41, 7419-7426.	4.0	66
100	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
101	Statistical characteristics of EMIC wave-driven relativistic electron precipitation with observations of POES satellites: Revisit. Journal of Geophysical Research: Space Physics, 2014, 119, 5509-5519.	2.4	29
102	Observation of directional change of core field inside flux ropes within one reconnection diffusion region in the Earth's magnetotail. Science Bulletin, 2014, 59, 4797-4803.	1.7	13
103	Observation of large-amplitude magnetosonic waves at dipolarization fronts. Journal of Geophysical Research: Space Physics, 2014, 119, 4335-4347.	2.4	53
104	Evidence of deflected super-Alfvénic electron jet in a reconnection region with weak guide field. Journal of Geophysical Research: Space Physics, 2014, 119, 1541-1548.	2.4	23
105	Whistler-mode waves inside flux pileup region: Structured or unstructured?. Journal of Geophysical Research: Space Physics, 2014, 119, 9089-9100.	2.4	112
106	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
107	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
108	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

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109	SCALING OF THE ELECTRON DISSIPATION RANGE OF SOLAR WIND TURBULENCE. <i>Astrophysical Journal</i> , 2013, 777, 15.	4.5	134
110	Field-aligned currents associated with dipolarization fronts. <i>Geophysical Research Letters</i> , 2013, 40, 4503-4508.	4.0	53
111	Dipolarization fronts as a consequence of transient reconnection: In situ evidence. <i>Geophysical Research Letters</i> , 2013, 40, 6023-6027.	4.0	168
112	Revealing the sub-structures of the magnetic reconnection separatrix via particle-in-cell simulation. <i>Physics of Plasmas</i> , 2012, 19, .	1.9	18
113	Kinetic structure and wave properties associated with sharp dipolarization front observed by Cluster. <i>Annales Geophysicae</i> , 2012, 30, 97-107.	1.6	124
114	Electric field structure inside the secondary island in the reconnection diffusion region. <i>Physics of Plasmas</i> , 2012, 19, .	1.9	53
115	Pitch angle distribution of suprathermal electrons behind dipolarization fronts: A statistical overview. <i>Journal of Geophysical Research</i> , 2012, 117, .	3.3	136
116	Electron acceleration in the reconnection diffusion region: Cluster observations. <i>Geophysical Research Letters</i> , 2012, 39, .	4.0	95
117	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
118	Electric structure of dipolarization front at sub-proton scale. <i>Geophysical Research Letters</i> , 2012, 39, .	4.0	160
119	Observations of turbulence within reconnection jet in the presence of guide field. <i>Geophysical Research Letters</i> , 2012, 39, .	4.0	78
120	Occurrence rate of earthward-propagating dipolarization fronts. <i>Geophysical Research Letters</i> , 2012, 39, .	4.0	141
121	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
122	Wave properties in the magnetic reconnection diffusion region with high $\hat{I}^2$ : Application of the $\hat{k}$ -filtering method to Cluster multispacecraft data. <i>Journal of Geophysical Research</i> , 2010, 115, .	3.3	48