

W-J Sun

List of Publications by Year in descending order

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Version: 2024-02-01

87
papers

1,770
citations

236925

25
h-index

330143

37
g-index

97
all docs

97
docs citations

97
times ranked

1206
citing authors

#	ARTICLE	IF	CITATIONS
1	Observational evidence of ring current in the magnetosphere of Mercury. <i>Nature Communications</i> , 2022, 13, 924.	12.8	12
2	Properties of Ionospheric Inertial Scale Plasmoids Observed by the Juno Spacecraft in the Jovian Magnetotail. <i>Journal of Geophysical Research: Space Physics</i> , 2022, 127, .	2.4	3
3	Review of Mercury's dynamic magnetosphere: Post-MESSENGER era and comparative magnetospheres. <i>Science China Earth Sciences</i> , 2022, 65, 25-74.	5.2	19
4	MESSENGER Observations of Planetary Ion Enhancements at Mercury's Northern Magnetospheric Cusp During Flux Transfer Event Showers. <i>Journal of Geophysical Research: Space Physics</i> , 2022, 127, .	2.4	7
5	Dayside magnetopause reconnection and flux transfer events under radial interplanetary magnetic field (IMF): BepiColombo Earth-flyby observations. <i>Annales Geophysicae</i> , 2022, 40, 217-229.	1.6	2
6	Earth Wind as a Possible Exogenous Source of Lunar Surface Hydration. <i>Astrophysical Journal Letters</i> , 2021, 907, L32.	8.3	18
7	Flux Transfer Events at a Reconnection-Suppressed Magnetopause: Cassini Observations at Saturn. <i>Journal of Geophysical Research: Space Physics</i> , 2021, 126, e2020JA028786.	2.4	10
8	Statistical properties of kinetic-scale magnetic holes in terrestrial space. <i>Earth and Planetary Physics</i> , 2021, 5, 63-72.	1.1	13
9	Electron Pitch Angle Distributions in Compressional Pc5 Waves by THEMIS's Observations. <i>Geophysical Research Letters</i> , 2021, 48, e2021GL095730.	4.0	5
10	Low-frequency Whistler Waves Modulate Electrons and Generate Higher-frequency Whistler Waves in the Solar Wind. <i>Astrophysical Journal</i> , 2021, 923, 216.	4.5	7
11	Propagation properties of foreshock cavitons: Cluster observations. <i>Science China Technological Sciences</i> , 2020, 63, 173-182.	4.0	10
12	Flux Transfer Event Showers at Mercury: Dependence on Plasma β^2 and Magnetic Shear and Their Contribution to the Dungey Cycle. <i>Geophysical Research Letters</i> , 2020, 47, e2020GL089784.	4.0	23
13	MESSENGER Observations of Flow Braking and Flux Pileup of Dipolarizations in Mercury's Magnetotail: Evidence for Current Wedge Formation. <i>Journal of Geophysical Research: Space Physics</i> , 2020, 125, e2020JA028112.	2.4	13
14	Proton Properties in Mercury's Magnetotail: A Statistical Study. <i>Geophysical Research Letters</i> , 2020, 47, e2020GL088075.	4.0	11
15	Large-Amplitude Oscillatory Motion of Mercury's Cross-Tail Current Sheet. <i>Journal of Geophysical Research: Space Physics</i> , 2020, 125, e2020JA027783.	2.4	8
16	Analysis of Turbulence Properties in the Mercury Plasma Environment Using MESSENGER Observations. <i>Astrophysical Journal</i> , 2020, 891, 159.	4.5	19
17	Ion-Scale Flux Rope Observed inside a Hot Flow Anomaly. <i>Geophysical Research Letters</i> , 2020, 47, e2019GL085933.	4.0	13
18	Cluster Observations on Time-of-Flight Effect of Oxygen Ions in Magnetotail Reconnection Exhaust Region. <i>Geophysical Research Letters</i> , 2020, 47, e2019GL085200.	4.0	1

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19	Modulation of Whistler Mode Waves by Ion-Scale Waves Observed in the Distant Magnetotail. Journal of Geophysical Research: Space Physics, 2020, 125, e2019JA027278.	2.4	4
20	MESSENGER Observations of Mercury's Nightside Magnetosphere Under Extreme Solar Wind Conditions: Reconnection-Generated Structures and Steady Convection. Journal of Geophysical Research: Space Physics, 2020, 125, e2019JA027490.	2.4	14
21	Particle-in-cell Simulations of Secondary Magnetic Islands: Ion-scale Flux Ropes and Plasmoids. Astrophysical Journal, 2020, 900, 145.	4.5	10
22	The Geometry of an Electron Scale Magnetic Cavity in the Plasma Sheet. Geophysical Research Letters, 2019, 46, 9308-9317.	4.0	7
23	MESSENGER Observations of Disappearing Dayside Magnetosphere Events at Mercury. Journal of Geophysical Research: Space Physics, 2019, 124, 6613-6635.	2.4	53
24	A Statistical Study of the Force Balance and Structure in the Flux Ropes in Mercury's Magnetotail. Journal of Geophysical Research: Space Physics, 2019, 124, 5143-5157.	2.4	9
25	Studying Dawn-Dusk Asymmetries of Mercury's Magnetotail Using MHD-EPIC Simulations. Journal of Geophysical Research: Space Physics, 2019, 124, 8954-8973.	2.4	26
26	Dissipation of Earthward Propagating Flux Rope Through Reconnection with Geomagnetic Field: An MMS Case Study. Journal of Geophysical Research: Space Physics, 2019, 124, 7477-7493.	2.4	15
27	MMS Study of the Structure of Ion-Scale Flux Ropes in the Earth's Cross-Tail Current Sheet. Geophysical Research Letters, 2019, 46, 6168-6177.	4.0	30
28	Three-Dimensional Magnetic Reconnection With a Spatially Confined X-Line Extent: Implications for Dipolarizing Flux Bundles and the Dawn-Dusk Asymmetry. Journal of Geophysical Research: Space Physics, 2019, 124, 2819-2830.	2.4	34
29	MMS observations of electron scale magnetic cavity embedded in proton scale magnetic cavity. Nature Communications, 2019, 10, 1040.	12.8	35
30	Heating of multi-species upflowing ion beams observed by Cluster on March 28, 2001. Earth and Planetary Physics, 2019, 3, 204-211.	1.1	0
31	Pc5 Poloidal ULF Wave Observed in the Dawnside Plasmaspheric Plume. Journal of Geophysical Research: Space Physics, 2019, 124, 9986-9998.	2.4	11
32	Oxygen Ion Butterfly Distributions Observed in a Magnetotail Dipolarizing Flux Bundle. Journal of Geophysical Research: Space Physics, 2019, 124, 10219-10229.	2.4	2
33	MMS Observations of Plasma Heating Associated With FTE Growth. Geophysical Research Letters, 2019, 46, 12654-12664.	4.0	22
34	The Magnetic Field Structure of Mercury's Magnetotail. Journal of Geophysical Research: Space Physics, 2018, 123, 548-566.	2.4	31
35	Magnetospheric Multiscale Observations of Electron Scale Magnetic Peak. Geophysical Research Letters, 2018, 45, 527-537.	4.0	33
36	Statistical study of ULF waves in the magnetotail by THEMIS observations. Annales Geophysicae, 2018, 36, 1335-1346.	1.6	11

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37	Transport of Mass and Energy in Mercury's Plasma Sheet. <i>Geophysical Research Letters</i> , 2018, 45, 12,163.	4.0	14
38	MESSENGER Observations of Fast Plasma Flows in Mercury's Magnetotail. <i>Geophysical Research Letters</i> , 2018, 45, 10,110.	4.0	22
39	Oxygen Ion Reflection at Earthward Propagating Dipolarization Fronts in the Magnetotail. <i>Journal of Geophysical Research: Space Physics</i> , 2018, 123, 6277-6288.	2.4	7
40	Electron Dynamics in Magnetosheath Mirror-Mode Structures. <i>Journal of Geophysical Research: Space Physics</i> , 2018, 123, 5561-5570.	2.4	33
41	A Comparative Study of the Proton Properties of Magnetospheric Substorms at Earth and Mercury in the Near Magnetotail. <i>Geophysical Research Letters</i> , 2018, 45, 7933-7941.	4.0	14
42	Dayside magnetospheric ULF wave frequency modulated by a solar wind dynamic pressure negative impulse. <i>Journal of Geophysical Research: Space Physics</i> , 2017, 122, 1658-1669.	2.4	15
43	Mercury's cross-tail current sheet: Structure, location and stress balance. <i>Geophysical Research Letters</i> , 2017, 44, 678-686.	4.0	53
44	Observations of kinetic-size magnetic holes in the magnetosheath. <i>Journal of Geophysical Research: Space Physics</i> , 2017, 122, 1990-2000.	2.4	70
45	Electron flat-top distributions and cross-scale wave modulations observed in the current sheet of geomagnetic tail. <i>Physics of Plasmas</i> , 2017, 24, 082903.	1.9	8
46	Statistical study of the storm time radiation belt evolution during Van Allen Probes era: CME-driven versus CIR-driven storms. <i>Journal of Geophysical Research: Space Physics</i> , 2017, 122, 8327-8339.	2.4	50
47	MESSENGER observations of the energization and heating of protons in the near-Mercury magnetotail. <i>Geophysical Research Letters</i> , 2017, 44, 8149-8158.	4.0	27
48	Coupling between Mercury and its nightside magnetosphere: Cross-tail current sheet asymmetry and substorm current wedge formation. <i>Journal of Geophysical Research: Space Physics</i> , 2017, 122, 8419-8433.	2.4	29
49	Plasma Sheet Pressure Variations in the Near-Earth Magnetotail During Substorm Growth Phase: THEMIS Observations. <i>Journal of Geophysical Research: Space Physics</i> , 2017, 122, 12,212.	2.4	22
50	MESSENGER observations of cusp plasma filaments at Mercury. <i>Journal of Geophysical Research: Space Physics</i> , 2016, 121, 8260-8285.	2.4	29
51	An EMHD soliton model for small-scale magnetic holes in magnetospheric plasmas. <i>Journal of Geophysical Research: Space Physics</i> , 2016, 121, 4180-4190.	2.4	38
52	Propagation of small size magnetic holes in the magnetospheric plasma sheet. <i>Journal of Geophysical Research: Space Physics</i> , 2016, 121, 5510-5519.	2.4	30
53	Spatial distribution of Mercury's flux ropes and reconnection fronts: MESSENGER observations. <i>Journal of Geophysical Research: Space Physics</i> , 2016, 121, 7590-7607.	2.4	55
54	Electromagnetic disturbances observed near the dip region ahead of dipolarization front. <i>Geophysical Research Letters</i> , 2016, 43, 3026-3034.	4.0	4

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55	Thin energetic O + layer embedded in the magnetotail reconnection current sheet observed by Cluster. <i>Geophysical Research Letters</i> , 2016, 43, 11,493.	4.0	4
56	Solar wind plasma entry observed by cluster in the high-latitude magnetospheric lobes. <i>Journal of Geophysical Research: Space Physics</i> , 2016, 121, 4135-4144.	2.4	10
57	Altitude of the upper boundary of AAR based on observations of ion beams in inverted-V structures: A case study. <i>Science China Earth Sciences</i> , 2016, 59, 1489-1497.	5.2	3
58	THEMIS statistical study on the plasma properties of high-speed flows in Earth's magnetotail. <i>Science China Earth Sciences</i> , 2016, 59, 548-555.	5.2	2
59	Models of the Earth's plasmapause position. <i>Science China Earth Sciences</i> , 2016, 59, 871-872.	5.2	3
60	Propagation characteristics of young hot flow anomalies near the bow shock: Cluster observations. <i>Journal of Geophysical Research: Space Physics</i> , 2015, 120, 4142-4154.	2.4	17
61	MESSENGER observations of magnetospheric substorm activity in Mercury's near magnetotail. <i>Geophysical Research Letters</i> , 2015, 42, 3692-3699.	4.0	50
62	Magnetospheric ULF waves with increasing amplitude related to solar wind dynamic pressure changes: The Time History of Events and Macroscale Interactions during Substorms (THEMIS) observations. <i>Journal of Geophysical Research: Space Physics</i> , 2015, 120, 7179-7190.	2.4	25
63	MESSENGER observations of Alfvénic and compressional waves during Mercury's substorms. <i>Geophysical Research Letters</i> , 2015, 42, 6189-6198.	4.0	19
64	Electromagnetic energy conversion at dipolarization fronts: Multispacecraft results. <i>Journal of Geophysical Research: Space Physics</i> , 2015, 120, 4496-4502.	2.4	86
65	Transpolar arc observation after solar wind entry into the high-latitude magnetosphere. <i>Journal of Geophysical Research: Space Physics</i> , 2015, 120, 3525-3534.	2.4	18
66	Braking of high-speed flows in the magnetotail: THEMIS joint observations. <i>Science Bulletin</i> , 2014, 59, 326-334.	1.7	7
67	Rapid templated fabrication of large-scale, high-density metallic nanocone arrays and SERS applications. <i>Journal of Materials Chemistry C</i> , 2014, 2, 9987-9992.	5.5	12
68	THEMIS observation of a magnetotail current sheet flapping wave. <i>Science Bulletin</i> , 2014, 59, 154-161.	1.7	14
69	Morphology inducing selective plasma etching for AlN nanocone arrays: tip-size dependent photoluminescence and enhanced field emission properties. <i>Journal of Materials Chemistry C</i> , 2014, 2, 2417-2422.	5.5	7
70	Electric fields associated with dipolarization fronts. <i>Journal of Geophysical Research: Space Physics</i> , 2014, 119, 5272-5278.	2.4	33
71	Direct laser writing of symmetry-broken nanocorrals and their applications in SERS spectroscopy. <i>Applied Physics B: Lasers and Optics</i> , 2014, 117, 121-125.	2.2	2
72	Plasma and Magnetic-Field Characteristics of Magnetic Decreases in the Solar Wind at 1 AU: Cluster-C1 Observations. <i>Solar Physics</i> , 2014, 289, 3175-3195.	2.5	17

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73	EMHD theory and observations of electron solitary waves in magnetotail plasmas. Journal of Geophysical Research: Space Physics, 2014, 119, 4281-4289.	2.4	46
74	The current system associated with the boundary of plasma bubbles. Geophysical Research Letters, 2014, 41, 8169-8175.	4.0	13
75	Plasma and Magnetic-Field Characteristics of Magnetic Decreases in the Solar Wind at 1 AU: Cluster-C1 Observations. , 2014, , 553-573.		2
76	Solar wind entry into the high-latitude terrestrial magnetosphere during geomagnetically quiet times. Nature Communications, 2013, 4, 1466.	12.8	68
77	Current structures associated with dipolarization fronts. Journal of Geophysical Research: Space Physics, 2013, 118, 6980-6985.	2.4	61
78	Field-aligned currents associated with dipolarization fronts. Geophysical Research Letters, 2013, 40, 4503-4508.	4.0	53
79	Cluster and TC-1 observation of magnetic holes in the plasma sheet. Annales Geophysicae, 2012, 30, 583-595.	1.6	64
80	Sensing properties of infrared nanostructured plasmonic crystals fabricated by electron beam lithography and argon ion milling. Journal of Vacuum Science and Technology B: Nanotechnology and Microelectronics, 2012, 30, 06FE02.	1.2	1
81	High-speed flowing plasmas in the Earth's plasma sheet. Science Bulletin, 2011, 56, 1182-1187.	1.7	11
82	Plasma transport processes at the high latitude magnetosphere observed by cluster. , 2011, , .		0
83	The magnetotail current sheet movement detected by Cluster. , 2011, , .		0
84	Cluster observations of magnetic holes near the interplanetary current sheets at 1 AU. , 2011, , .		6
85	Statistical research on the motion properties of the magnetotail current sheet: Cluster observations. Science China Technological Sciences, 2010, 53, 1732-1738.	4.0	15
86	Cluster-C1 observations on the geometrical structure of linear magnetic holes in the solar wind at 1 AU. Annales Geophysicae, 2010, 28, 1695-1702.	1.6	37
87	Magnetic storms in Mercury's magnetosphere. Science China Technological Sciences, 0, , 1.	4.0	2