Meng Zhou

List of Publications by Citations

122 papers	2,928 citations	31 h-index	48 g-index
127 ext. papers	3,450 ext. citations	4 avg, IF	4.82 L-index

#	Paper	IF	Citations
122	THEMIS observation of multiple dipolarization fronts and associated wave characteristics in the near-Earth magnetotail. *Geophysical Research Letters*, **2009**, 36,	4.9	151
121	Observations and simulations of non-local acceleration of electrons in magnetotail magnetic reconnection events. *Nature Physics*, **2011**, 7, 360-365	16.2	145
120	Kinetic structure and wave properties associated with sharp dipolarization front observed by Cluster. *Annales Geophysicae*, **2012**, 30, 97-107	2	106
119	Whistler-mode waves inside flux pileup region: Structured or unstructured?. *Journal of Geophysical Research: Space Physics*, **2014**, 119, 9089-9100	2.6	95
118	Wave and particle characteristics of earthward electron injections associated with dipolarization fronts. *Journal of Geophysical Research*, **2010**, 115, n/a-n/a		91
117	Electron acceleration in the reconnection diffusion region: Cluster observations. *Geophysical Research Letters*, **2012**, 39, n/a-n/a	4.9	78
116	Magnetospheric Multiscale Observations of Electron Vortex Magnetic Hole in the Turbulent Magnetosheath Plasma. *Astrophysical Journal Letters*, **2017**, 836, L27	7.9	63
115	Electromagnetic energy conversion at dipolarization fronts: Multispacecraft results. *Journal of Geophysical Research: Space Physics*, **2015**, 120, 4496-4502	2.6	61
114	Observation of waves near lower hybrid frequency in the reconnection region with thin current sheet. *Journal of Geophysical Research*, **2009**, 114, n/a-n/a		59
113	Statistical characteristics of EMIC waves: Van Allen Probe observations. *Journal of Geophysical Research: Space Physics*, **2015**, 120, 4400-4408	2.6	57
112	Cluster observations of kinetic structures and electron acceleration within a dynamic plasma bubble. *Journal of Geophysical Research: Space Physics*, **2013**, 118, 674-684	2.6	57
111	Coalescence of Macroscopic Flux Ropes at the Subsolar Magnetopause: Magnetospheric Multiscale Observations. *Physical Review Letters*, **2017**, 119, 055101	7.4	56
110	Observations of turbulence within reconnection jet in the presence of guide field. *Geophysical Research Letters*, **2012**, 39, n/a-n/a	4.9	56
109	Dipolarization fronts as earthward propagating flux ropes: A three-dimensional global hybrid simulation. *Journal of Geophysical Research: Space Physics*, **2015**, 120, 6286-6300	2.6	55
108	KINETIC TURBULENCE IN THE TERRESTRIAL MAGNETOSHEATH: CLUSTER OBSERVATIONS. *Astrophysical Journal Letters*, **2014**, 789, L28	7.9	55
107	Observations of an Electron Diffusion Region in Symmetric Reconnection with Weak Guide Field. *Astrophysical Journal*, **2019**, 870, 34	4.7	53
106	A statistical study of kinetic-size magnetic holes in turbulent magnetosheath: MMS observations. *Journal of Geophysical Research: Space Physics*, **2017**, 122, 8577-8588	2.6	51

105	Magnetospheric Multiscale observations of large-amplitude, parallel, electrostatic waves associated with magnetic reconnection at the magnetopause. *Geophysical Research Letters*, **2016**, 43, 5626-5634	4.9	49
104	Two types of whistler waves in the hall reconnection region. *Journal of Geophysical Research: Space Physics*, **2016**, 121, 6639-6646	2.6	46
103	Bifunctional Copper-Doped Nickel Catalysts Enable Energy-Efficient Hydrogen Production via Hydrazine Oxidation and Hydrogen Evolution Reduction. *ACS Sustainable Chemistry and Engineering* , **2018**, 6, 12746-12754	8.3	45
102	Cold electron heating by EMIC waves in the plasmaspheric plume with observations of the Cluster satellite. *Geophysical Research Letters*, **2014**, 41, 1830-1837	4.9	44
101	Observation of large-amplitude magnetosonic waves at dipolarization fronts. *Journal of Geophysical Research: Space Physics*, **2014**, 119, 4335-4347	2.6	43
100	MMS observations of ion-scale magnetic island in the magnetosheath turbulent plasma. *Geophysical Research Letters*, **2016**, 43, 7850-7858	4.9	41
99	Wave properties in the magnetic reconnection diffusion region with high Application of the k-filtering method to Cluster multispacecraft data. *Journal of Geophysical Research*, **2010**, 115, n/a-n/a		41
98	Electric field structure inside the secondary island in the reconnection diffusion region. *Physics of Plasmas*, **2012**, 19, 042902	2.1	40
97	Wave-particle interaction in a plasmaspheric plume observed by a Cluster satellite. *Journal of Geophysical Research*, **2012**, 117, n/a-n/a		39
96	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	2.6	39
95	On the origin of the crescent-shaped distributions observed by MMS at the magnetopause. *Journal of Geophysical Research: Space Physics*, **2017**, 122, 2024-2039	2.6	35
94	Dynamics and waves near multiple magnetic null points in reconnection diffusion region. *Journal of Geophysical Research*, **2009**, 114, n/a-n/a		35
93	Density cavity in magnetic reconnection diffusion region in the presence of guide field. *Journal of Geophysical Research*, **2011**, 116, n/a-n/a		32
92	Observations of Whistler Waves Correlated with Electron-scale Coherent Structures in the Magnetosheath Turbulent Plasma. *Astrophysical Journal*, **2018**, 861, 29	4.7	32
91	Achieving a stable Na metal anode with a 3D carbon fibre scaffold. *Inorganic Chemistry Frontiers*, **2018**, 5, 864-869	6.8	31
90	Observations of the Electron Jet Generated by Secondary Reconnection in the Terrestrial Magnetotail. *Astrophysical Journal*, **2018**, 862, 144	4.7	30
89	Plasma physics of magnetic island coalescence during magnetic reconnection. *Journal of Geophysical Research: Space Physics*, **2014**, 119, 6177-6189	2.6	30
88	Evidence for Secondary Flux Rope Generated by the Electron Kelvin-Helmholtz Instability in a Magnetic Reconnection Diffusion Region. *Physical Review Letters*, **2018**, 120, 075101	7.4	28

87	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	2.6	28
86	Electric structure of dipolarization fronts associated with interchange instability in the magnetotail. *Journal of Geophysical Research: Space Physics*, **2013**, 118, 6019-6025	2.6	28
85	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	2.6	26
84	Occurrence rate of whistler waves in the magnetotail reconnection region. *Journal of Geophysical Research: Space Physics*, **2017**, 122, 7188-7196	2.6	26
83	Observations of large-amplitude electromagnetic waves and associated wave–particle interactions at the dipolarization front in the Earth's magnetotail: A case study. *Journal of Atmospheric and Solar-Terrestrial Physics*, **2015**, 129, 119-127	2	26
82	In Situ Observation of Magnetic Reconnection Between an Earthward Propagating Flux Rope and the Geomagnetic Field. *Geophysical Research Letters*, **2018**, 45, 8729-8737	4.9	26
81	Force balance at the magnetopause determined with MMS: Application to flux transfer events. *Geophysical Research Letters*, **2016**, 43, 11,941-11,947	4.9	25
80	Observation of high-frequency electrostatic waves in the vicinity of the reconnection ion diffusion region by the spacecraft of the Magnetospheric Multiscale (MMS) mission. *Geophysical Research Letters*, **2016**, 43, 4808-4815	4.9	24
79	Energy Conversion and Dissipation at Dipolarization Fronts: A Statistical Overview. *Geophysical Research Letters*, **2019**, 46, 12693-12701	4.9	24
78	Suprathermal Electron Acceleration in a Reconnecting Magnetotail: Large-Scale Kinetic Simulation. *Journal of Geophysical Research: Space Physics*, **2018**, 123, 8087-8108	2.6	24
77	Magnetospheric Multiscale Observations of an Ion Diffusion Region With Large Guide Field at the Magnetopause: Current System, Electron Heating, and Plasma Waves. *Journal of Geophysical Research: Space Physics*, **2018**, 123, 1834-1852	2.6	24
76	Direct Evidence for Electron Acceleration Within Ion-Scale Flux Rope. *Geophysical Research Letters*, **2020**, 47, e2019GL085141	4.9	23
75	Kinetic simulations of secondary reconnection in the reconnection jet. *Journal of Geophysical Research: Space Physics*, **2015**, 120, 6188-6198	2.6	23
74	In situ observations of flux rope at the separatrix region of magnetic reconnection. *Journal of Geophysical Research: Space Physics*, **2016**, 121, 205-213	2.6	23
73	Universality of Lower Hybrid Waves at Earth's Magnetopause. *Journal of Geophysical Research: Space Physics*, **2019**, 124, 8727-8760	2.6	22
72	Observations of Flux Ropes With Strong Energy Dissipation in the Magnetotail. *Geophysical Research Letters*, **2019**, 46, 580-589	4.9	21
71	Observation of Three-Dimensional Magnetic Reconnection in the Terrestrial Magnetotail. *Journal of Geophysical Research: Space Physics*, **2017**, 122, 9513-9520	2.6	20
70	A statistical study on the whistler waves behind dipolarization fronts. *Journal of Geophysical Research: Space Physics*, **2015**, 120, 1086-1095	2.6	20

69	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	2.6	20
68	Dawn-dusk scale of dipolarization front in the Earth magnetotail: multi-cases study. *Astrophysics and Space Science*, **2015**, 357, 1	1.6	19
67	Evidence of deflected super-Alfvenic electron jet in a reconnection region with weak guide field. *Journal of Geophysical Research: Space Physics*, **2014**, 119, 1541-1548	2.6	17
66	Observation of a Sharp Negative Dipolarization Front in the Reconnection Outflow Region. *Chinese Physics Letters*, **2011**, 28, 109402	1.8	16
65	A simulation study of particle energization observed by THEMIS spacecraft during a substorm. *Journal of Geophysical Research*, **2009**, 114, n/a-n/a		16
64	MMS Observations of Kinetic-size Magnetic Holes in the Terrestrial Magnetotail Plasma Sheet. *Astrophysical Journal*, **2019**, 875, 113	4.7	15
63	Chorus Wave Modulation of Langmuir Waves in the Radiation Belts. *Geophysical Research Letters*, **2017**, 44, 11,713-11,721	4.9	15
62	Direct evidence for kinetic effects associated with solar wind reconnection. *Scientific Reports*, **2015**, 5, 8080	4.9	15
61	THEMIS observations of electron acceleration associated with the evolution of substorm dipolarization in the near-Earth tail. *Journal of Geophysical Research: Space Physics*, **2013**, 118, 4237-4247	2.6	15
60	Geomagnetic storms and EMIC waves: Van Allen Probe observations. *Journal of Geophysical Research: Space Physics*, **2016**, 121, 6444-6457	2.6	15
59	The anti-hyperuricemic effect of four astilbin stereoisomers in Smilax glabra on hyperuricemic mice. *Journal of Ethnopharmacology*, **2019**, 238, 111777	5	14
58	Revealing the sub-structures of the magnetic reconnection separatrix via particle-in-cell simulation. *Physics of Plasmas*, **2012**, 19, 072907	2.1	14
57	Local Excitation of Whistler Mode Waves and Associated Langmuir Waves at Dayside Reconnection Regions. *Geophysical Research Letters*, **2018**, 45, 8793-8802	4.9	14
56	Observations of a Kinetic-Scale Magnetic Hole in a Reconnection Diffusion Region. *Geophysical Research Letters*, **2019**, 46, 6248-6257	4.9	13
55	Statistics of energetic electrons in the magnetotail reconnection. *Journal of Geophysical Research: Space Physics*, **2016**, 121, 3108-3119	2.6	13
54	Compression-related EMIC waves drive relativistic electron precipitation. *Science China Technological Sciences*, **2014**, 57, 2418-2425	3.5	13
53	On the Energy Conversion Rate during Collisionless Magnetic Reconnection. *Astrophysical Journal Letters*, **2019**, 883, L22	7.9	12
52	Observation of directional change of core field inside flux ropes within one reconnection diffusion region in the Earth magnetotail. *Science Bulletin*, **2014**, 59, 4797-4803		12

51	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	2.6	12
50	Observations of Secondary Magnetic Reconnection in the Turbulent Reconnection Outflow. *Geophysical Research Letters*, **2021**, 48, e2020GL091215	4.9	12
49	Three new flavonoid glycosides from Smilax glabra and their anti-inflammatory activity. *Natural Product Research*, **2018**, 32, 1760-1768	2.3	12
48	Mathematical Methods and Algorithms for Improving Near-Infrared Tunable Diode-Laser Absorption Spectroscopy. *Sensors*, **2018**, 18,	3.8	12
47	EVIDENCE FOR NEWLY INITIATED RECONNECTION IN THE SOLAR WIND AT 1 AU. *Astrophysical Journal*, **2015**, 809, 5	4.7	11
46	Electron acceleration associated with the magnetic flux pileup regions in the near-Earth plasma sheet: A multicase study. *Journal of Geophysical Research: Space Physics*, **2016**, 121, 4331-4342	2.6	11
45	Electron-scale Vertical Current Sheets in a Bursty Bulk Flow in the Terrestrial Magnetotail. *Astrophysical Journal Letters*, **2019**, 872, L26	7.9	11
44	Identifying the electron diffusion region in a realistic simulation of Earth's magnetotail. *Geophysical Research Letters*, **2016**, 43, 6005-6011	4.9	10
43	Coordinated observations of two types of diffuse auroras near magnetic local noon by Magnetospheric Multiscale mission and ground all-sky camera. *Geophysical Research Letters*, **2017**, 44, 8130-8139	4.9	10
42	Reconnection Front Associated with Asymmetric Magnetic Reconnection: Particle-in-cell Simulations. *Astrophysical Journal Letters*, **2019**, 881, L22	7.9	9
41	Force and Energy Balance of the Dipolarization Front. *Journal of Geophysical Research: Space Physics*, **2020**, 125, e2020JA028278	2.6	9
40	New furostanol saponins with anti-inflammatory and cytotoxic activities from the rhizomes of Smilax davidiana. *Steroids*, **2017**, 127, 62-68	2.8	8
39	Observations of Short-period Current Sheet Flapping Events in the Earth's Magnetotail. *Astrophysical Journal Letters*, **2019**, 874, L18	7.9	7
38	Energetic electrons associated with magnetic reconnection in the sheath of interplanetary coronal mass ejection. *Science Bulletin*, **2012**, 57, 1455-1460		7
37	Observations of Electron-Only Magnetic Reconnection Associated With Macroscopic Magnetic Flux Ropes. *Geophysical Research Letters*, **2020**, 47, e2020GL089659	4.9	7
36	Extension of the Electron Diffusion Region in a Guide Field Magnetic Reconnection at Magnetopause. *Astrophysical Journal Letters*, **2020**, 892, L5	7.9	6
35	System Design of the Prototype Incoherent Scatter Radar at Nanchang University. *IEEE Geoscience and Remote Sensing Letters*, **2014**, 11, 352-356	4.1	6
34	Large three-dimensional ellipsoid sphere-shaped structure of electrostatic solitary waves in the terrestrial bow shock under condition of □e/□e . *Geophysical Research Letters*, **2013**, 40, 3356-3361	4.9	6

33	Modeling substorm ion injection observed by the THEMIS and LANL spacecraft in the near-Earth magnetotail. *Journal of Geophysical Research*, **2011**, 116, n/a-n/a		6
32	Three-Dimensional Electron-Scale Magnetic Reconnection in Earth's Magnetosphere. *Geophysical Research Letters*, **2021**, 48,	4.9	6
31	AME: A Cross-Scale Constellation of CubeSats to Explore Magnetic Reconnection in the Solar Terrestrial Relation. *Frontiers in Physics*, **2020**, 8,	3.9	5
30	Deformation of plasma bubbles and the associated field aligned current system during substorm recovery phase. *Journal of Geophysical Research*, **2012**, 117, n/a-n/a		5
29	Direct auroral precipitation from the magnetotail during substorms. *Geophysical Research Letters*, **2013**, 40, 3787-3792	4.9	5
28	Electron Acceleration Rate at Dipolarization Fronts. *Astrophysical Journal*, **2020**, 903, 84	4.7	5
27	Tripolar electric field Structure in guide field magnetic reconnection. *Annales Geophysicae*, **2018**, 36, 373-379	2	5
26	Optimized Node Deployment Algorithm and Parameter Investigation in a Mobile Sensor Network for Robotic Systems. *International Journal of Advanced Robotic Systems*, **2015**, 12, 152	1.4	4
25	How Does the Guide Field Affect the Asymmetry of Hall Magnetic and Electric Fields in Fast Magnetic Reconnection?. *Chinese Physics Letters*, **2015**, 32, 095202	1.8	4
24	Observations of current sheets associated with solar wind reconnection exhausts passing through the near lunar wake. *Journal of Geophysical Research: Space Physics*, **2015**, 120, 9246-9255	2.6	4
23	The turbulence evolution in the high region of the Earth's foreshock. *Journal of Geophysical Research: Space Physics*, **2013**, 118, 7151-7159	2.6	4
22	Small-scale dipolarization fronts in the Earth?s magnetotail. *Earth and Planetary Physics*, **2019**, 3, 358-364	1.6	4
21	Whistler and Broadband Electrostatic Waves in the Multiple X-Line Reconnection at the Magnetopause. *Geophysical Research Letters*, **2021**, 48, e2020GL091320	4.9	4
20	Electron dynamics and wave activities associated with mirror mode structures in the near-Earth magnetotail. *Science China Technological Sciences*, **2014**, 57, 1541-1551	3.5	3
19	Anomalously high rate refilling in the near lunar wake caused by the Earth's bow shock. *Journal of Geophysical Research: Space Physics*, **2017**, 122, 9102-9114	2.6	3
18	Comparisons of electron acceleration efficiency among different structures during magnetic reconnection: a Cluster multicase study. *Annales Geophysicae*, **2015**, 33, 1469-1478	2	3
17	Sub-ion-scale Dynamics of the Ion Diffusion Region in the Magnetotail: MMS Observations. *Journal of Geophysical Research: Space Physics*, **2019**, 124, 7898-7911	2.6	2
16	Ion dynamics associated with substorm dipolarization fronts. *Science China Earth Sciences*, **2014**, 57, 2543-2551	1.7	2

15	Anomalous Resistivity Associated with Secondary Islands in the Reconnection Region. *Chinese Physics Letters*, **2012**, 29, 089401	1.8	2
14	Formation of Negative J ? E ? in the Outer Electron Diffusion Region During Magnetic Reconnection. *Journal of Geophysical Research: Space Physics*, **2022**, 127,	2.6	2
13	Energy conversion during multiple X-lines reconnection. *Physics of Plasmas*, **2020**, 27, 122905	2.1	2
12	Stacked Electron Diffusion Regions and Electron Kelvin□Helmholtz Vortices within the Ion Diffusion Region of Collisionless Magnetic Reconnection. *Astrophysical Journal Letters*, **2022**, 926, L27	7.9	2
11	Measurements of Energy Dissipation in the Electron Diffusion Region. *Geophysical Research Letters*, **2021**, 48,	4.9	2
10	Statistical study on the suprathermal electrons properties around dipolarization fronts in Earth□ magnetotail. *Science China Technological Sciences*, **2015**, 58, 961-966	3.5	1
9	Statistics of the Intense Current Structure in the Dayside Magnetopause Boundary Layer. *Journal of Geophysical Research: Space Physics*, **2021**, 126, e2021JA029890	2.6	1
8	Antibacterial activities of the chemical constituents of MST7-3 collected from coal area. *Natural Product Research*, **2021**, 1-10	2.3	1
7	Electron-Only Magnetic Reconnection: Lessons Learned From Magnetic Island Coalescence. *Geophysical Research Letters*, **2022**, 49,	4.9	1
6	Evidence for Whistler Waves Propagating Into the Electron Diffusion Region of Collisionless Magnetic Reconnection. *Geophysical Research Letters*, **2022**, 49,	4.9	1
5	Intense Energy Conversion Events at the Magnetopause Boundary Layer. *Geophysical Research Letters*, **2022**, 49,	4.9	1
4	Contrasting the Mechanisms of Reconnection-driven Electron Acceleration with In Situ Observations from MMS in the Terrestrial Magnetotail. *Astrophysical Journal*, **2022**, 931, 135	4.7	1
3	Characteristics of Turbulence Driven by Transient Magnetic Reconnection in the Terrestrial Magnetotail. *Astrophysical Journal*, **2022**, 925, 17	4.7	0
2	Electron Pitch Angle Distributions Around Dipolarization Fronts at the Off Magnetic Equator. *Journal of Geophysical Research: Space Physics*, **2021**, 126, e2020JA028787	2.6	0
1	Distribution of Negative J □E ? in the Inflow Edge of the Inner Electron Diffusion Region During Tail Magnetic Reconnection: Simulations Vs. Observations. *Geophysical Research Letters*, **2022**, 49,	4.9	0