L-J Chen

List of Publications by Year
in descending order

135	5,156	70961	102304
papers	citations	41 h-index	66 g-index

142	142	142	1932
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Solitary Magnetic Structures Developed From Gyroâ€Resonance With Solar Wind Ions at Mars and Earth. Geophysical Research Letters, 2022, 49, .	1.5	7
2	Whistler waves generated by nongyrotropic and gyrotropic electron beams during asymmetric guide field reconnection. Physics of Plasmas, 2022, 29, .	0.7	6
3	Unsteady Magnetopause Reconnection Under Quasiâ€Steady Solar Wind Driving. Geophysical Research Letters, 2022, 49, .	1.5	7
4	Strong reconnection electric fields in shock-driven turbulence. Physics of Plasmas, 2022, 29, .	0.7	13
5	Automatic Identification and New Observations of Ion Energy Dispersion Events in the Cusp Ionosphere. Journal of Geophysical Research: Space Physics, 2022, 127, .	0.8	2
6	Lowerâ€Hybrid Wave Structures and Interactions With Electrons Observed in Magnetotail Reconnection Diffusion Regions. Journal of Geophysical Research: Space Physics, 2022, 127, .	0.8	8
7	The EDR inflow region of a reconnecting current sheet in the geomagnetic tail. Physics of Plasmas, 2022, 29, .	0.7	3
8	A New Look at the Electron Diffusion Region in Asymmetric Magnetic Reconnection. Journal of Geophysical Research: Space Physics, 2021, 126, e2020JA028456.	0.8	4
9	Correlating the interplanetary factors to distinguish extreme and major geomagnetic storms. Earth and Planetary Physics, 2021, 5, 1-7.	0.4	1
10	Magnetotailâ€Inner Magnetosphere Transport Associated With Fast Flows Based on Combined Globalâ€Hybrid and CIMI Simulation. Journal of Geophysical Research: Space Physics, 2021, 126, e2020JA028405.	0.8	6
11	HYPERS simulations of solar wind interactions with the Earth's magnetosphere and the Moon. Journal of Atmospheric and Solar-Terrestrial Physics, 2021, 215, 105581.	0.6	13
12	Magnetopause Reconnection and Indents Induced by Foreshock Turbulence. Geophysical Research Letters, 2021, 48, e2021GL093029.	1.5	14
13	Direct Evidence for Magnetic Reflection of Heavy Ions from High Mach Number Collisionless Shocks. Astrophysical Journal Letters, 2021, 915, L19.	3.0	6
14	Structures in the terms of the Vlasov equation observed at Earthâ€™s magnetopause. Nature Physics, 2021, 17, 1056-1065.	6.5	15
15	Lower-hybrid drift waves and their interaction with plasmas in a 3D symmetric reconnection simulation with zero guide field. Physics of Plasmas, 2021, 28, .	0.7	9
16	3D Spaceâ€Time Adaptive Hybrid Simulations of Magnetosheath Highâ€Speed Jets. Journal of Geophysical Research: Space Physics, 2021, 126, e2020JA029035.	0.8	15
17	Evaluating the deHoffmannâ€Teller Crossâ€Shock Potential at Real Collisionless Shocks. Journal of Geophysical Research: Space Physics, 2021, 126, e2021JA029295.	0.8	6
18	A statistical study of three-second foreshock ULF waves observed by the Magnetospheric Multiscale mission. Physics of Plasmas, 2021, 28, .	0.7	6

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19	Bursty magnetic reconnection at the Earth's magnetopause triggered by high-speed jets. Physics of Plasmas, 2021, 28, .	0.7	18
20	MMS Observations of an Expanding Oxygen Wave in Magnetic Reconnection. Geophysical Research Letters, 2021, 48, e2021GL095065.	1.5	0
21	Solitary Magnetic Structures at Quasiâ€Parallel Collisionless Shocks: Formation. Geophysical Research Letters, 2021, 48, e2020GL090800.	1.5	21
22	The Discrepancy Between Simulation and Observation of Electric Fields in Collisionless Shocks. Frontiers in Astronomy and Space Sciences, 2021, 7, .	1.1	11
23	Three Solar Irradiance Proxies for Aperture Photoelectron Detections in Topâ€Hat ESAs Coated With Ebonolâ€C. Journal of Geophysical Research: Space Physics, 2021, 126, .	0.8	1
24	Multiscale Coupling During Magnetopause Reconnection: Interface Between the Electron and Ion Diffusion Regions. Journal of Geophysical Research: Space Physics, 2020, 125, e2020JA027985.	0.8	10
25	Lower Hybrid Drift Waves During Guide Field Reconnection. Geophysical Research Letters, 2020, 47, e2020GL087192.	1.5	16
26	Lowerâ€Hybridâ€Drift Vortices in the Electronâ€Scale Magnetic Reconnection Layer. Geophysical Research Letters, 2020, 47, e2020GL090726.	1.5	6
27	A Case Study of Nonresonant Mode 3â€s ULF Waves Observed by MMS. Journal of Geophysical Research: Space Physics, 2020, 125, e2020JA028557.	0.8	5
28	Magnetic reconnection and kinetic waves generated in the Earth's quasi-parallel bow shock. Physics of Plasmas, 2020, 27, .	0.7	21
29	Electron Inflow Velocities and Reconnection Rates at Earth's Magnetopause and Magnetosheath. Geophysical Research Letters, 2020, 47, e2020GL089082.	1.5	23
30	Statistical Properties of Magnetic Structures and Energy Dissipation during Turbulent Reconnection in the Earth's Magnetotail. Geophysical Research Letters, 2020, 47, e2020GL088540.	1.5	9
31	Lower-Hybrid Drift Waves Driving Electron Nongyrotropic Heating and Vortical Flows in a Magnetic Reconnection Layer. Physical Review Letters, 2020, 125, 025103.	2.9	29
32	Electron Energy Partition across Interplanetary Shocks. III. Analysis. Astrophysical Journal, 2020, 893, 22.	1.6	21
33	Ion-scale Current Structures in Short Large-amplitude Magnetic Structures. Astrophysical Journal, 2020, 898, 121.	1.6	12
34	Reconstruction of Electron and Ion Distribution Functions in a Magnetotail Reconnection Diffusion Region. Journal of Geophysical Research: Space Physics, 2020, 125, e2020JA027879.	0.8	0
35	Magnetic Reconnection in a Quasiâ€Parallel Shock: Twoâ€Dimensional Local Particleâ€inâ€Cell Simulation. Geophysical Research Letters, 2019, 46, 9352-9361.	1.5	36
36	Electron Energy Partition across Interplanetary Shocks. I. Methodology and Data Product. Astrophysical Journal, Supplement Series, 2019, 243, 8.	3.0	57

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37	Effects of the guide field on electron distribution functions in the diffusion region of asymmetric reconnection. Physics of Plasmas, 2019, 26, .	0.7	8
38	Reconnection With Magnetic Flux Pileup at the Interface of Converging Jets at the Magnetopause. Geophysical Research Letters, 2019, 46, 1937-1946.	1.5	36
39	Observational Evidence of Magnetic Reconnection in the Terrestrial Bow Shock Transition Region. Geophysical Research Letters, 2019, 46, 562-570.	1.5	47
40	MMS Measurements of the Vlasov Equation: Probing the Electron Pressure Divergence Within Thin Current Sheets. Geophysical Research Letters, 2019, 46, 7862-7872.	1.5	19
41	Electron Diffusion Regions in Magnetotail Reconnection Under Varying Guide Fields. Geophysical Research Letters, 2019, 46, 6230-6238.	1.5	33
42	Whistler wave generation by electron temperature anisotropy during magnetic reconnection at the magnetopause. Physics of Plasmas, 2019, 26, .	0.7	11
43	Ion Behaviors in the Reconnection Diffusion Region of a Corrugated Magnetotail Current Sheet. Geophysical Research Letters, 2019, 46, 5014-5020.	1.5	5
44	Highâ€Frequency Wave Generation in Magnetotail Reconnection: Linear Dispersion Analysis. Geophysical Research Letters, 2019, 46, 4089-4097.	1.5	32
45	Magnetic Reconnection in Three Dimensions: Observations of Electromagnetic Drift Waves in the Adjacent Current Sheet. Journal of Geophysical Research: Space Physics, 2019, 124, 10104-10118.	0.8	6
46	Electron Energy Partition across Interplanetary Shocks. II. Statistics. Astrophysical Journal, Supplement Series, 2019, 245, 24.	3.0	40
47	The physical foundation of the reconnection electric field. Physics of Plasmas, 2018, 25, .	0.7	20
48	Magnetic Reconnection, Turbulence, and Particle Acceleration: Observations in the Earth's Magnetotail. Geophysical Research Letters, 2018, 45, 3338-3347.	1.5	69
49	Localized Oscillatory Energy Conversion in Magnetopause Reconnection. Geophysical Research Letters, 2018, 45, 1237-1245.	1.5	41
50	Wave Phenomena and Beamâ€Plasma Interactions at the Magnetopause Reconnection Region. Journal of Geophysical Research: Space Physics, 2018, 123, 1118-1133.	0.8	19
51	Magnetic Reconnection at a Thin Current Sheet Separating Two Interlaced Flux Tubes at the Earth's Magnetopause. Journal of Geophysical Research: Space Physics, 2018, 123, 1779-1793.	0.8	35
52	On the Collisionless Asymmetric Magnetic Reconnection Rate. Geophysical Research Letters, 2018, 45, 3311-3318.	1.5	15
53	Magnetospheric Multiscale Dayside Reconnection Electron Diffusion Region Events. Journal of Geophysical Research: Space Physics, 2018, 123, 4858-4878.	0.8	79
54	Effect of the Reconnection Electric Field on Electron Distribution Functions in the Diffusion Region of Magnetotail Reconnection. Geophysical Research Letters, 2018, 45, 12,142.	1.5	14

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55	Electron-scale dynamics of the diffusion region during symmetric magnetic reconnection in space. Science, 2018, 362, 1391-1395.	6.0	221
56	On the role of separatrix instabilities in heating the reconnection outflow region. Physics of Plasmas, 2018, 25, .	0.7	27
57	The two-fluid dynamics and energetics of the asymmetric magnetic reconnection in laboratory and space plasmas. Nature Communications, 2018, 9, 5223.	5.8	18
58	Energy Conversion and Partition in the Asymmetric Reconnection Diffusion Region. Journal of Geophysical Research: Space Physics, 2018, 123, 8185-8205.	0.8	17
59	Electron Bulk Acceleration and Thermalization at Earthâ€™s Quasiperpendicular Bow Shock. Physical Review Letters, 2018, 120, 225101.	2.9	38
60	Whistler Wave Generation by Anisotropic Tail Electrons During Asymmetric Magnetic Reconnection in Space and Laboratory. Geophysical Research Letters, 2018, 45, 8054-8061.	1.5	17
61	Drift turbulence, particle transport, and anomalous dissipation at the reconnecting magnetopause. Physics of Plasmas, 2018, 25, .	0.7	45
62	Hodographic approach for determining spacecraft trajectories through magnetic reconnection diffusion regions. Geophysical Research Letters, 2017, 44, 1625-1633.	1.5	7
63	Magnetospheric Multiscale mission observations of the outer electron diffusion region. Geophysical Research Letters, 2017, 44, 2049-2059.	1.5	41
64	Largeâ€scale characteristics of reconnection diffusion regions and associated magnetopause crossings observed by MMS. Journal of Geophysical Research: Space Physics, 2017, 122, 5466-5486.	0.8	48
65	Electron diffusion region during magnetopause reconnection with an intermediate guide field: Magnetospheric multiscale observations. Journal of Geophysical Research: Space Physics, 2017, 122, 5235-5246.	0.8	52
66	Parallel electron heating in the magnetospheric inflow region. Geophysical Research Letters, 2017, 44, 4384-4392.	1.5	8
67	Drift waves, intense parallel electric fields, and turbulence associated with asymmetric magnetic reconnection at the magnetopause. Geophysical Research Letters, 2017, 44, 2978-2986.	1.5	46
68	Enhanced electron mixing and heating in 3â€Ð asymmetric reconnection at the Earth's magnetopause. Geophysical Research Letters, 2017, 44, 2096-2104.	1.5	56
69	The effect of reconnection electric field on crescent and U-shaped distribution functions in asymmetric reconnection with no guide field. Physics of Plasmas, 2017, 24, .	0.7	20
70	Electron heating and energy inventory during asymmetric reconnection in a laboratory plasma. Journal of Geophysical Research: Space Physics, 2017, 122, 9264-9281.	0.8	18
71	Population Mixing in Asymmetric Magnetic Reconnection with a Guide Field. Physical Review Letters, 2017, 118, 145101.	2.9	11
72	Electron distribution functions in the diffusion region of asymmetric magnetic reconnection. Geophysical Research Letters, 2016, 43, 1828-1836.	1.5	72

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73	Currents and associated electron scattering and bouncing near the diffusion region at Earth's magnetopause. Geophysical Research Letters, 2016, 43, 3042-3050.	1.5	81
74	Ionâ€scale secondary flux ropes generated by magnetopause reconnection as resolved by MMS. Geophysical Research Letters, 2016, 43, 4716-4724.	1.5	95
75	Electron energization and structure of the diffusion region during asymmetric reconnection. Geophysical Research Letters, 2016, 43, 2405-2412.	1.5	60
76	Electron heating in the exhaust of magnetic reconnection with negligible guide field. Journal of Geophysical Research: Space Physics, 2016, 121, 2104-2130.	0.8	27
77	Twoâ€scale ion meandering caused by the polarization electric field during asymmetric reconnection. Geophysical Research Letters, 2016, 43, 7831-7839.	1.5	19
78	Electron-scale measurements of magnetic reconnection in space. Science, 2016, 352, aaf2939.	6.0	545
79	On the electron diffusion region in asymmetric reconnection with a guide magnetic field. Geophysical Research Letters, 2016, 43, 2359-2364.	1.5	50
80	Electron dynamics in a subprotonâ€gyroscale magnetic hole. Geophysical Research Letters, 2016, 43, 4112-4118.	1.5	49
81	MMS observations of electronâ€scale filamentary currents in the reconnection exhaust and near the X line. Geophysical Research Letters, 2016, 43, 6060-6069.	1.5	99
82	MMS observations of large guide field symmetric reconnection between colliding reconnection jets at the center of a magnetic flux rope at the magnetopause. Geophysical Research Letters, 2016, 43, 5536-5544.	1.5	84
83	Ion demagnetization in the magnetopause current layer observed by MMS. Geophysical Research Letters, 2016, 43, 4850-4857.	1.5	12
84	Magnetospheric Multiscale Satellites Observations of Parallel Electric Fields Associated with Magnetic Reconnection. Physical Review Letters, 2016, 116, 235102.	2.9	61
85	Magnetospheric Multiscale Observations of the Electron Diffusion Region of Large Guide Field Magnetic Reconnection. Physical Review Letters, 2016, 117, 015001.	2.9	74
86	Electron energization and mixing observed by MMS in the vicinity of an electron diffusion region during magnetopause reconnection. Geophysical Research Letters, 2016, 43, 6036-6043.	1.5	67
87	Spacecraft Observations and Analytic Theory of Crescent-Shaped Electron Distributions in Asymmetric Magnetic Reconnection. Physical Review Letters, 2016, 117, 185101.	2.9	42
88	In-situ observations of flux ropes formed in association with a pair of spiral nulls in magnetotail plasmas. Physics of Plasmas, 2016, 23, .	0.7	11
89	Finite gyroradius effects in the electron outflow of asymmetric magnetic reconnection. Geophysical Research Letters, 2016, 43, 6724-6733.	1.5	37
90	Magnetospheric Multiscale observations of largeâ€amplitude, parallel, electrostatic waves associated with magnetic reconnection at the magnetopause. Geophysical Research Letters, 2016, 43, 5626-5634.	1.5	66

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91	Electron acceleration by parallel and perpendicular electric fields during magnetic reconnection without guide field. Journal of Geophysical Research: Space Physics, 2015, 120, 9355-9367.	0.8	12
92	Spatiotemporal evolution of electron characteristics in the electron diffusion region of magnetic reconnection: Implications for acceleration and heating. Geophysical Research Letters, 2015, 42, 2586-2593.	1.5	60
93	Highly structured electron anisotropy in collisionless reconnection exhausts. Geophysical Research Letters, 2014, 41, 5389-5395.	1.5	33
94	Laboratory Study of Magnetic Reconnection with a Density Asymmetry across the Current Sheet. Physical Review Letters, 2014, 113, 095002.	2.9	35
95	Electron distribution functions in the electron diffusion region of magnetic reconnection: Physics behind the fine structures. Geophysical Research Letters, 2014, 41, 8688-8695.	1.5	55
96	In-plane electric fields in magnetic islands during collisionless magnetic reconnection. Physics of Plasmas, 2012, 19, 112902.	0.7	23
97	Microfabricated Flexible Electrodes for Multiaxis Sensing in the Large Plasma Device at UCLA. IEEE Transactions on Plasma Science, 2011, 39, 1507-1515.	0.6	52
98	â€œCraterâ€•flux transfer events: Highroad to the X line?. Journal of Geophysical Research, 2011, 116, n/a-n/a.	3.3	16
99	Kinetic Structure of the Electron Diffusion Region in Antiparallel Magnetic Reconnection. Physical Review Letters, 2011, 106, 065002.	2.9	69
100	The inversion layer of electric fields and electron phase-space-hole structure during two-dimensional collisionless magnetic reconnection. Physics of Plasmas, 2011, 18, 012904.	0.7	40
101	On The Propagation And Modulation Of Electrostatic Solitary Waves Observed Near The Magnetopause On Cluster. AIP Conference Proceedings, 2011, , .	0.3	1
102	Debye-scale solitary structures measured in a beam-plasma laboratory experiment. Nonlinear Processes in Geophysics, 2011, 18, 41-47.	0.6	18
103	Laboratory Measurements of Electrostatic Solitary Structures Generated by Beam Injection. Physical Review Letters, 2010, 105, 115001.	2.9	41
104	Cluster observations of bidirectional beams caused by electron trapping during antiparallel reconnection. Journal of Geophysical Research, 2010, 115, .	3.3	58
105	Electrostatic solitary waves in current layers: from Cluster observations during a super-substorm to beam experiments at the LAPD. Nonlinear Processes in Geophysics, 2009, 16, 431-442.	0.6	20
106	Multispacecraft observations of the electron current sheet, neighboring magnetic islands, and electron acceleration during magnetotail reconnection. Physics of Plasmas, 2009, 16, .	0.7	57
107	Furthering our understanding of electrostatic solitary waves through Cluster multispacecraft observations and theory. Advances in Space Research, 2008, 41, 1666-1676.	1.2	53
108	Observation of energetic electrons within magnetic islands. Nature Physics, 2008, 4, 19-23.	6.5	238

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109	Evidence of an extended electron current sheet and its neighboring magnetic island during magnetotail reconnection. Journal of Geophysical Research, 2008, 113, .	3.3	92
110	Electrostatic solitary structures observed at Saturn. Geophysical Research Letters, 2006, 33, .	1.5	25
111	On the generation of solitary waves observed by Cluster in the near-Earth magnetosheath. Nonlinear Processes in Geophysics, 2005, 12, 181-193.	0.6	68
112	Electrostatic solitary structures associated with the November 10, 2003, interplanetary shock at 8.7 AU. Geophysical Research Letters, 2005, 32, .	1.5	32
113	On the width-amplitude inequality of electron phase space holes. Journal of Geophysical Research, 2005, 110, .	3.3	46
114	Properties of small-amplitude electron phase-space holes observed by Polar. Journal of Geophysical Research, 2005, 110, .	3.3	61
115	Auroral electron dispersion below inverted-V energies: Resonant deceleration and acceleration by AlfvÃ©n waves. Journal of Geophysical Research, 2005, 110, .	3.3	19
116	Isolated electrostatic structures observed throughout the Cluster orbit: relationship to magnetic field strength. Annales Geophysicae, 2004, 22, 2515-2523.	0.6	117
117	Solitary waves observed in the auroral zone: the Cluster multi-spacecraft perspective. Nonlinear Processes in Geophysics, 2004, 11, 183-196.	0.6	87
118	Bernsteinâ€“Greeneâ€“Kruskal solitary waves in three-dimensional magnetized plasma. Physical Review E, 2004, 69, 055401.	0.8	52
119	Wind observations pertaining to current disruption and ballooning instability during substorms. Geophysical Research Letters, 2003, 30, .	1.5	26
120	BGK electron solitary waves in 3D magnetized plasma. Geophysical Research Letters, 2002, 29, 45-1-45-4.	1.5	33
121	BGK electron solitary waves: 1D and 3D. Nonlinear Processes in Geophysics, 2002, 9, 111-119.	0.6	28
122	A new framework for studying the relationship of aurora and plasma sheet dynamics. Journal of Atmospheric and Solar-Terrestrial Physics, 2002, 64, 115-124.	0.6	4
123	Kinetic Characterization of Plasma Sheet Dynamics. Space Science Reviews, 2001, 95, 237-255.	3.7	35
124	Comparison of plasma sheet dynamics during pseudobreakups and expansive aurorae. Physics of Plasmas, 2001, 8, 1127.	0.7	12
125	Kinetic properties of bursty bulk flow events. Geophysical Research Letters, 2000, 27, 1847-1850.	1.5	22
126	Multicomponent plasma distributions in the tail current sheet associated with substorms. Geophysical Research Letters, 2000, 27, 843-846.	1.5	12

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127	Coincident POLAR/UVI and WIND observations of pseudobreakups. Geophysical Research Letters, 2000, 27, 1379-1382.	1.5	24
128	The geopause in relation to the plasma sheet and the low-latitude boundary layer: Comparison between Wind observations and multifluid simulations. Journal of Geophysical Research, 2000, 105, 2563-2587.	3.3	7
129	New results on the polar cap and PSBL dynamics. Geophysical Monograph Series, 1999, , 57-64.	0.1	0
130	Reply [to â€œComment on: â€˜New observations of ion beams in the plasma sheet boundary layerâ€™ by G. Parks et al.â€]. Geophysical Research Letters, 1999, 26, 2639-2640.	1.5	1
131	New observations of ion beams in the plasma sheet boundary layer. Geophysical Research Letters, 1998, 25, 3285-3288.	1.5	71
132	A dayside auroral energy deposition case study using the Polar Ultraviolet Imager. Geophysical Research Letters, 1997, 24, 991-994.	1.5	45
133	Remote determination of auroral energy characteristics during substorm activity. Geophysical Research Letters, 1997, 24, 995-998.	1.5	108
134	Does the UVI on polar detect cosmic snowballs?. Geophysical Research Letters, 1997, 24, 3109-3112.	1.5	15
135	Auroral Observations from the POLAR Ultraviolet Imager (UVI). Geophysical Monograph Series, 0, , 149-160.	0.1	24