

# W-L Liu

## List of Publications by Year in descending order

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91  
papers

3,145  
citations

172457

29  
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161849

54  
g-index

93  
all docs

93  
docs citations

93  
times ranked

2808  
citing authors

#	ARTICLE	IF	CITATIONS
1	Very long carbon nanotubes. Nature, 1998, 394, 631-632.	27.8	345
2	Ultrahigh-energy photons up to 1.4 petaelectronvolts from 12 $\hat{1}^3$ -ray Galactic sources. Nature, 2021, 594, 33-36.	27.8	262
3	First Results from the THEMIS Mission. Space Science Reviews, 2008, 141, 453-476.	8.1	171
4	Dual nonlinear dielectric resonance and strong natural resonance in Ni/ZnO nanocapsules. Applied Physics Letters, 2009, 94, .	3.3	137
5	First Detection of sub-PeV Diffuse Gamma Rays from the Galactic Disk: Evidence for Ubiquitous Galactic Cosmic Rays beyond PeV Energies. Physical Review Letters, 2021, 126, 141101.	7.8	120
6	Whistler-mode waves inside flux pileup region: Structured or unstructured?. Journal of Geophysical Research: Space Physics, 2014, 119, 9089-9100.	2.4	112
7	On the calculation of electric diffusion coefficient of radiation belt electrons with in situ electric field measurements by THEMIS. Geophysical Research Letters, 2016, 43, 1023-1030.	4.0	90
8	Simultaneous THEMIS in situ and auroral observations of a small substorm. Geophysical Research Letters, 2008, 35, .	4.0	89
9	Electric and magnetic field observations of Pc4 and Pc5 pulsations in the inner magnetosphere: A statistical study. Journal of Geophysical Research, 2009, 114, .	3.3	79
10	Poloidal ULF wave observed in the plasmasphere boundary layer. Journal of Geophysical Research: Space Physics, 2013, 118, 4298-4307.	2.4	74
11	Extended Very-High-Energy Gamma-Ray Emission Surrounding PSR $J0622+3749$ Observed by LHAASO-KM2A. Physical Review Letters, 2021, 126, 241103.	7.8	73
12	Identifying magnetic reconnection events using the FOTE method. Journal of Geophysical Research: Space Physics, 2016, 121, 1263-1272.	2.4	69
13	Explaining the rolling-pin distribution of suprathermal electrons behind dipolarization fronts. Geophysical Research Letters, 2017, 44, 6492-6499.	4.0	68
14	Quantifying radial diffusion coefficients of radiation belt electrons based on global MHD simulation and spacecraft measurements. Journal of Geophysical Research, 2012, 117, .	3.3	62
15	Solar wind pressure pulse-driven magnetospheric vortices and their global consequences. Journal of Geophysical Research: Space Physics, 2014, 119, 4274-4280.	2.4	61
16	Structural and electrical characteristics of Ge nanoclusters embedded in Al <sub>2</sub> O <sub>3</sub> gate dielectric. Applied Physics Letters, 2003, 82, 4708-4710.	3.3	58
17	Three-dimensional lunar wake reconstructed from ARTEMIS data. Journal of Geophysical Research: Space Physics, 2014, 119, 5220-5243.	2.4	54
18	Dynamic plasmopause model based on THEMIS measurements. Journal of Geophysical Research: Space Physics, 2015, 120, 10,543.	2.4	50

#	ARTICLE	IF	CITATIONS
19	Broadband high-frequency waves detected at dipolarization fronts. <i>Journal of Geophysical Research: Space Physics</i> , 2017, 122, 4299-4307.	2.4	49
20	Characterization of ULF pulsations by THEMIS. <i>Geophysical Research Letters</i> , 2009, 36, .	4.0	46
21	Solar wind influence on Pc4 and Pc5 ULF wave activity in the inner magnetosphere. <i>Journal of Geophysical Research</i> , 2010, 115, .	3.3	46
22	Memory and negative photoconductivity effects of Ge nanocrystals embedded in ZrO <sub>2</sub> /Al <sub>2</sub> O <sub>3</sub> gate dielectrics. <i>Applied Physics Letters</i> , 2003, 83, 138-140.	3.3	45
23	Determination of the substorm initiation region from a major conjunction interval of THEMIS satellites. <i>Journal of Geophysical Research</i> , 2008, 113, .	3.3	42
24	High quality, high-k gate dielectric: amorphous LaAlO <sub>3</sub> thin films grown on Si(100) without Si interfacial layer. <i>Applied Physics A: Materials Science and Processing</i> , 2003, 77, 721-724.	2.3	40
25	Observation and modeling of the injection observed by THEMIS and LANL satellites during the 23 March 2007 substorm event. <i>Journal of Geophysical Research</i> , 2009, 114, .	3.3	38
26	THEMIS observations of the spatial extent and pressure-pulse excitation of field line resonances. <i>Geophysical Research Letters</i> , 2010, 37, .	4.0	36
27	Multipoint observation of fast mode waves trapped in the dayside plasmasphere. <i>Journal of Geophysical Research</i> , 2010, 115, .	3.3	34
28	Simultaneous field-aligned currents at Swarm and Cluster satellites. <i>Geophysical Research Letters</i> , 2015, 42, 3683-3691.	4.0	32
29	Multispacecraft observations of a foreshock-induced magnetopause disturbance exhibiting distinct plasma flows and an intense density compression. <i>Journal of Geophysical Research</i> , 2011, 116, n/a-n/a.	3.3	30
30	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
31	Linear and third-order nonlinear optical absorption of amorphous Ge nanoclusters embedded in Al <sub>2</sub> O <sub>3</sub> matrix synthesized by electron-beam coevaporation. <i>Applied Physics Letters</i> , 2003, 82, 3162-3164.	3.3	29
32	Polytropic index of central plasma sheet ions based on MHD Bernoulli integral. <i>Journal of Geophysical Research: Space Physics</i> , 2015, 120, 4736-4747.	2.4	28
33	Correlation of substorm injections, auroral modulations, and ground Pi2. <i>Geophysical Research Letters</i> , 2008, 35, .	4.0	26
34	DEMETER observations of high-latitude chorus waves penetrating the plasmasphere during a geomagnetic storm. <i>Geophysical Research Letters</i> , 2013, 40, 5827-5832.	4.0	26
35	Enhancement of oxygen in the magnetic island associated with dipolarization fronts. <i>Journal of Geophysical Research: Space Physics</i> , 2017, 122, 185-193.	2.4	26
36	Mode number calculations of ULF field-line resonances using ground magnetometers and THEMIS measurements. <i>Journal of Geophysical Research: Space Physics</i> , 2013, 118, 6986-6997.	2.4	24

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37	On the relationship between electron flux oscillations and ULF wave-driven radial transport. Journal of Geophysical Research: Space Physics, 2017, 122, 9306-9319.	2.4	23
38	Seismo-ionospheric anomalies in ionospheric TEC and plasma density before the 17 July 2006 M7.7 south of Java earthquake. Annales Geophysicae, 2017, 35, 589-598.	1.6	22
39	Storm time evolution of ELF/VLF waves observed by DEMETER satellite. Journal of Geophysical Research: Space Physics, 2014, 119, 2612-2622.	2.4	21
40	Whistler mode wave generation at the edges of a magnetic dip. Journal of Geophysical Research: Space Physics, 2015, 120, 2469-2476.	2.4	21
41	Microstructure and magnetic properties of graphite-coated Gd nanocapsules. Applied Physics Letters, 2009, 94, .	3.3	20
42	Multiple intensifications inside the auroral bulge and their association with plasma sheet activities. Journal of Geophysical Research, 2008, 113, .	3.3	19
43	Exploring Lorentz Invariance Violation from Ultrahigh-Energy $\gamma$ Rays Observed by LHAASO. Physical Review Letters, 2022, 128, 051102.	7.8	19
44	Outward expansion of the lunar wake: ARTEMIS observations. Geophysical Research Letters, 2012, 39, .	4.0	18
45	A new plasmopause location model based on THEMIS observations. Science China Earth Sciences, 2014, 57, 2552-2557.	5.2	18
46	Dipole tilt angle effect on magnetic reconnection locations on the magnetopause. Journal of Geophysical Research: Space Physics, 2015, 120, 5344-5354.	2.4	18
47	Earth Wind as a Possible Exogenous Source of Lunar Surface Hydration. Astrophysical Journal Letters, 2021, 907, L32.	8.3	18
48	Construction and on-site performance of the LHAASO WFCTA camera. European Physical Journal C, 2021, 81, 1.	3.9	18
49	Spatial structure and temporal evolution of a dayside poloidal ULF wave event. Geophysical Research Letters, 2011, 38, n/a-n/a.	4.0	17
50	New development of laser ion source for highly charged ion beam production at Institute of Modern Physics (invited). Review of Scientific Instruments, 2016, 87, 02A917.	1.3	17
51	Alfvén wings in the lunar wake: The role of pressure gradients. Journal of Geophysical Research: Space Physics, 2016, 121, 10,698.	2.4	17
52	Observations of Impulsive Electric Fields Induced by Interplanetary Shock. Geophysical Research Letters, 2018, 45, 7287-7296.	4.0	16
53	Gamma-Ray Observation of the Cygnus Region in the 100-TeV Energy Region. Physical Review Letters, 2021, 127, 031102.	7.8	16
54	Variations of N+/O+ in the ring current during magnetic storms. Geophysical Research Letters, 2005, 32, .	4.0	15

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55	The study towards high intensity high charge state laser ion sources. Review of Scientific Instruments, 2014, 85, 02B910.	1.3	14
56	Ion composition variations in the plasma sheet observed by Cluster/RAPID. Geophysical Research Letters, 2005, 32, .	4.0	13
57	Turbulence in the Earth's cusp region: The $k$ -filtering analysis. Journal of Geophysical Research: Space Physics, 2014, 119, 9527-9542.	2.4	12
58	Case study of small scale polytropic index in the central plasma sheet. Science China Earth Sciences, 2015, 58, 1993-2001.	5.2	12
59	Relation Between Shock-Related Impulse and Subsequent ULF Wave in the Earth's Magnetosphere. Geophysical Research Letters, 2020, 47, e2020GL090027.	4.0	12
60	Magnetic properties and large cryogenic low-field magnetocaloric effect of HoCo <sub>2</sub> nanoparticles without core/shell structure. Journal of Nanoparticle Research, 2010, 12, 1167-1172.	1.9	11
61	Pc <sup>4</sup> Poloidal ULF Wave Observed in the Dawnside Plasmaspheric Plume. Journal of Geophysical Research: Space Physics, 2019, 124, 9986-9998.	2.4	11
62	Simulations of Electron Flux Oscillations as Observed by MagEIS in Response to Broadband ULF Waves. Journal of Geophysical Research: Space Physics, 2020, 125, e2020JA027798.	2.4	11
63	Energy Flux Densities at Dipolarization Fronts. Geophysical Research Letters, 2021, 48, e2021GL094932.	4.0	10
64	Light-by-light scattering in a photon-photon collider. European Physical Journal C, 2018, 78, 1.	3.9	8
65	On the Association Between Electron Flux Oscillations and Local Phase Space Density Gradients. Journal of Geophysical Research: Space Physics, 2021, 126, e2020JA028891.	2.4	8
66	Response of magnetic fields at geosynchronous orbit and on the ground to the sudden changes of IMF B Z. Science China Technological Sciences, 2014, 57, 360-367.	4.0	7
67	3D inversion of the Sichuan Basin magnetic anomaly in South China and its geological significance. Earth, Planets and Space, 2020, 72, .	2.5	7
68	Van Allen Probes Observations of Multi-MeV Electron Drift-Periodic Flux Oscillations in Earth's Outer Radiation Belt During the March 2017 Event. Journal of Geophysical Research: Space Physics, 2021, 126, e2021JA029284.	2.4	7
69	First Results from the THEMIS Mission. , 2009, , 453-476.		7
70	Study on space charge effect in an electrostatic ion analyzer applied to measure laser produced ions. Review of Scientific Instruments, 2014, 85, 033307.	1.3	6
71	Observations of ULF waves on the ground and ionospheric Doppler shifts during storm sudden commencement. Journal of Geophysical Research: Space Physics, 2016, 121, 2976-2983.	2.4	6
72	Distribution of hydrogen and oxygen ion species in the plasmasheet. Advances in Space Research, 2016, 58, 84-91.	2.6	6

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73	Measurements of convection electric field in the inner magnetosphere. Science China Technological Sciences, 2018, 61, 1866-1871.	4.0	6
74	Statistical Correlation Analysis of Field-Aligned Currents Measured by Swarm. Journal of Geophysical Research: Space Physics, 2018, 123, 8170-8184.	2.4	6
75	Prompt GPS TEC response to magnetospheric compression. Journal of Geophysical Research: Space Physics, 2017, 122, 4357-4366.	2.4	5
76	Study on the Curvature and Gradient of the Magnetic Field in Earth's Cusp Region Based on the Magnetic Curvature Analysis Method. Journal of Geophysical Research: Space Physics, 2018, 123, 3794-3805.	2.4	5
77	Initial scalar lithospheric magnetic anomaly map of China and surrounding regions derived from CSES satellite data. Science China Technological Sciences, 2021, 64, 1118-1126.	4.0	5
78	Plasma perturbations in the coexisting environment of VLF transmitter emission, lightning strokes and seismic activity. Science China Technological Sciences, 2018, 61, 678-686.	4.0	4
79	Effects of Geomagnetic and Solar Activities on the Composition and Position of the Ring Current Ion. Chinese Journal of Geophysics, 2003, 46, 1041-1049.	0.2	3
80	ELECTRON DIFFRACTION AND LATTICE IMAGE STUDY OF HIGH Jc YBCO AND GBCO THIN FILMS. Modern Physics Letters B, 1990, 04, 1163-1170.	1.9	2
81	Long term average distribution of $O^+$ in the quiet-time terrestrial magnetosphere. Astrophysics and Space Science, 2016, 361, 1.	1.4	2
82	Lattice of the CSR. AIP Conference Proceedings, 2001, , .	0.4	1
83	Study of Different Dislocations in YBCO Thin Film. International Journal of Modern Physics B, 2003, 17, 3530-3533.	2.0	1
84	Effect of plasmopause on the generation of ultra low frequency (ULF) waves. , 2014, , .		1
85	A dynamic range extension system for LHAASO WCDA-1. Radiation Detection Technology and Methods, 2021, 5, 520-530.	0.8	1
86	Line-of-shower trigger method to lower energy threshold for GRB detection using LHAASO-WCDA. Radiation Detection Technology and Methods, 2021, 5, 531.	0.8	1
87	Nuclear Data Online Services at Peking University. AIP Conference Proceedings, 2005, , .	0.4	0
88	Multi-spacecraft detection of kinetic Alfvén waves in the turbulent cusp region. , 2014, , .		0
89	Simulation of direct plasma injection for laser ion beam acceleration with a radio frequency quadrupole. Review of Scientific Instruments, 2014, 85, 073304.	1.3	0
90	Kinetic features of bursty bulk flows and dipolarization fronts. Science China Earth Sciences, 2016, 59, 2463-2464.	5.2	0

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91	Design and Testing of the Front-End Electronics of WCDA in LHAASO. IEEE Transactions on Nuclear Science, 2021, 68, 2257-2267.	2.0	0