Xinliang Gao

List of Publications by Year
in descending order

77 papers	1,322 citations	304743 22 h-index	434195 31 g-index
77 all docs	77 docs citations	77 times ranked	787 citing authors

#	Article	IF	Citations
1	Generation of multiband chorus by lower band cascade in the Earth's magnetosphere. Geophysical Research Letters, 2016, 43, 2343-2350.	4.0	62
2	New evidence for generation mechanisms of discrete and hissâ€like whistler mode waves. Geophysical Research Letters, 2014, 41, 4805-4811.	4.0	58
3	Twoâ€Dimensional gcPIC Simulation of Risingâ€Tone Chorus Waves in a Dipole Magnetic Field. Journal of Geophysical Research: Space Physics, 2019, 124, 4157-4167.	2.4	47
4	Generation of Multiband Chorus in the Earth's Magnetosphere: 1â€D PIC Simulation. Geophysical Research Letters, 2017, 44, 618-624.	4.0	44
5	The effect of different solar wind parameters upon significant relativistic electron flux dropouts in the magnetosphere. Journal of Geophysical Research: Space Physics, 2015, 120, 4324-4337.	2.4	43
6	Generation of risingâ€tone chorus in a twoâ€dimensional mirror field by using the general curvilinear PIC code. Journal of Geophysical Research: Space Physics, 2017, 122, 8154-8165.	2.4	43
7	Spectral properties and associated plasma energization by magnetosonic waves in the Earth's magnetosphere: Particleâ€inâ€cell simulations. Journal of Geophysical Research: Space Physics, 2017, 122, 5377-5390.	2.4	39
8	Statistical results describing the bandwidth and coherence coefficient of whistler mode waves using THEMIS waveform data. Journal of Geophysical Research: Space Physics, 2014, 119, 8992-9003.	2.4	35
9	Generation of magnetosonic waves over a continuous spectrum. Journal of Geophysical Research: Space Physics, 2016, 121, 1137-1147.	2.4	33
10	A parametric study for the generation of ion Bernstein modes from a discrete spectrum to a continuous one in the inner magnetosphere. II. Particle-in-cell simulations. Physics of Plasmas, 2016, 23, .	1.9	32
11	Reformation of rippled quasiâ€parallel shocks: 2â€D hybrid simulations. Journal of Geophysical Research: Space Physics, 2017, 122, 6385-6396.	2.4	32
12	Statistical Results of the Power Gap Between Lowerâ€Band and Upperâ€Band Chorus Waves. Geophysical Research Letters, 2019, 46, 4098-4105.	4.0	32
13	ION DYNAMICS AT A RIPPLED QUASI-PARALLEL SHOCK: 2D HYBRID SIMULATIONS. Astrophysical Journal, 2016, 823, 7.	4.5	31
14	Whistlerâ€Mode Waves Trapped by Density Irregularities in the Earth's Magnetosphere. Geophysical Research Letters, 2021, 48, e2020GL092305.	4.0	30
15	Particle acceleration and generation of diffuse superthermal ions at a quasiâ€parallel collisionless shock: Hybrid simulations. Journal of Geophysical Research, 2012, 117, .	3.3	29
16	Observational evidence of generation mechanisms for very oblique lower band chorus using THEMIS waveform data. Journal of Geophysical Research: Space Physics, 2016, 121, 6732-6748.	2.4	28
17	Lowerâ€Band â€œMonochromaticâ€•Chorus Riser Subelement/Wave Packet Observations. Journal of Geophysical Research: Space Physics, 2020, 125, e2020JA028090.	2.4	28
18	Turbulenceâ€Driven Magnetic Reconnection in the Magnetosheath Downstream of a Quasiâ€Parallel Shock: A Threeâ€Dimensional Global Hybrid Simulation. Geophysical Research Letters, 2020, 47, e2019GL085661.	4.0	27

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19	Transmission of largeâ€amplitude ULF waves through a quasiâ€parallel shock at Venus. Journal of Geophysical Research: Space Physics, 2014, 119, 237-245.	2.4	26
20	In Situ Observations of Whistlerâ€Mode Chorus Waves Guided by Density Ducts. Journal of Geophysical Research: Space Physics, 2021, 126, e2020JA028814.	2.4	26
21	In Situ Observations of Harmonic AlfvÃ©n Waves and Associated Heavy Ion Heating. Astrophysical Journal, 2018, 859, 120.	4.5	24
22	Parametric instability of a monochromatic Alfven wave: Perpendicular decay in low beta plasma. Physics of Plasmas, 2013, 20, 072902.	1.9	23
23	The shape of the Venusian bow shock at solar minimum and maximum: Revisit based on VEX observations. Planetary and Space Science, 2015, 109-110, 32-37.	1.7	23
24	A parametric study for the generation of ion Bernstein modes from a discrete spectrum to a continuous one in the inner magnetosphere. I. Linear theory. Physics of Plasmas, 2016, 23, .	1.9	22
25	First report of resonant interactions between whistler mode waves in the Earth's magnetosphere. Geophysical Research Letters, 2017, 44, 5269-5275.	4.0	22
26	Statistical Evidence for EMIC Wave Excitation Driven by Substorm Injection and Enhanced Solar Wind Pressure in the Earth's Magnetosphere: Two Different EMIC Wave Sources. Geophysical Research Letters, 2020, 47, e2020GL090275.	4.0	22
27	Analyzing EMIC Waves in the Inner Magnetosphere Using Longâ€Term Van Allen Probes Observations. Journal of Geophysical Research: Space Physics, 2019, 124, 7402-7412.	2.4	20
28	Ion dynamics at supercritical quasi-parallel shocks: Hybrid simulations. Physics of Plasmas, 2012, 19, .	1.9	18
29	He²⁺ dynamics and ion cyclotron waves in the downstream of quasiâ€perpendicular shocks: 2â€D hybrid simulations. Journal of Geophysical Research: Space Physics, 2014, 119, 3225-3236.	2.4	18
30	Lower Band Cascade of Whistler Waves Excited by Anisotropic Hot Electrons: Oneâ€Dimensional PIC Simulations. Journal of Geophysical Research: Space Physics, 2017, 122, 10,448.	2.4	18
31	A statistical study of the spatial distribution and source-region size of chorus waves using Van Allen Probes data. Annales Geophysicae, 2018, 36, 867-878.	1.6	18
32	Gap Formation Around 0.5Î©_e of Whistlerâ€Mode Waves Excited by Electron Temperature Anisotropy. Journal of Geophysical Research: Space Physics, 2021, 126, e2020JA028631.	2.4	18
33	Repetitive Emissions of Risingâ€Tone Chorus Waves in the Inner Magnetosphere. Geophysical Research Letters, 2021, 48, e2021GL094979.	4.0	17
34	Unraveling the Correlation Between Chorus Wave and Electron Beamâ€Like Distribution in the Earth's Magnetosphere. Geophysical Research Letters, 2019, 46, 11671-11678.	4.0	16
35	Electrostatic and electromagnetic fluctuations detected inside magnetic flux ropes during magnetic reconnection. Journal of Geophysical Research: Space Physics, 2016, 121, 9473-9482.	2.4	15
36	Parametric decay of a parallel propagating monochromatic whistler wave: Particle-in-cell simulations. Physics of Plasmas, 2017, 24, 012108.	1.9	15

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37	Statistical Results of Multiband Chorus by Using THEMIS Waveform Data. Journal of Geophysical Research: Space Physics, 2018, 123, 5506-5515.	2.4	14
38	Generation of Lower Harmonic Magnetosonic Waves Through Nonlinear Waveâ€Wave Interactions. Geophysical Research Letters, 2018, 45, 8029-8034.	4.0	14
39	Observational Evidence for the Origin of Repetitive Chorus Emissions. Geophysical Research Letters, 2022, 49, .	4.0	14
40	ION DYNAMICS DURING THE PARAMETRIC INSTABILITIES OF A LEFT-HAND POLARIZED ALFVÃ‰N WAVE IN A PROTON-ELECTRON-ALPHA PLASMA. Astrophysical Journal, 2014, 780, 56.	4.5	13
41	Twoâ€Dimensional Particleâ€inâ€Cell Simulation of Magnetosonic Wave Excitation in a Dipole Magnetic Field. Geophysical Research Letters, 2018, 45, 8712-8720.	4.0	12
42	Generation of harmonic AlfvÃ©n waves and its implications to heavy ion heating in the solar corona: Hybrid simulations. Physics of Plasmas, 2020, 27, .	1.9	12
43	Gap Formation Around 0.5Î©_e in the Whistlerâ€Mode Waves Due To the Plateauâ€Like Shape in the Parallel Electron Distribution: 2D PIC Simulations. Journal of Geophysical Research: Space Physics, 2022, 127, .	2.4	12
44	Effects of alpha beam on the parametric decay of a parallel propagating circularly polarized Alfven wave: Hybrid simulations. Physics of Plasmas, 2013, 20, .	1.9	11
45	ELECTROMAGNETIC PROTON/PROTON INSTABILITY AND ITS IMPLICATIONS FOR ION HEATING IN THE EXTENDED FAST SOLAR WIND. Astrophysical Journal, 2013, 764, 71.	4.5	11
46	Observational Evidence for Whistler Mode Waves Guided/Ducted by the Inner and Outer Edges of the Plasmapause. Geophysical Research Letters, 2021, 48, e2021GL092652.	4.0	11
47	Magnetic ramp scale at supercritical perpendicular collisionless shocks: Full particle electromagnetic simulations. Physics of Plasmas, 2013, 20, .	1.9	10
48	Heating of the background plasma by obliquely propagating Alfven waves excited in the electromagnetic alpha/proton instability. Physics of Plasmas, 2012, 19, 032901.	1.9	9
49	The Effects of Thermal Electrons on Whistler Mode Waves Excited by Anisotropic Hot Electrons: Linear Theory and 2â€D PIC Simulations. Journal of Geophysical Research: Space Physics, 2019, 124, 5234-5245.	2.4	9
50	MMS Observations of Broadband Electrostatic Waves in Electron Diffusion Region of Magnetotail Reconnection. Journal of Geophysical Research: Space Physics, 2021, 126, e2020JA028882.	2.4	9
51	Oneâ€Dimensional gcPICâ€Îf Simulation of Hooked Chorus Waves in the Earthâ€™s Inner Magnetosphere. Geophysical Research Letters, 2022, 49, .	4.0	9
52	Particleâ€inâ€Cell Simulations of Characteristics of Risingâ€Tone Chorus Waves in the Inner Magnetosphere. Journal of Geophysical Research: Space Physics, 2020, 125, e2020JA027961.	2.4	8
53	Particleâ€inâ€Cell Simulations of Electrostatic Solitary Waves in Asymmetric Magnetic Reconnection. Journal of Geophysical Research: Space Physics, 2021, 126, e2021JA029290.	2.4	8
54	Simultaneous Observation of Whistler Waves and Electron Cyclotron Harmonic Waves in the Separatrix Region of Magnetopause Reconnection. Journal of Geophysical Research: Space Physics, 2021, 126, e2021JA029609.	2.4	8

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55	PIC Simulations of Microinstabilities and Waves at Near-Sun Solar Wind Perpendicular Shocks: Predictions for Parker Solar Probe and Solar Orbiter. Astrophysical Journal Letters, 2020, 900, L24.	8.3	8
56	Theoretical analysis on lower band cascade as a mechanism for multiband chorus in the Earthâ€™s magnetosphere. AIP Advances, 2018, 8, .	1.3	7
57	Two-band whistler-mode waves excited by an electron bi-Maxwellian distribution plus parallel beams. AIP Advances, 2020, 10, 125010.	1.3	7
58	He²⁺ HEATING VIA PARAMETRIC INSTABILITIES OF PARALLEL PROPAGATING ALFVÃ‰N WAVES WITH AN INCOHERENT SPECTRUM. Astrophysical Journal, 2016, 827, 64.	4.5	6
59	Nonlinear Evolution of Counterâ€Propagating Whistler Mode Waves Excited by Anisotropic Electrons Within the Equatorial Source Region: 1â€D PIC Simulations. Journal of Geophysical Research: Space Physics, 2018, 123, 1200-1207.	2.4	6
60	Two-dimensional Hybrid Simulations of Filamentary Structures and Kinetic Slow Waves Downstream of a Quasi-parallel Shock. Astrophysical Journal, 2018, 861, 57.	4.5	6
61	Expansion of Solar Coronal Hot Electrons in an Inhomogeneous Magnetic Field: 1D PIC Simulation. Astrophysical Journal, 2019, 887, 96.	4.5	6
62	The Efficiency of Ion Stochastic Heating by a Monochromatic Obliquely Propagating Low-Frequency Alfven Wave. Plasma Science and Technology, 2014, 16, 919-923.	1.5	5
63	Nonlinear Waveâ€“Wave Coupling Related to Whistler-mode and Electron Bernstein Waves Observed by the Parker Solar Probe. Astrophysical Journal, 2021, 918, 26.	4.5	5
64	The Correlation between Whistler Mode Waves and Electron Beamâ€like Distribution: Test particle simulations and THEMIS observations. Journal of Geophysical Research: Space Physics, 2021, 126, e2021JA029834.	2.4	5
65	Parametric decay of oblique whistler waves in the Earth's magnetosphere: 2-D PIC simulations. Physics of Plasmas, 2018, 25, 072901.	1.9	4
66	Dissipation and reformation of thermal fronts in solar flares. Astrophysics and Space Science, 2019, 364, 1.	1.4	4
67	Largeâ€Scale Highâ€Speed Jets in Earth's Magnetosheath: Global Hybrid Simulations. Journal of Geophysical Research: Space Physics, 2022, 127, .	2.4	4
68	Dynamics of charged particles and perpendicular diffusion in turbulent magnetic field. Astrophysics and Space Science, 2011, 335, 399-403.	1.4	3
69	Comparison between magnetic coplanarity and MVA methods in determining the normal of Venusian bow shock. Science Bulletin, 2013, 58, 2469-2472.	1.7	3
70	Modulation of Magnetosonic Waves by Background Plasma Density in a Dipole Magnetic Field: 2â€D PIC Simulation. Journal of Geophysical Research: Space Physics, 2021, 126, e2021JA029729.	2.4	3
71	Ion stochastic heating by obliquely propagating magnetosonic waves. Physics of Plasmas, 2012, 19, 062111.	1.9	2
72	In situ evidence of resonant interactions between energetic electrons and whistler waves in magnetopause reconnection. Earth and Planetary Physics, 2019, 3, 1-7.	1.1	2

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73	Propagation of Electromagnetic Ion Cyclotron Waves in a Dipole Magnetic Field: A 2â€Ð Hybrid Simulation. Journal of Geophysical Research: Space Physics, 2021, 126, e2021JA029720.	2.4	2
74	Deformation of Electron Distributions Due to Landau Trapping by the Whistlerâ€Mode Wave. Geophysical Research Letters, 2022, 49, .	4.0	2
75	Electrostatic Solitary Waves and Electron-beam Instabilities in the Separatrix Region of Magnetic Reconnection. Astrophysical Journal, 2022, 933, 67.	4.5	2
76	The effects of beam proportion on electromagnetic proton/proton instability and associated ion heating: 2D hybrid simulation. Physics of Plasmas, 2020, 27, .	1.9	1
77	Electron Acceleration by Moderate-Mach-number Low-Î² Shocks: Particle-in-Cell Simulations. Astrophysical Journal, 2022, 930, 155.	4.5	1