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	Deformation of Electron Distributions Due to Landau Trapping by the Whistlerâ€Mode Wave. Geophysical Research Letters, 2022, 49, .	4.0	2
2	Oneâ€Dimensional gcPICâ€Îf Simulation of Hooked Chorus Waves in the Earthâ€™s Inner Magnetosphere. Geophysical Research Letters, 2022, 49, .	4.0	9
3	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
4	Electron Acceleration by Moderate-Mach-number Low-Î² Shocks: Particle-in-Cell Simulations. Astrophysical Journal, 2022, 930, 155.	4.5	1
5	Largeâ€Scale Highâ€Speed Jets in Earth's Magnetosheath: Global Hybrid Simulations. Journal of Geophysical Research: Space Physics, 2022, 127, .	2.4	4
6	Observational Evidence for the Origin of Repetitive Chorus Emissions. Geophysical Research Letters, 2022, 49, .	4.0	14
7	Electrostatic Solitary Waves and Electron-beam Instabilities in the Separatrix Region of Magnetic Reconnection. Astrophysical Journal, 2022, 933, 67.	4.5	2
8	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
9	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
10	Whistlerâ€Mode Waves Trapped by Density Irregularities in the Earth's Magnetosphere. Geophysical Research Letters, 2021, 48, e2020GL092305.	4.0	30
11	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
12	In Situ Observations of Whistlerâ€Mode Chorus Waves Guided by Density Ducts. Journal of Geophysical Research: Space Physics, 2021, 126, e2020JA028814.	2.4	26
13	Particleâ€Inâ€Cell Simulations of Electrostatic Solitary Waves in Asymmetric Magnetic Reconnection. Journal of Geophysical Research: Space Physics, 2021, 126, e2021JA029290.	2.4	8
14	Repetitive Emissions of Risingâ€Tone Chorus Waves in the Inner Magnetosphere. Geophysical Research Letters, 2021, 48, e2021GL094979.	4.0	17
15	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
16	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
17	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
18	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

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19	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
20	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
21	Lowerâ€Band â€œMonochromaticâ€•Chorus Riser Subelement/Wave Packet Observations. Journal of Geophysical Research: Space Physics, 2020, 125, e2020JA028090.	2.4	28
22	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
23	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
24	Turbulenceâ€Ðriven Magnetic Reconnection in the Magnetosheath Downstream of a Quasiâ€Parallel Shock: A Threeâ€Ðimensional Global Hybrid Simulation. Geophysical Research Letters, 2020, 47, e2019GL085661.	4.0	27
25	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
26	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
27	Two-band whistler-mode waves excited by an electron bi-Maxwellian distribution plus parallel beams. AIP Advances, 2020, 10, 125010.	1.3	7
28	Dissipation and reformation of thermal fronts in solar flares. Astrophysics and Space Science, 2019, 364, 1.	1.4	4
29	Statistical Results of the Power Gap Between Lowerâ€Band and Upperâ€Band Chorus Waves. Geophysical Research Letters, 2019, 46, 4098-4105.	4.0	32
30	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
31	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
32	Twoâ€Ðimensional 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
33	The Effects of Thermal Electrons on Whistler Mode Waves Excited by Anisotropic Hot Electrons: Linear Theory and 2â€Ð PIC Simulations. Journal of Geophysical Research: Space Physics, 2019, 124, 5234-5245.	2.4	9
34	Expansion of Solar Coronal Hot Electrons in an Inhomogeneous Magnetic Field: 1D PIC Simulation. Astrophysical Journal, 2019, 887, 96.	4.5	6
35	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
36	Nonlinear Evolution of Counterâ€Propagating Whistler Mode Waves Excited by Anisotropic Electrons Within the Equatorial Source Region: 1â€Ð PIC Simulations. Journal of Geophysical Research: Space Physics, 2018, 123, 1200-1207.	2.4	6

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37	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
38	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
39	Theoretical analysis on lower band cascade as a mechanism for multiband chorus in the Earthâ€™s magnetosphere. AIP Advances, 2018, 8, .	1.3	7
40	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
41	Statistical Results of Multiband Chorus by Using THEMIS Waveform Data. Journal of Geophysical Research: Space Physics, 2018, 123, 5506-5515.	2.4	14
42	Parametric decay of oblique whistler waves in the Earth's magnetosphere: 2-D PIC simulations. Physics of Plasmas, 2018, 25, 072901.	1.9	4
43	Generation of Lower Harmonic Magnetosonic Waves Through Nonlinear Waveâ€Wave Interactions. Geophysical Research Letters, 2018, 45, 8029-8034.	4.0	14
44	In Situ Observations of Harmonic AlfvÃ©n Waves and Associated Heavy Ion Heating. Astrophysical Journal, 2018, 859, 120.	4.5	24
45	Parametric decay of a parallel propagating monochromatic whistler wave: Particle-in-cell simulations. Physics of Plasmas, 2017, 24, 012108.	1.9	15
46	Generation of Multiband Chorus in the Earth's Magnetosphere: 1â€D PIC Simulation. Geophysical Research Letters, 2017, 44, 618-624.	4.0	44
47	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
48	First report of resonant interactions between whistler mode waves in the Earth's magnetosphere. Geophysical Research Letters, 2017, 44, 5269-5275.	4.0	22
49	Reformation of rippled quasiâ€parallel shocks: 2â€D hybrid simulations. Journal of Geophysical Research: Space Physics, 2017, 122, 6385-6396.	2.4	32
50	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
51	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
52	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
53	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
54	Generation of multiband chorus by lower band cascade in the Earth's magnetosphere. Geophysical Research Letters, 2016, 43, 2343-2350.	4.0	62

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55	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
56	ION DYNAMICS AT A RIPPLED QUASI-PARALLEL SHOCK: 2D HYBRID SIMULATIONS. Astrophysical Journal, 2016, 823, 7.	4.5	31
57	Generation of magnetosonic waves over a continuous spectrum. Journal of Geophysical Research: Space Physics, 2016, 121, 1137-1147.	2.4	33
58	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
59	He²⁺ HEATING VIA PARAMETRIC INSTABILITIES OF PARALLEL PROPAGATING ALFVÃ‰N WAVES WITH AN INCOHERENT SPECTRUM. Astrophysical Journal, 2016, 827, 64.	4.5	6
60	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
61	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
62	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
63	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
64	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
65	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
66	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
67	New evidence for generation mechanisms of discrete and hissâ€like whistler mode waves. Geophysical Research Letters, 2014, 41, 4805-4811.	4.0	58
68	Comparison between magnetic coplanarity and MVA methods in determining the normal of Venusian bow shock. Science Bulletin, 2013, 58, 2469-2472.	1.7	3
69	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
70	Magnetic ramp scale at supercritical perpendicular collisionless shocks: Full particle electromagnetic simulations. Physics of Plasmas, 2013, 20, .	1.9	10
71	Parametric instability of a monochromatic Alfven wave: Perpendicular decay in low beta plasma. Physics of Plasmas, 2013, 20, 072902.	1.9	23
72	ELECTROMAGNETIC PROTON/PROTON INSTABILITY AND ITS IMPLICATIONS FOR ION HEATING IN THE EXTENDED FAST SOLAR WIND. Astrophysical Journal, 2013, 764, 71.	4.5	11

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73	Ion dynamics at supercritical quasi-parallel shocks: Hybrid simulations. Physics of Plasmas, 2012, 19, .	1.9	18
74	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
75	Ion stochastic heating by obliquely propagating magnetosonic waves. Physics of Plasmas, 2012, 19, 062111.	1.9	2
76	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
77	Dynamics of charged particles and perpendicular diffusion in turbulent magnetic field. Astrophysics and Space Science, 2011, 335, 399-403.	1.4	3