

# Christopher C Chaston

## List of Publications by Year in descending order

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84  
papers

6,065  
citations

100601

38  
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78623

77  
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86  
all docs

86  
docs citations

86  
times ranked

2859  
citing authors

#	ARTICLE	IF	CITATIONS
1	Fluidâ€Kinetic Variations in the Stormâ€™Time Inner Magnetosphere. <i>Geophysical Research Letters</i> , 2022, 49, .	1.5	2
2	Electron Energization Signatures in Traveling Kinetic AlfvÃ©n Waves at Storm Time Injection Fronts. <i>Geophysical Research Letters</i> , 2022, 49, .	1.5	2
3	Small-Scale Dynamic Aurora. <i>Space Science Reviews</i> , 2021, 217, 17.	3.7	10
4	An Auroral AlfvÃ©n Wave Cascade. <i>Frontiers in Astronomy and Space Sciences</i> , 2021, 8, .	1.1	2
5	Ion Scattering and Energization in Filamentary Structures Through Earth's Magnetosheath. <i>Geophysical Research Letters</i> , 2021, 48, e2021GL094029.	1.5	3
6	MAVEN Observations of Low Frequency Steepened Magnetosonic Waves and Associated Heating of the Martian Nightside Ionosphere. <i>Journal of Geophysical Research: Space Physics</i> , 2021, 126, e2021JA029615.	0.8	8
7	Turbulent Wavefield Morphology and Ion Scattering in the Magnetosheath. <i>Geophysical Research Letters</i> , 2020, 47, e2020GL089613.	1.5	3
8	Correlations Between Dispersive AlfvÃ©n Wave Activity, Electron Energization, and Ion Outflow in the Inner Magnetosphere. <i>Geophysical Research Letters</i> , 2020, 47, e2020GL088985.	1.5	18
9	Switchbacks in the Solar Magnetic Field: Their Evolution, Their Content, and Their Effects on the Plasma. <i>Astrophysical Journal, Supplement Series</i> , 2020, 246, 68.	3.0	83
10	MHD Mode Composition in the Inner Heliosphere from the <i>Parker Solar Probe</i>â€™s First Perihelion. <i>Astrophysical Journal, Supplement Series</i> , 2020, 246, 71.	3.0	17
11	Filamentary Currents and AlfvÃ©nic Vortices in the Inner Magnetosphere. <i>Geophysical Research Letters</i> , 2020, 47, e2019GL086318.	1.5	8
12	Ion-scale Electromagnetic Waves in the Inner Heliosphere. <i>Astrophysical Journal, Supplement Series</i> , 2020, 246, 66.	3.0	67
13	CME-associated Energetic Ions at 0.23 au: Consideration of the Auroral Pressure Cooker Mechanism Operating in the Low Corona as a Possible Energization Process. <i>Astrophysical Journal, Supplement Series</i> , 2020, 246, 59.	3.0	21
14	Inferring Source Properties of Monoenergetic Electron Precipitation From Kappa and Maxwellian Momentâ€Voltage Relationships. <i>Journal of Geophysical Research: Space Physics</i> , 2019, 124, 1548-1567.	0.8	3
15	Dispersive AlfvÃ©n Wave Control of O<sup>+</sup> Ion Outflow and Energy Densities in the Inner Magnetosphere. <i>Geophysical Research Letters</i> , 2019, 46, 8597-8606.	1.5	23
16	Highly structured slow solar wind emerging from an equatorial coronal hole. <i>Nature</i> , 2019, 576, 237-242.	13.7	401
17	Radiation Belt â€Dropoutsâ€™and Driftâ€Bounce Resonances in Broadband Electromagnetic Waves. <i>Geophysical Research Letters</i> , 2018, 45, 2128-2137.	1.5	14
18	Storm phaseâ€™partitioned rates and budgets of global AlfvÃ©nic energy deposition, electron precipitation, and ion outflow. <i>Journal of Atmospheric and Solar-Terrestrial Physics</i> , 2018, 167, 1-12.	0.6	8

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19	Nonthermal Limit of Monoenergetic Precipitation in the Auroral Acceleration Region. <i>Geophysical Research Letters</i> , 2018, 45, 10, 167-10,176.	1.5	2
20	Pitch Angle Scattering and Loss of Radiation Belt Electrons in Broadband Electromagnetic Waves. <i>Geophysical Research Letters</i> , 2018, 45, 9344-9352.	1.5	21
21	Electron Distributions in Kinetic Scale Field Line Resonances: A Comparison of Simulations and Observations. <i>Geophysical Research Letters</i> , 2018, 45, 5826-5835.	1.5	19
22	Radial transport of radiation belt electrons in kinetic field line resonances. <i>Geophysical Research Letters</i> , 2017, 44, 8140-8148.	1.5	18
23	IMF Control of Alfvénic Energy Transport and Deposition at High Latitudes. <i>Journal of Geophysical Research: Space Physics</i> , 2017, 122, 12, 189.	0.8	17
24	Ion gyroradius effects on particle trapping in kinetic Alfvén waves along auroral field lines. <i>Journal of Geophysical Research: Space Physics</i> , 2016, 121, 10, 831.	0.8	31
25	Alfvén wave-driven ionospheric mass outflow and electron precipitation during storms. <i>Journal of Geophysical Research: Space Physics</i> , 2016, 121, 7828-7846.	0.8	13
26	The Alfvénic surge at substorm onset/expansion and the formation of an Inverted V Cluster and IMAGE observations. <i>Journal of Geophysical Research: Space Physics</i> , 2016, 121, 3978-4004.	0.8	14
27	Driving ionospheric outflows and magnetospheric O <sup>+</sup> energy density with Alfvén waves. <i>Geophysical Research Letters</i> , 2016, 43, 4825-4833.	1.5	37
28	The FIELDS Instrument Suite for Solar Probe Plus. <i>Space Science Reviews</i> , 2016, 204, 49-82.	3.7	521
29	Extreme ionospheric ion energization and electron heating in Alfvén waves in the storm time inner magnetosphere. <i>Geophysical Research Letters</i> , 2015, 42, 10, 531.	1.5	38
30	Ion temperature effects on magnetotail Alfvén wave propagation and electron energization. <i>Journal of Geophysical Research: Space Physics</i> , 2015, 120, 5623-5632.	0.8	39
31	Broadband low-frequency electromagnetic waves in the inner magnetosphere. <i>Journal of Geophysical Research: Space Physics</i> , 2015, 120, 8603-8615.	0.8	56
32	Magnetic reconnection in the auroral acceleration region. <i>Geophysical Research Letters</i> , 2015, 42, 1646-1653.	1.5	9
33	Observations of plasma waves in the colliding jet region of a magnetic flux rope flanked by two active X lines at the subsolar magnetopause. <i>Journal of Geophysical Research: Space Physics</i> , 2014, 119, 6256-6272.	0.8	29
34	Review of Solar Wind Entry into and Transport Within the Plasma Sheet. <i>Space Science Reviews</i> , 2014, 184, 33-86.	3.7	82
35	Heating of the plasma sheet by broadband electromagnetic waves. <i>Geophysical Research Letters</i> , 2014, 41, 8185-8192.	1.5	28
36	Observations of kinetic scale field line resonances. <i>Geophysical Research Letters</i> , 2014, 41, 209-215.	1.5	69

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37	Megavolt Parallel Potentials Arising from Double-Layer Streams in the Earth's Outer Radiation Belt. <i>Physical Review Letters</i> , 2013, 111, 235002.	2.9	64
38	The Electric Field and Waves Instruments on the Radiation Belt Storm Probes Mission. <i>Space Science Reviews</i> , 2013, 179, 183-220.	3.7	421
39	Ion heating by broadband electromagnetic waves in the magnetosheath and across the magnetopause. <i>Journal of Geophysical Research: Space Physics</i> , 2013, 118, 5579-5591.	0.8	27
40	IDENTIFICATION OF KINETIC ALFVÉN WAVE TURBULENCE IN THE SOLAR WIND. <i>Astrophysical Journal Letters</i> , 2012, 745, L9.	3.0	250
41	Energy transport by kinetic-scale electromagnetic waves in fast plasma sheet flows. <i>Journal of Geophysical Research</i> , 2012, 117, .	3.3	55
42	Correction to "Energy transport by kinetic-scale electromagnetic waves in fast plasma sheet flows". <i>Journal of Geophysical Research</i> , 2012, 117, .	3.3	27
43	Electromagnetic waves on ion gyro-radii scales across the magnetopause. <i>Geophysical Research Letters</i> , 2011, 38, .	1.5	41
44	Cross-scale coupling in the auroral acceleration region. <i>Geophysical Research Letters</i> , 2011, 38, n/a-n/a.	1.5	29
45	Evidence for a Multi-scale Aurora. , 2011, , 271-280.		1
46	Motion of aurorae. <i>Geophysical Research Letters</i> , 2010, 37, .	1.5	23
47	Time development of field-aligned currents, potential drops, and plasma associated with an auroral poleward boundary intensification. <i>Journal of Geophysical Research</i> , 2010, 115, .	3.3	36
48	Small-scale auroral current sheet structuring. <i>Journal of Geophysical Research</i> , 2010, 115, .	3.3	28
49	Small and meso-scale properties of a substorm onset auroral arc. <i>Journal of Geophysical Research</i> , 2010, 115, .	3.3	29
50	Kinetic Alfvén Wave Turbulence and Transport through a Reconnection Diffusion Region. <i>Physical Review Letters</i> , 2009, 102, 015001.	2.9	87
51	Sheared flows and small-scale Alfvén wave generation in the auroral acceleration region. <i>Geophysical Research Letters</i> , 2009, 36, .	1.5	41
52	Quasi-parallel whistler mode waves observed by THEMIS during near-earth dipolarizations. <i>Annales Geophysicae</i> , 2009, 27, 2259-2275.	0.6	83
53	The Turbulent Alfvénic Aurora. <i>Physical Review Letters</i> , 2008, 100, 175003.	2.9	102
54	Mode Conversion and Anomalous Transport in Kelvin-Helmholtz Vortices and Kinetic Alfvén Waves at the Earth's Magnetopause. <i>Physical Review Letters</i> , 2007, 99, 175004.	2.9	83

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55	How important are dispersive Alfvén waves for auroral particle acceleration?. Geophysical Research Letters, 2007, 34, .	1.5	113
56	Large parallel electric fields, currents, and density cavities in dispersive Alfvén waves above the aurora. Journal of Geophysical Research, 2007, 112, n/a-n/a.	3.3	39
57	Generation of short-burst radiation through Alfvénic acceleration of auroral electrons. Journal of Geophysical Research, 2007, 112, n/a-n/a.	3.3	12
58	ULF Waves and Auroral Electrons. Geophysical Monograph Series, 2006, , 239-257.	0.1	21
59	Ionospheric erosion by Alfvén waves. Journal of Geophysical Research, 2006, 111, .	3.3	102
60	Localized parallel electric fields associated with inertial Alfvén waves. Physics of Plasmas, 2005, 12, 072901.	0.7	29
61	Drift-Kinetic Alfvén Waves Observed near a Reconnection X Line in the Earth's Magnetopause. Physical Review Letters, 2005, 95, 065002.	2.9	93
62	Energy deposition by Alfvén waves into the dayside auroral oval: Cluster and FAST observations. Journal of Geophysical Research, 2005, 110, .	3.3	113
63	Reply to "Comment by P. K. Shukla and L. Stenflo on "Kinetic effects in the acceleration of auroral electrons in small scale Alfvén waves: A FAST case study". Geophysical Research Letters, 2004, 31, .	1.5	6
64	Auroral ion acceleration in dispersive Alfvén waves. Journal of Geophysical Research, 2004, 109, .	3.3	137
65	Kinetic effects in the acceleration of auroral electrons in small scale Alfvén waves: A FAST case study. Geophysical Research Letters, 2003, 30, .	1.5	51
66	Properties of small-scale Alfvén waves and accelerated electrons from FAST. Journal of Geophysical Research, 2003, 108, .	3.3	160
67	Width and brightness of auroral arcs driven by inertial Alfvén waves. Journal of Geophysical Research, 2003, 108, .	3.3	72
68	Inverse ion-cyclotron damping: Laboratory demonstration and space ramifications. Physics of Plasmas, 2003, 10, 1605-1613.	0.7	15
69	Electromagnetic ion cyclotron waves at proton cyclotron harmonics. Journal of Geophysical Research, 2002, 107, SMP 8-1.	3.3	34
70	Electron acceleration in the ionospheric Alfvén resonator. Journal of Geophysical Research, 2002, 107, SMP 41-1.	3.3	101
71	Driven Alfvén waves and electron acceleration: A FAST case study. Geophysical Research Letters, 2002, 29, 30-1.	1.5	121
72	Multiscale Coherent Structures and Broadband Waves due to Parallel Inhomogeneous Flows. Physical Review Letters, 2000, 85, 4285-4288.	2.9	65

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73	Alfvén Waves, Density Cavities and Electron Acceleration Observed from the FAST Spacecraft. <i>Physica Scripta</i> , 2000, T84, 64.	1.2	103
74	Quasilinear evolution of the ion cyclotron beam-anisotropy instability in a current carrying plasma. <i>Physics of Plasmas</i> , 1999, 6, 2588-2597.	0.7	5
75	FAST Observations of Inertial Alfvén Waves in the Dayside Aurora. <i>Geophysical Research Letters</i> , 1999, 26, 647-650.	1.5	188
76	Characteristics of electromagnetic proton cyclotron waves along auroral field lines observed by FAST in regions of upward current. <i>Geophysical Research Letters</i> , 1998, 25, 2057-2060.	1.5	23
77	FAST satellite wave observations in the AKR source region. <i>Geophysical Research Letters</i> , 1998, 25, 2061-2064.	1.5	177
78	FAST satellite observations of electric field structures in the auroral zone. <i>Geophysical Research Letters</i> , 1998, 25, 2025-2028.	1.5	248
79	FAST satellite observations of large-amplitude solitary structures. <i>Geophysical Research Letters</i> , 1998, 25, 2041-2044.	1.5	504
80	FAST observations of VLF waves in the auroral zone: Evidence of very low plasma densities. <i>Geophysical Research Letters</i> , 1998, 25, 2065-2068.	1.5	105
81	FAST observations of electron distributions within AKR source regions. <i>Geophysical Research Letters</i> , 1998, 25, 2069-2072.	1.5	145
82	Electron modulation and ion cyclotron waves observed by FAST. <i>Geophysical Research Letters</i> , 1998, 25, 2045-2048.	1.5	68
83	Non-Maxwellian particle distributions and electromagnetic ion cyclotron instabilities in the near-Earth magnetotail. <i>Geophysical Research Letters</i> , 1997, 24, 2913-2916.	1.5	42
84	Electromagnetic Ion Cyclotron Waves Observed in the Near Earth Plasma Sheet Boundary Layer. <i>Journal of Geomagnetism and Geoelectricity</i> , 1994, 46, 987-995.	0.8	8