Anatoly Streltsov

List of Publications by Year
in descending order

Version: 2024-02-01

71 papers	1,562 citations	331670 21 h-index	315739 38 g-index
72 all docs	72 docs citations	72 times ranked	905 citing authors

#	Article	IF	Citations
1	AlfvÃ©n vortices and related phenomena in the ionosphere and the magnetosphere. Physica Scripta, 1988, 38, 841-854.	2.5	171
2	Discrete auroral arc, electrostatic shock and suprathermal electrons powered by dispersive, anomalously resistive field line resonance. Geophysical Research Letters, 1998, 25, 4449-4452.	4.0	92
3	Microwave Image Reconstruction From 3-D Fields Coupled to 2-D Parameter Estimation. IEEE Transactions on Medical Imaging, 2004, 23, 475-484.	8.9	88
4	Multiscale electrodynamics of the ionosphere-magnetosphere system. Journal of Geophysical Research, 2004, 109, .	3.3	81
5	Whistler propagation in inhomogeneous plasma. Journal of Geophysical Research, 2006, 111, .	3.3	79
6	Large AlfvÃ©n wave power in the plasma sheet boundary layer during the expansion phase of substorms. Geophysical Research Letters, 2000, 27, 3169-3172.	4.0	78
7	Small-scale, dispersive field line resonances in the hot magnetospheric plasma. Journal of Geophysical Research, 1998, 103, 26559-26572.	3.3	76
8	Coupling between density structures, electromagnetic waves and ionospheric feedback in the auroral zone. Journal of Geophysical Research, 2008, 113, .	3.3	62
9	Past, Present and Future of Active Radio Frequency Experiments in Space. Space Science Reviews, 2018, 214, 1.	8.1	62
10	Small-scale electric fields in downward auroral current channels. Journal of Geophysical Research, 2003, 108, .	3.3	50
11	Numerical modeling of localized electromagnetic waves in the nightside subauroral zone. Journal of Geophysical Research, 2003, 108, .	3.3	36
12	Reflection and absorption of AlfvÃ©nic power in the low-altitude magnetosphere. Journal of Geophysical Research, 2003, 108, .	3.3	31
13	Harmonic structure of field line eigenmodes generated by ionospheric feedback instability. Journal of Geophysical Research, 2002, 107, SMP 14-1.	3.3	29
14	Effects of the seasonal asymmetry in ionospheric Pedersen conductance on the appearance of discrete aurora. Geophysical Research Letters, 2002, 29, 79-1-79-4.	4.0	28
15	The formation and nonlinear evolution of convective cells in the auroral plasma. Physica Scripta, 1990, 41, 686-692.	2.5	26
16	Ionospheric feedback instability and substorm development. Journal of Geophysical Research, 2010, 115, .	3.3	25
17	Divergent electric fields in downward current channels. Journal of Geophysical Research, 2006, 111, .	3.3	24
18	Electrodynamics of the magnetosphereâ€“ionosphere coupling in the nightside subauroral zone. Physics of Plasmas, 2004, 11, 1260-1267.	1.9	23

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19	Ultra-low-frequency electrodynamics of the magnetosphere-ionosphere interaction. Journal of Geophysical Research, 2005, 110, .	3.3	23
20	Whistler propagation in ionospheric density ducts: Simulations and DEMETER observations. Journal of Geophysical Research: Space Physics, 2013, 118, 7011-7018.	2.4	22
21	Production of smallâ€scale AlfvÃ©n waves by ionospheric depletion, nonlinear magnetosphereâ€ionosphere coupling and phase mixing. Journal of Geophysical Research: Space Physics, 2013, 118, 1450-1460.	2.4	22
22	Numerical modeling of AlfvÃ©n waves observed by the Polar spacecraft in the nightside plasma sheet boundary layer. Journal of Geophysical Research, 2002, 107, SMP 9-1-SMP 9-8.	3.3	21
23	Ultralow Frequency Electrodynamics of Magnetosphereâ€Ionosphere Interactions Near the Plasmapause During Substorms. Journal of Geophysical Research: Space Physics, 2018, 123, 7441-7451.	2.4	21
24	On the Existence of Ionospheric Feedback Instability in the Earth's Magnetosphereâ€Ionosphere System. Journal of Geophysical Research: Space Physics, 2018, 123, 8951-8957.	2.4	21
25	STEVE and the Picket Fence: Evidence of Feedbackâ€Unstable Magnetosphereâ€Ionosphere Interaction. Geophysical Research Letters, 2019, 46, 14247-14255.	4.0	21
26	Auroral Current and Electrodynamics Structure (ACES) observations of ionospheric feedback in the AlfvÃ©n resonator and model responses. Journal of Geophysical Research: Space Physics, 2013, 118, 3288-3296.	2.4	19
27	Ionospheric feedback instability and active discrete auroral forms. Journal of Geophysical Research: Space Physics, 2014, 119, 2243-2254.	2.4	19
28	Observations and Modeling of Whistler Mode Waves in the Magnetospheric Density Ducts. Journal of Geophysical Research: Space Physics, 2020, 125, e2020JA028398.	2.4	19
29	Smallâ€scale, localized electromagnetic waves observed by Cluster: Result of magnetosphereâ€ionosphere interactions. Geophysical Research Letters, 2008, 35, .	4.0	17
30	Van Allen Probes observations of structured whistler mode activity and coincident electron Landau acceleration inside a remnant plasmaspheric plume. Journal of Geophysical Research: Space Physics, 2017, 122, 3073-3086.	2.4	17
31	Dispersive width of the AlfvÃ©nic field line resonance. Journal of Geophysical Research, 1999, 104, 22657-22666.	3.3	16
32	Simulation of ULF field-aligned currents generated by HF heating of the ionosphere. Journal of Geophysical Research, 2005, 110, .	3.3	16
33	Whistler propagation in nonsymmetrical density channels. Journal of Geophysical Research, 2007, 112, n/a-n/a.	3.3	16
34	Modeling the propagation of whistler-mode waves in the presence of field-aligned density irregularities. Physics of Plasmas, 2012, 19, .	1.9	14
35	Prebreakup Arc Intensification due to Short Circuiting of Mesoscale Plasma Flows Over the Plasmapause. Journal of Geophysical Research: Space Physics, 2020, 125, e2019JA027666.	2.4	14
36	Propagation of whistler mode waves with a modulated frequency in the magnetosphere. Journal of Geophysical Research, 2010, 115, .	3.3	13

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37	ULF waves and discrete aurora. Journal of Geophysical Research, 2012, 117, .	3.3	11
38	Whistler interaction with fieldâ€aligned density irregularities in the ionosphere: Refraction, diffraction, and interference. Journal of Geophysical Research: Space Physics, 2014, 119, 5790-5799.	2.4	10
39	Narrowing of the discrete auroral arc by the ionosphere. Journal of Geophysical Research, 2007, 112, .	3.3	9
40	Effect of frequency modulation on whistler mode waves in the magnetosphere. Journal of Geophysical Research, 2009, 114, .	3.3	9
41	Simulations of resonant AlfvÃ©n waves generated by artificial HF heating of the auroral ionosphere. Annales Geophysicae, 2004, 22, 2943-2949.	1.6	9
42	Quasineutral particle simulation technique for whistlers. Journal of Computational Physics, 2006, 214, 284-298.	3.8	8
43	Excitation of the ionospheric AlfvÃ©n resonator from the ground: Theory and experiments. Journal of Geophysical Research, 2011, 116, n/a-n/a.	3.3	8
44	Whistler interactions with density gradients in the magnetosphere. Journal of Geophysical Research: Space Physics, 2013, 118, 167-172.	2.4	8
45	Spectral properties of highâ€density ducts. Journal of Geophysical Research, 2007, 112, .	3.3	7
46	An alternative method for generation of ULF waves by ionospheric heating. Geophysical Research Letters, 2010, 37, .	4.0	7
47	Propagation of whistler mode waves through the ionosphere. Journal of Geophysical Research, 2012, 117, .	3.3	7
48	Whistlers in Micro Ducts. Journal of Geophysical Research: Space Physics, 2021, 126, .	2.4	7
49	Determining Parameters of Whistler Waves Trapped in Highâ€Density Ducts. Journal of Geophysical Research: Space Physics, 2021, 126, e2021JA029228.	2.4	7
50	On the Asymmetry Between Upward and Downward Fieldâ€Aligned Currents Interacting With the Ionosphere. Journal of Geophysical Research: Space Physics, 2018, 123, 9275-9285.	2.4	6
51	Ionospheric AlfvÃ©n resonator and aurora: Modeling of MICA observations. Journal of Geophysical Research: Space Physics, 2017, 122, 7530-7540.	2.4	5
52	ULF Waves Generated Near the Plasmapause by the Magnetosphereâ€Ionosphere Interactions. Journal of Geophysical Research: Space Physics, 2020, 125, e2019JA027353.	2.4	5
53	Whistlers in the Plasmasphere. Journal of Geophysical Research: Space Physics, 2021, 126, e2020JA028933.	2.4	5
54	Effects of ionospheric heating on feedbackâ€unstable electromagnetic waves. Journal of Geophysical Research, 2008, 113, .	3.3	4

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55	Effect of heavy ions on coupling between density structures and electromagnetic waves in the auroral zone. Journal of Geophysical Research, 2011, 116, n/a-n/a.	3.3	4
56	Whistler on a Shelf. Journal of Geophysical Research: Space Physics, 2021, 126, e2021JA029403.	2.4	3
57	Subauroral geospace. , 2022, , 481-610.		3
58	Resonant AlfvÃ©n Waves in the Lower Auroral Ionosphere: Evidence for the Nonlinear Evolution of the Ionospheric Feedback Instability. Journal of Geophysical Research: Space Physics, 2022, 127, .	2.4	3
59	Effect of the radial boundary condition on AlfvÃ©n wave dynamics in reduced magnetohydrodynamics. Physics of Plasmas, 2008, 15, 032106.	1.9	2
60	Excitation of zero-frequency magnetic field-aligned currents by ionospheric heating. Annales Geophysicae, 2011, 29, 1147-1152.	1.6	2
61	Hybrid simulation of whistler excitation by electron beams in two-dimensional non-periodic domains. Journal of Computational Physics, 2014, 276, 468-478.	3.8	2
62	Effects of the Hall Conductivity in Ionospheric Heating Experiments. Geophysical Research Letters, 2019, 46, 6188-6194.	4.0	2
63	Artificial Aurora Produced by HAARP. Journal of Geophysical Research: Space Physics, 2019, 124, 3255-3265.	2.4	2
64	ULF waves observed in solar wind and on the ground at high, mid, and low latitudes. Journal of Atmospheric and Solar-Terrestrial Physics, 2020, 200, 105220.	1.6	2
65	Magnetospheric resonances at low and middle latitudes. Journal of Geophysical Research: Space Physics, 2015, 120, 7718-7727.	2.4	1
66	Whistler interactions with density gradients in the magnetosphere. , 2013, , .		0
67	Discrete auroral arcs generated by ionospheric feedback instability. , 2014, , .		0
68	Propagation of whistler-mode waves through the ionosphere to the radiation belt. , 2014, , .		0
69	Nonlinear effects in natural and artificial aurora. , 2022, , 345-479.		0
70	Auroral geospace. , 2022, , 199-343.		0
71	Feedback Interactions Between the Ionosphere and Magnetosphere at Middle Latitude.. Journal of Geophysical Research: Space Physics, 0, , .	2.4	0