G V Khazanov

List of Publications by Year
in descending order

79 papers	1,630 citations	279798 23 h-index	330143 37 g-index
81 all docs	81 docs citations	81 times ranked	1147 citing authors

#	Article	IF	Citations
1	Magnetosphereâ€Ionosphere Coupling of Precipitated Electrons in Diffuse Aurora Driven by Time Domain Structures. Geophysical Research Letters, 2021, 48, e2021GL092655.	4.0	8
2	Why Atmospheric Backscatter Is Important in the Formation of Electron Precipitation in the Diffuse Aurora. Journal of Geophysical Research: Space Physics, 2021, 126, e2021JA029211.	2.4	5
3	Electron Energy Interplay in the Geomagnetic Trap Below the Auroral Acceleration Region. Journal of Geophysical Research: Space Physics, 2021, 126, e2020JA028811.	2.4	7
4	The Precipitated Electrons in the Region of Diffuse Aurora Driven by Ionosphereâ€Thermosphere Collisional Processes. Geophysical Research Letters, 2021, 48, e2021GL094583.	4.0	6
5	Dayside Low Energy Electron Precipitation Driven by Hiss Waves in the Presence of Ionospheric Photoelectrons. Journal of Geophysical Research: Space Physics, 2021, 126, .	2.4	5
6	Effects of Electron Precipitation on Eâ€Region Instabilities: Theoretical Analysis. Journal of Geophysical Research: Space Physics, 2021, 126, .	2.4	3
7	To the Interchange Instability Criterion in the Magnetosphere in the Presence of Velocity Shear. Journal of Geophysical Research: Space Physics, 2020, 125, e2020JA028172.	2.4	1
8	The Formation of Electron Heat Flux in the Region of Diffuse Aurora. Journal of Geophysical Research: Space Physics, 2020, 125, e2020JA028175.	2.4	13
9	How Magnetically Conjugate Atmospheres and the Magnetosphere Participate in the Formation of Lowâ€Energy Electron Precipitation in the Region of Diffuse Aurora. Journal of Geophysical Research: Space Physics, 2020, 125, e2020JA028057.	2.4	7
10	Formation of the Potential Jump Over the Geomagnetically Quiet Sunlit Polar Cap Region. Journal of Geophysical Research: Space Physics, 2019, 124, 4384-4401.	2.4	5
11	Source of the Bursty Bulk Flow Diffuse Aurora: Electrostatic Cyclotron Harmonic and Whistler Waves in the Coupling of Bursty Bulk Flows to Auroral Precipitation. Journal of Geophysical Research: Space Physics, 2019, 124, 6669-6690.	2.4	8
12	The Magnetosphereâ€Ionosphere Electron Precipitation Dynamics and Their Geospace Consequences During the 17 March 2013 Storm. Journal of Geophysical Research: Space Physics, 2019, 124, 6504-6523.	2.4	16
13	The Formation of Electron Heat Flux Over the Sunlit Quiet Polar Cap Ionosphere. Geophysical Research Letters, 2019, 46, 10201-10208.	4.0	8
14	Low Energy Precipitating Electrons in the Diffuse Aurorae. Geophysical Research Letters, 2019, 46, 3582-3589.	4.0	11
15	Impact of Precipitating Electrons and Magnetosphereâ€Ionosphere Coupling Processes on Ionospheric Conductance. Space Weather, 2018, 16, 829-837.	3.7	32
16	Is diffuse aurora driven from above or below?. Geophysical Research Letters, 2017, 44, 641-647.	4.0	18
17	How Hospitable Are Space Weather Affected Habitable Zones? The Role of Ion Escape. Astrophysical Journal Letters, 2017, 836, L3.	8.3	185
18	First optical observations of interhemispheric electron reflections within pulsating aurora. Geophysical Research Letters, 2017, 44, 2618-2623.	4.0	13

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19	Major pathways to electron distribution function formation in regions of diffuse aurora. Journal of Geophysical Research: Space Physics, 2017, 122, 4251-4265.	2.4	18
20	Simple analytical expressions for electron pitch angle diffusion coefficients. Physics of Plasmas, 2017, 24, 032904.	1.9	2
21	Lower hybrid frequency range waves generated by ion polarization drift due to electromagnetic ion cyclotron waves: Analysis of an event observed by the Van Allen Probe B. Journal of Geophysical Research: Space Physics, 2017, 122, 449-463.	2.4	5
22	Photoelectrons in the quiet polar wind. Journal of Geophysical Research: Space Physics, 2017, 122, 6708-6726.	2.4	25
23	Ionosphereâ€magnetosphere energy interplay in the regions of diffuse aurora. Journal of Geophysical Research: Space Physics, 2016, 121, 6661-6673.	2.4	8
24	Banded structures in electron pitch angle diffusion coefficients from resonant wave-particle interactions. Physics of Plasmas, 2016, 23, .	1.9	3
25	Electron distribution function formation in regions of diffuse aurora. Journal of Geophysical Research: Space Physics, 2015, 120, 9891-9915.	2.4	40
26	Superthermal electron magnetosphere-ionosphere coupling in the diffuse aurora in the presence of ECH waves. Journal of Geophysical Research: Space Physics, 2015, 120, 445-459.	2.4	12
27	Stochastic electron motion driven by space plasma waves. Nonlinear Processes in Geophysics, 2014, 21, 61-85.	1.3	9
28	Magnetosphereâ€ionosphere energy interchange in the electron diffuse aurora. Journal of Geophysical Research: Space Physics, 2014, 119, 171-184.	2.4	47
29	Radiation belt electron dynamics driven by largeâ€amplitude whistlers. Journal of Geophysical Research: Space Physics, 2013, 118, 6397-6404.	2.4	4
30	Superthermal electron energy interchange in the ionosphereâ€plasmasphere system. Journal of Geophysical Research: Space Physics, 2013, 118, 925-934.	2.4	7
31	Restrictions on the quasi-linear description of electronâ€“chorus interaction in the earth's magnetosphere. Radiation Effects and Defects in Solids, 2013, 168, 799-804.	1.2	0
32	Kinetic description of ionospheric outflows based on the exact form of Fokkerâ€Planck collision operator: Electrons. Journal of Geophysical Research, 2012, 117, .	3.3	5
33	Bursty precipitation driven by chorus waves. Radiation Effects and Defects in Solids, 2011, 166, 795-805.	1.2	3
34	Kinetic Theory of the Inner Magnetospheric Plasma. Astrophysics and Space Science Library, 2011, , .	2.7	43
35	Kinetic Theory of Ring Current and Electromagnetic Ion Cyclotron Waves: Fundamentals. Astrophysics and Space Science Library, 2011, , 429-489.	2.7	1
36	Kinetic Theory of Ring Current and Electromagnetic Ion Cyclotron Waves: Applications. Astrophysics and Space Science Library, 2011, , 491-540.	2.7	0

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37	Stochastic ion heating by the lower-hybrid waves. Radiation Effects and Defects in Solids, 2010, 165, 165-176.	1.2	2
38	Sounding rocket experiment of bare electrodynamic tether system. Acta Astronautica, 2009, 64, 313-324.	3.2	32
39	Selfâ€consistent model of magnetospheric electric field, ring current, plasmasphere, and electromagnetic ion cyclotron waves: Initial results. Journal of Geophysical Research, 2009, 114, .	3.3	23
40	Nonlinear electron motion in a coherent whistler wave packet. Physics of Plasmas, 2008, 15, 073506.	1.9	5
41	Dynamic theory of relativistic electrons stochastic heating by whistler mode waves with application to the Earth magnetosphere. Journal of Geophysical Research, 2008, 113, .	3.3	8
42	Influence of the convection electric field models on predicted plasmapause positions during magnetic storms. Journal of Geophysical Research, 2008, 113, .	3.3	46
43	Crucial role of ring current H⁺ in electromagnetic ion cyclotron wave dispersion relation: Results from global simulations. Journal of Geophysical Research, 2008, 113, .	3.3	16
44	Chaotic motion of relativistic electrons driven by whistler waves. Plasma Physics and Controlled Fusion, 2007, 49, 447-466.	2.1	14
45	Electrostatic wave generation and transverse ion acceleration by AlfvÃ©nic wave components of broadband extremely low frequency turbulence. Journal of Geophysical Research, 2007, 112, n/a-n/a.	3.3	17
46	Self-consistent model of magnetospheric ring current and propagating electromagnetic ion cyclotron waves: 2. Wave-induced ring current precipitation and thermal electron heating. Journal of Geophysical Research, 2007, 112, n/a-n/a.	3.3	29
47	Effect of electromagnetic ion cyclotron wave normal angle distribution on relativistic electron scattering in outer radiation belt. Journal of Geophysical Research, 2007, 112, .	3.3	6
48	Correction to â€œEffect of oblique electromagnetic ion cyclotron waves on relativistic electron scattering: Combined Release and Radiation Effects Satellite (CRRES)-based calculationâ€ Journal of Geophysical Research, 2007, 112, n/a-n/a.	3.3	2
49	Self-consistent model of magnetospheric ring current and propagating electromagnetic ion cyclotron waves: Waves in multi-ion magnetosphere. Journal of Geophysical Research, 2006, 111, .	3.3	43
50	Solid and grid sphere current collection in view of the tethered satellite system TSS 1 and TSS 1R mission results. Journal of Geophysical Research, 2005, 110, .	3.3	3
51	The nonlinear coupling of electromagnetic ion cyclotron and lower hybrid waves in the ring current region: the magnetic storm 1-7May 1998. Nonlinear Processes in Geophysics, 2004, 11, 229-239.	1.3	3
52	Stormtime particle energization with high temporal resolution AMIE potentials. Journal of Geophysical Research, 2004, 109, .	3.3	23
53	Numerical simulation of waves driven by plasma currents generated by low-frequency AlfvÃ©n waves in a multi-ion plasma. Journal of Geophysical Research, 2004, 109, .	3.3	10
54	Self-consistent magnetosphere-ionosphere coupling: Theoretical studies. Journal of Geophysical Research, 2003, 108, .	3.3	38

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55	Self-consistent model of magnetospheric ring current and electromagnetic ion cyclotron waves: The 2â€“7 May 1998 storm. Journal of Geophysical Research, 2003, 108, .	3.3	52
56	A radiation belt-ring current forecasting model. Space Weather, 2003, 1, n/a-n/a.	3.7	26
57	Transport of photoelectrons in the nightside magnetosphere. Journal of Geophysical Research, 2002, 107, SMP 10-1.	3.3	9
58	Adiabatic energization in the ring current and its relation to other source and loss terms. Journal of Geophysical Research, 2002, 107, SMP 4-1.	3.3	26
59	Ionospheres: Physics, plasma physics, and chemistry. Eos, 2001, 82, 556-556.	0.1	2
60	Interhemispheric transport of relativistic electron beams. Geophysical Research Letters, 1999, 26, 581-584.	4.0	11
61	Analysis of early phase ring current recovery mechanisms during geomagnetic storms. Geophysical Research Letters, 1999, 26, 2845-2848.	4.0	162
62	Generalized kinetic description of a plasma in an arbitrary field-aligned potential energy structure. Journal of Geophysical Research, 1998, 103, 6871-6889.	3.3	30
63	Collisionless plasma modeling in an arbitrary potential energy distribution. Physics of Plasmas, 1998, 5, 580-589.	1.9	22
64	Achieving zero current for polar wind outflow on open flux tubes subjected to large photoelectron fluxes. Geophysical Research Letters, 1997, 24, 1183-1186.	4.0	33
65	A model for lower hybrid wave excitation compared with observations by Viking. Geophysical Research Letters, 1997, 24, 2399-2402.	4.0	6
66	Lower hybrid oscillations in multicomponent space plasmas subjected to ion cyclotron waves. Journal of Geophysical Research, 1997, 102, 175-184.	3.3	17
67	Photoelectron effects on the self-consistent potential in the collisionless polar wind. Journal of Geophysical Research, 1997, 102, 7509-7521.	3.3	66
68	Self-consistent superthermal electron effects on plasmaspheric refilling. Journal of Geophysical Research, 1997, 102, 7523-7536.	3.3	35
69	Global, collisional model of high-energy photoelectrons. Geophysical Research Letters, 1996, 23, 331-334.	4.0	21
70	Lower hybrid turbulence and ponderomotive force effects in space plasmas subjected to large-amplitude low-frequency waves. Geophysical Research Letters, 1996, 23, 797-800.	4.0	27
71	Nonsteady state coupling processes in superthermal electron transport. Geophysical Monograph Series, 1995, , 181-191.	0.1	10
72	Nonsteady state ionosphere-plasmasphere coupling of superthermal electrons. Journal of Geophysical Research, 1995, 100, 9669.	3.3	54

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73	Selfâ€consistent electrostatic potential due to trapped plasma in the magnetosphere. Geophysical Research Letters, 1993, 20, 1331-1334.	4.0	13
74	A kinetic description of electron beam ejection from spacecraft. Geophysical Research Letters, 1993, 20, 1999-2002.	4.0	8
75	Nonâ€steadyâ€state transport of superthermal electrons in the plasmasphere. Geophysical Research Letters, 1993, 20, 2821-2824.	4.0	36
76	Parametric excitation of longitudinal oscillations by the lower frequency pumping wave. Plasma Physics and Controlled Fusion, 1992, 34, 1359-1367.	2.1	5
77	Analytic description of the electron temperature behavior in the upper ionosphere and plasmasphere. Geophysical Research Letters, 1992, 19, 1915-1918.	4.0	14
78	Anisotropic ion heating and parallel O⁺ acceleration in regions of rapid E Ã— B convection. Geophysical Research Letters, 1992, 19, 2289-2292.	4.0	27
79	Parameterization of Ring Current Adiabatic Energization. Geophysical Monograph Series, 0, , 215-229.	0.1	4