A G Demekhov

List of Publications by Year
in descending order

125	2,006	218662	315719
papers	citations	26 h-index	38 g-index

130	130	130	802
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Amplitude Dependence of Nonlinear Precipitation Blocking of Relativistic Electrons by Large Amplitude EMIC Waves. Geophysical Research Letters, 2022, 49, .	4.0	17
2	Proton Precipitation and Electromagnetic Ion Cyclotron Waves Associated with Substorm Injections. Bulletin of the Russian Academy of Sciences: Physics, 2021, 85, 292-297.	0.6	0
3	Evening Side EMIC Waves and Related Proton Precipitation Induced by a Substorm. Journal of Geophysical Research: Space Physics, 2021, 126, e2020JA029091.	2.4	13
4	Resonant interaction of relativistic electrons with realistic electromagnetic ionâ€“cyclotron wave packets. Earth, Planets and Space, 2021, 73, .	2.5	13
5	Fine Structure of Chorus Wave Packets: Comparison Between Observations and Wave Generation Models. Journal of Geophysical Research: Space Physics, 2021, 126, e2021JA029330.	2.4	23
6	Short Periodic VLF Emissions Observed Simultaneously by Van Allen Probes and on the Ground. Geophysical Research Letters, 2021, 48, e2021GL095476.	4.0	3
7	Role of Ducting in Relativistic Electron Loss by Whistlerâ€Mode Wave Scattering. Journal of Geophysical Research: Space Physics, 2021, 126, e2021JA029851.	2.4	17
8	An Ephemeral Red Arc Appeared at 68Â° MLat at a Pseudo Breakup During Geomagnetically Quiet Conditions. Journal of Geophysical Research: Space Physics, 2020, 125, e2020JA028468.	2.4	5
9	Frequency Dependence of Very Low Frequency Chorus Poynting Flux in the Source Region: THEMIS Observations and a Model. Geophysical Research Letters, 2020, 47, e2020GL086958.	4.0	8
10	Precipitation of Relativistic Electrons Under Resonant Interaction With Electromagnetic Ion Cyclotron Wave Packets. Journal of Geophysical Research: Space Physics, 2020, 125, e2019JA027358.	2.4	29
11	Whistler Mode Quasiperiodic Emissions: Contrasting Van Allen Probes and DEMETER Occurrence Rates. Journal of Geophysical Research: Space Physics, 2020, 125, e2020JA027918.	2.4	5
12	Localization of the Source of Quasiperiodic VLF Emissions in the Magnetosphere by Using Simultaneous Ground and Space Observations: A Case Study. Journal of Geophysical Research: Space Physics, 2020, 125, e2020JA027776.	2.4	15
13	Pitch-Angle Diffusion of Energetic Protons upon Their Interaction with EMIC Waves: Comparison of Calculation Results with THEMIS and NOAA/POES Data. Springer Proceedings in Earth and Environmental Sciences, 2020, , 309-318.	0.4	1
14	Characteristics of the Pitch-Angle Anisotropy of Energetic Protons in the Daytime Magnetosphere due to Particle Drift in the Nondipole Magnetic Field. Geomagnetism and Aeronomy, 2020, 60, 461-471.	0.8	0
15	On the Influence of Propagation Properties of Whistler-Mode Waves in the Earthâ€™s Magnetosphere on Their Cyclotron Amplification. Radiophysics and Quantum Electronics, 2020, 63, 241-256.	0.5	1
16	Dynamics of the Spectra of Multiband Pc1 Pulsations in the Presence of Multiple Regions of Ionâ€“Cyclotron Instability in the Magnetosphere. Radiophysics and Quantum Electronics, 2019, 62, 1-25.	0.5	4
17	Quasiperiodic ELF/VLF Emissions Detected Onboard the DEMETER Spacecraft: Theoretical Analysis and Comparison With Observations. Journal of Geophysical Research: Space Physics, 2019, 124, 5278-5288.	2.4	8
18	Properties of Localized Precipitation of Energetic Protons Equatorward of the Isotropic Boundary. Geophysical Research Letters, 2019, 46, 10932-10940.	4.0	5

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19	Impact of the Space Charge Distribution in the Model Source of Quasi-Electrostatic Whistler-Mode Waves on the Effective Length of a Short Receiving Antenna. Radiophysics and Quantum Electronics, 2019, 62, 123-132.	0.5	1
20	The Parameterization Method of Discrete VLF Chorus Emissions. Radiophysics and Quantum Electronics, 2019, 62, 159-173.	0.5	2
21	Simultaneous Observations of EMIC Waves, ELF/VLF Waves, and Energetic Particle Precipitation during Multiple Compressions of the Magnetosphere. Geomagnetism and Aeronomy, 2019, 59, 668-680.	0.8	13
22	Reception of Quasi-Electrostatic Waves by Dipole Antennas in a Resonant Magnetoplasma. , 2019, , .		0
23	Backward-Wave Oscillator Regime in the Magnetosphere Cyclotron Maser Under an Arbitrary Direction of Wave Propagation Relative to an External Magnetic Field. Radiophysics and Quantum Electronics, 2018, 60, 595-608.	0.5	0
24	Resonant Interaction of Relativistic Electrons with Electromagnetic Ionâ€“Cyclotron Waves. II. Integral Parameters of Interaction Regimes. Radiophysics and Quantum Electronics, 2018, 61, 389-401.	0.5	7
25	Resonance Interaction of Relativistic Electrons with Ion-Cyclotron Waves. I. Specific Features of the Nonlinear Interaction Regimes. Radiophysics and Quantum Electronics, 2018, 60, 942-959.	0.5	14
26	Dependence of the Effective Length of a Receiving Antenna on the Space Charge Distribution in a Model Source of Quasi-Electrostatic Chorus Emissions. , 2018, , .		0
27	Proton Auroras Equatorward of the Oval as a Manifestation of the Ion-Cyclotron Instability in the Earthâ€™s Magnetosphere (Brief Review). Geomagnetism and Aeronomy, 2018, 58, 577-585.	0.8	8
28	Quasiperiodic Whistler Mode Emissions Observed by the Van Allen Probes Spacecraft. Journal of Geophysical Research: Space Physics, 2018, 123, 8969-8982.	2.4	18
29	Generation of EMIC Waves in the Magnetosphere and Precipitation of Energetic Protons: Comparison of the Data from THEMIS High Earth Orbiting Satellites and POES Low Earth Orbiting Satellites. Geomagnetism and Aeronomy, 2018, 58, 469-482.	0.8	10
30	Simulation of VLF chorus emissions in the magnetosphere and comparison with THEMIS spacecraft data. Journal of Geophysical Research: Space Physics, 2017, 122, 166-184.	2.4	39
31	Amplitudeâ€“frequency characteristics of ionâ€“cyclotron and whistler-mode waves from Van Allen Probes data. Geomagnetism and Aeronomy, 2017, 57, 40-50.	0.8	7
32	Relationship Between the Parameters of the Linear and Nonlinear Wave Generation Stages in a Magnetospheric Cyclotron Maser in the Backward-Wave Oscillator Regime. Radiophysics and Quantum Electronics, 2017, 59, 773-781.	0.5	5
33	Global distribution of energetic proton precipitations equatorward of the boundary of isotropic fluxes. Geomagnetism and Aeronomy, 2017, 57, 398-405.	0.8	3
34	Effective length of aÂreceiving antenna in case of quasiâ€electrostatic whistler mode waves: Application to spacecraft observations of chorus emissions. Radio Science, 2017, 52, 884-895.	1.6	7
35	Peculiarities of VLF wave propagation in the Earth's magnetosphere in the presence of artificial largeâ€scale inhomogeneity. Journal of Geophysical Research: Space Physics, 2017, 122, 8124-8135.	2.4	5
36	Conjugate Groundâ€Spacecraft Observations of VLF Chorus Elements. Geophysical Research Letters, 2017, 44, 11,735.	4.0	20

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37	Effective length of a receiving antenna in case of spacecraft observations of quasi-electrostatic chorus emissions. , 2017, , .		0
38	Localization of the sources of narrow-band noise VLF emissions in the range 4â€“10 kHz from simultaneous ground-based and Van Allen Probes satellite observations. Geomagnetism and Aeronomy, 2017, 57, 706-718.	0.8	11
39	Cluster observations of nonâ€“time continuous magnetosonic waves. Journal of Geophysical Research: Space Physics, 2016, 121, 9701-9716.	2.4	10
40	Sporadic Geomagnetic Pulsations at Frequencies of up to 15 HZ in the Magnetic Storm of November 7â€“14, 2004: Features of the Amplitude and Polarization Spectra and their Connection with Ionâ€“Cyclotron Waves in the Magnetosphere. Radiophysics and Quantum Electronics, 2016, 58, 547-560.	0.5	11
41	Identification of the source of quasiperiodic VLF emissions using groundâ€based and Van Allen Probes satellite observations. Geophysical Research Letters, 2015, 42, 6137-6145.	4.0	50
42	Victor Trakhtengerts: His contribution to space plasma physics. Cosmic Research, 2015, 53, 1-9.	0.6	0
43	ELF/VLF Perturbations Above the Haarp Transmitter Recorded by the Demeter Satellite in the Upper Ionosphere. Radiophysics and Quantum Electronics, 2015, 58, 155-172.	0.5	5
44	The Influence of artificial plasma irregularities on the propagation of VLF waves in the Earthâ€™s magnetosphere. Cosmic Research, 2014, 52, 72-78.	0.6	3
45	Quasiperiodic VLF emissions: Analysis of periods on different timescales. Cosmic Research, 2014, 52, 61-67.	0.6	7
46	Quasiperiodic VLF emissions with shortâ€period modulation and their relationship to whistlers: A case study. Journal of Geophysical Research: Space Physics, 2014, 119, 3544-3557.	2.4	36
47	Pulsating nighttime magnetic background noise in the upper ULF band at low latitudes. Journal of Geophysical Research: Space Physics, 2014, 119, 4109-4119.	2.4	4
48	Simultaneous observations of quasiâ€periodic ELF/VLF wave emissions and electron precipitation by DEMETER satellite: A case study. Journal of Geophysical Research: Space Physics, 2013, 118, 4523-4533.	2.4	40
49	RESONANCE Project for Studies of Wave-Particle Interactions in the Inner Magnetosphere. Geophysical Monograph Series, 2013, , 117-126.	0.1	5
50	Properties of the magnetospheric backward wave oscillator inferred from CLUSTER measurements of VLF chorus elements. Journal of Geophysical Research, 2012, 117, .	3.3	9
51	A new model for formation of artificial ducts due to ionospheric HFâ€heating. Geophysical Research Letters, 2012, 39, .	4.0	18
52	Coupling at the Atmosphere-Ionosphere-Magnetosphere Interface and Resonant Phenomena in the ULF Range. Space Science Reviews, 2012, 168, 595-609.	8.1	20
53	Project â€œDevelopment of the Methodology of Experiment and Technical Support for Studies of the Flow Cyclotron Maser in the Earth's Magnetosphere by Creating an Artificial Ionization Cloud From a Geophysical Rocketâ€• Optica Pura Y Aplicada, 2012, 45, 45-49.	0.1	0
54	Generation of VLF emissions with the increasing and decreasing frequency in the magnetosperic cyclotron maser in the backward wave oscillator regime. Radiophysics and Quantum Electronics, 2011, 53, 609-622.	0.5	36

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55	Theory and simulations of discrete VLF emissions in the magnetosphere. , 2011, , .		0
56	Testing of the backward wave oscillator model by using the spectral characteristics of VLF chorus elements. , 2011, , .		1
57	On statistical distribution of characteristics of chorus element generation. , 2011, , .		0
58	Coupling at the Atmosphere-Ionosphere-Magnetosphere Interface and Resonant Phenomena in the ULF Range. Space Sciences Series of ISSI, 2011, , 595-609.	0.0	0
59	Model for artificial ionospheric duct formation due to HF heating. Geophysical Research Letters, 2010, 37, .	4.0	32
60	Observations of the relationship between frequency sweep rates of chorus wave packets and plasma density. Journal of Geophysical Research, 2010, 115, .	3.3	48
61	Propagation of lower hybrid resonance waves in depleted-plasma regions in the upper auroral ionosphere. Radiophysics and Quantum Electronics, 2009, 52, 252-261.	0.5	0
62	A linear theory of the backward-wave-oscillator regime in the magnetospheric cyclotron ELF/VLF maser. Radiophysics and Quantum Electronics, 2009, 52, 761-773.	0.5	8
63	Efficiency of electron acceleration in the Earthâ€™s magnetosphere by whistler mode waves. Geomagnetism and Aeronomy, 2009, 49, 24-29.	0.8	33
64	Survey of magnetospheric line radiation events observed by the DEMETER spacecraft. Journal of Geophysical Research, 2009, 114, .	3.3	18
65	Dynamics of the magnetospheric cyclotron ELF/VLF maser in the backward-wave-oscillator regime. II. The influence of the magnetic-field inhomogeneity. Radiophysics and Quantum Electronics, 2008, 51, 880-889.	0.5	29
66	Variations in the chorus source location deduced from fluctuations of the ambient magnetic field: Comparison of Cluster data and the backward wave oscillator model. Journal of Geophysical Research, 2008, 113, .	3.3	10
67	Frequencies of wave packets of whistler-mode chorus inside its source region: a case study. Annales Geophysicae, 2008, 26, 1665-1670.	1.6	27
68	Formation of VLF chorus frequency spectrum: Cluster data and comparison with the backward wave oscillator model. Geophysical Research Letters, 2007, 34, .	4.0	29
69	Ground-based observations atLâˆ¼ 6 of multi-band structures in VLF hiss. Geophysical Research Letters, 2007, 34, .	4.0	14
70	Recent progress in understanding Pc1 pearl formation. Journal of Atmospheric and Solar-Terrestrial Physics, 2007, 69, 1609-1622.	1.6	40
71	Observation of pulsed fast electron precipitations and the cyclotron generation mechanism of burst activity in a decaying ECR discharge plasma. Journal of Experimental and Theoretical Physics, 2007, 104, 296-306.	0.9	27
72	Generation of Pc 1 pulsations in the regime of backward wave oscillator. Journal of Atmospheric and Solar-Terrestrial Physics, 2007, 69, 1651-1656.	1.6	16

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73	Longitudinal drift of substorm electrons as the reason of impulsive precipitation events and VLF emissions. Annales Geophysicae, 2006, 24, 2667-2684.	1.6	6
74	Interrelation between localized energetic particle precipita ion and cold plasma inhomogeneities in the magnetosphere. Geomagnetism and Aeronomy, 2006, 46, 332-338.	0.8	13
75	Electron acceleration in the magnetosphere by whistler-mode waves of varying frequency. Geomagnetism and Aeronomy, 2006, 46, 711-716.	0.8	76
76	Maser based on cyclotron resonance in a decaying plasma. JETP Letters, 2006, 84, 314-319.	1.4	22
77	Dissipative instability of charged aerosol flows in the mesosphere. Radiophysics and Quantum Electronics, 2006, 49, 851-865.	0.5	4
78	Laboratory modeling of nonstationary processes in space cyclotron masers: First results and prospects. Plasma Physics Reports, 2005, 31, 927-937.	0.9	21
79	Kinetic Instability of Charged-Particle Flow in a Thunderstorm Cloud. Radiophysics and Quantum Electronics, 2005, 48, 435-446.	0.5	9
80	Dynamics of the Magnetospheric Cyclotron ELF/VLF Maser in the Backward-Wave-Oscillator Regime. I. Basic Equations and Results in the Case of a Uniform Magnetic Field. Radiophysics and Quantum Electronics, 2005, 48, 639-649.	0.5	15
81	Quasi-periodic ELF/VLF wave emissions in the Earth's magnetosphere: comparison of satellite observations and modeling. Annales Geophysicae, 2004, 22, 4351-4361.	1.6	40
82	Interpretation of Cluster data on chorus emissions using the backward wave oscillator model. Physics of Plasmas, 2004, 11, 1345-1351.	1.9	85
83	Fine structure in ionospheric AlfvÃ©n resonator spectra observed at low latitude (L= 1.3). Geophysical Research Letters, 2004, 31, .	4.0	39
84	Modeling whistler wave generation regimes in magnetospheric cyclotron maser. Annales Geophysicae, 2004, 22, 3561-3570.	1.6	32
85	Current problems in studies of magnetospheric cyclotron masers and new space project â€œresonanceâ€. Advances in Space Research, 2003, 32, 355-374.	2.6	24
86	Phase-bunching effects in triggered VLF emissions: Antenna effect. Journal of Geophysical Research, 2003, 108, .	3.3	15
87	Cyclotron acceleration of radiation belt electrons by whistlers. Journal of Geophysical Research, 2003, 108, .	3.3	40
88	Backward wave oscillator regime of the whistler cyclotron instability in an inhomogeneous magnetic field. Physics of Plasmas, 2003, 10, 4472-4477.	1.9	17
89	Energetic particle counterparts for geomagnetic pulsations of Pc1 and IPDP types. Annales Geophysicae, 2003, 21, 2281-2292.	1.6	58
90	Verification of the backward wave oscillator model of VLF chorus generation using data from MAGION 5 satellite. Annales Geophysicae, 2003, 21, 1073-1081.	1.6	41

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91	VLF emission triggering by a highly anisotropic energetic electron plasma. Annales Geophysicae, 2003, 21, 481-492.	1.6	17
92	Experimental investigation of the whistler cyclotron instability in ECR-produced plasma in a simple mirror trap. , 2003, , .		0
93	Cyclotron amplification of whistler-mode waves: A parametric study relevant to discrete VLF emissions in the Earth's magnetosphere. Journal of Geophysical Research, 2002, 107, SMP 4-1-SMP 4-6.	3.3	11
94	Spectral properties of the ionospheric AlfvÃ©n resonator observed at a low-latitude station (L= 1.3). Journal of Geophysical Research, 2002, 107, SIA 4-1.	3.3	72
95	A role of the second-order cyclotron resonance effect in a self-consistent approach to triggered VLF emissions. Journal of Geophysical Research, 2001, 106, 3897-3904.	3.3	8
96	Highly anisotropic distributions of energetic electrons and triggered VLF emissions. Geophysical Research Letters, 2001, 28, 2577-2579.	4.0	11
97	Theory of Generation of Discrete ELF/VLF Emissions in the Earth's Magnetosphere. Radiophysics and Quantum Electronics, 2001, 44, 103-116.	0.5	6
98	Possibility of creating optical parametric oscillators with a precise shift of oscillation frequency, excited by monochromatic signal injection. Quantum Electronics, 2001, 31, 915-920.	1.0	0
99	Modelling the diurnal evolution of the resonance spectral structure of the atmospheric noise background in the Pc 1 frequency range. Journal of Atmospheric and Solar-Terrestrial Physics, 2000, 62, 257-265.	1.6	31
100	Cyclotron amplification of whistler waves by nonstationary electron beams in an inhomogeneous magnetic field. Physics of Plasmas, 2000, 7, 5153-5158.	1.9	10
101	Pc 1 waves and ionospheric AlfvÃ©n resonator: Generation or filtration?. Geophysical Research Letters, 2000, 27, 3805-3808.	4.0	34
102	Beam-plasma instability in inhomogeneous magnetic field and second order cyclotron resonance effects. Physics of Plasmas, 1999, 6, 692-698.	1.9	20
103	Cyclotron amplification of whistler waves. Advances in Space Research, 1999, 24, 95-98.	2.6	2
104	Self-consistent theory of triggered VLF emissions: An analytical approach. Advances in Space Research, 1999, 24, 1011-1014.	2.6	1
105	Whistler cyclotron instability and second order cyclotron resonance effects in the magnetosphere. Advances in Space Research, 1999, 24, 35-42.	2.6	1
106	Formation of electron beams under the interaction of a whistler wave packet with the radiation belt electrons. Advances in Space Research, 1999, 24, 1007-1010.	2.6	3
107	Theory of second-order cyclotron resonance as related to the origin of discrete VLF emissions in the magnetosphere. Radiophysics and Quantum Electronics, 1999, 42, 625-638.	0.5	1
108	Strong localized variations of the low-altitude energetic electron fluxes in the evening sector near the plasmapause. Annales Geophysicae, 1998, 16, 25-33.	1.6	19

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109	A quantitative model for cyclotron wave-particle interactions at the plasmapause. Annales Geophysicae, 1998, 16, 322-330.	1.6	12
110	Modeling of nonstationary electron precipitation by the whistler cyclotron instability. Annales Geophysicae, 1998, 16, 1455-1460.	1.6	3
111	Cyclotron amplification of whistler waves by electron beams in an inhomogeneous magnetic field. Journal of Geophysical Research, 1998, 103, 20449-20458.	3.3	15
112	Modeling of nonstationary electron precipitation by the whistler cyclotron instability. Annales Geophysicae, 1998, 16, 1455.	1.6	0
113	Afternoon mid-latitude current system and low-latitude geomagnetic field asymmetry during geomagnetic storms. Annales Geophysicae, 1997, 15, 1537-1547.	1.6	17
114	Afternoon mid-latitude current system and low-latitude geomagnetic field asymmetry during geomagnetic storms. Annales Geophysicae, 1997, 15, 1537.	1.6	0
115	Interrelation of noise-like and discrete ELF/VLF emissions generated by cyclotron interactions. Journal of Geophysical Research, 1996, 101, 13293-13301.	3.3	56
116	Evolution of the low-latitude geomagnetic storm field and the importance of turbulent diffusion for ring current particle losses. Journal of Geophysical Research, 1996, 101, 24689-24706.	3.3	8
117	Self-oscillations in a cyclotron maser with background plasma. Radiophysics and Quantum Electronics, 1996, 39, 656-665.	0.5	0
118	An EISCAT study of a pulsating auroral arc: simultaneous ionospheric electron density, auroral luminosity and magnetic field pulsations. Journal of Atmospheric and Solar-Terrestrial Physics, 1996, 58, 23-35.	0.9	16
119	Modeling of asymmetric DR variation in presence of spatio-temporal variations of the plasmapause. Advances in Space Research, 1996, 18, 299-304.	2.6	4
120	Nonequilibrium electron density fluctuations and wave scattering in the mesosphere. Journal of Atmospheric and Solar-Terrestrial Physics, 1995, 57, 1153-1164.	0.9	11
121	On the role of collective interactions in asymmetric ring current formation. Annales Geophysicae, 1994, 12, 422-430.	1.6	16
122	A mechanism of formation of pulsating aurorae. Journal of Geophysical Research, 1994, 99, 5831.	3.3	103
123	On the role of collective interactions in asymmetric ring current formation. Annales Geophysicae, 1994, 12, 422.	1.6	0
124	Cyclotron instability of the slow extraordinary wave in a magnetoactive plasma. Radiophysics and Quantum Electronics, 1987, 30, 547-557.	0.5	6
125	Several Questions on radiation dynamics in magnetic plasma traps. Radiophysics and Quantum Electronics, 1986, 29, 848-857.	0.5	7