O V Agapitov

List of Publications by Citations

127	3,268	35	48
papers	citations	h-index	g-index
137	3,879	3.8	5.47
ext. papers	ext. citations	avg, IF	L-index

#	Paper	IF	Citations
127	Statistics of whistler mode waves in the outer radiation belt: Cluster STAFF-SA measurements. *Journal of Geophysical Research: Space Physics*, **2013**, 118, 3407-3420	2.6	173
126	Oblique Whistler-Mode Waves in the Earth's Inner Magnetosphere: Energy Distribution, Origins, and Role in Radiation Belt Dynamics. *Space Science Reviews*, **2016**, 200, 261-355	7.5	111
125	Time domain structures: What and where they are, what they do, and how they are made. *Geophysical Research Letters*, **2015**, 42, 3627-3638	4.9	95
124	Wave-induced loss of ultra-relativistic electrons in the Van Allen radiation belts. *Nature Communications*, **2016**, 7, 12883	17.4	90
123	Consequences of geomagnetic activity on energization and loss of radiation belt electrons by oblique chorus waves. *Journal of Geophysical Research: Space Physics*, **2014**, 119, 2775-2796	2.6	68
122	Observations Directly Linking Relativistic Electron Microbursts to Whistler Mode Chorus: Van Allen Probes and FIREBIRD II. *Geophysical Research Letters*, **2017**, 44, 11,265-11,272	4.9	63
121	Fast dropouts of multi-MeV electrons due to combined effects of EMIC and whistler mode waves. *Geophysical Research Letters*, **2016**, 43, 4155-4163	4.9	63
120	Very oblique whistler generation by low-energy electron streams. *Journal of Geophysical Research: Space Physics*, **2015**, 120, 3665-3683	2.6	62
119	Synthetic Empirical Chorus Wave Model From Combined Van Allen Probes and Cluster Statistics. *Journal of Geophysical Research: Space Physics*, **2018**, 123, 297-314	2.6	61
118	Direct observation of radiation-belt electron acceleration from electron-volt energies to megavolts by nonlinear whistlers. *Physical Review Letters*, **2014**, 113, 035001	7.4	61
117	Analytical estimates of electron quasi-linear diffusion by fast magnetosonic waves. *Journal of Geophysical Research: Space Physics*, **2013**, 118, 3096-3112	2.6	60
116	Timescales for electron quasi-linear diffusion by parallel and oblique lower-band chorus waves. *Journal of Geophysical Research*, **2012**, 117, n/a-n/a		59
115	Nonlinear local parallel acceleration of electrons through Landau trapping by oblique whistler mode waves in the outer radiation belt. *Geophysical Research Letters*, **2015**, 42, 10,140	4.9	55
114	Non-diffusive resonant acceleration of electrons in the radiation belts. *Physics of Plasmas*, **2012**, 19, 122901	2.1	55
113	The quasi-electrostatic mode of chorus waves and electron nonlinear acceleration. *Journal of Geophysical Research: Space Physics*, **2014**, 119, 1606-1626	2.6	54
112	Evidence of stronger pitch angle scattering loss caused by oblique whistler-mode waves as compared with quasi-parallel waves. *Geophysical Research Letters*, **2014**, 41, 6063-6070	4.9	54
111	Switchbacks in the Solar Magnetic Field: Their Evolution, Their Content, and Their Effects on the Plasma. *Astrophysical Journal, Supplement Series*, **2020**, 246, 68	8	50

110	Wave energy budget analysis in the Earth's radiation belts uncovers a missing energy. *Nature Communications*, **2015**, 6, 8143	17.4	47
109	Nonlinear electron acceleration by oblique whistler waves: Landau resonance vs. cyclotron resonance. *Physics of Plasmas*, **2013**, 20, 122901	2.1	44
108	Structure and long-term change in the zonal asymmetry in Antarctic total ozone during spring. *Annales Geophysicae*, **2007**, 25, 361-374	2	44
107	Electron-acoustic solitons and double layers in the inner magnetosphere. *Geophysical Research Letters*, **2017**, 44, 4575-4583	4.9	43
106	Surface waves and field line resonances: A THEMIS case study. *Journal of Geophysical Research*, **2009**, 114, n/a-n/a		41
105	Magnetospheric Multiscale Satellite Observations of Parallel Electron Acceleration in Magnetic Field Reconnection by Fermi Reflection from Time Domain Structures. *Physical Review Letters*, **2016** , 116, 145101	7.4	40
104	Inner belt and slot region electron lifetimes and energization rates based on AKEBONO statistics of whistler waves. *Journal of Geophysical Research: Space Physics*, **2014**, 119, 2876-2893	2.6	40
103	Electron pitch-angle diffusion in radiation belts: The effects of whistler wave oblique propagation. *Geophysical Research Letters*, **2012**, 39, n/a-n/a	4.9	40
102	Fast transport of resonant electrons in phase space due to nonlinear trapping by whistler waves. *Geophysical Research Letters*, **2014**, 41, 5727-5733	4.9	39
101	Chorus source region localization in the Earth's outer magnetosphere using THEMIS measurements. *Annales Geophysicae*, **2010**, 28, 1377-1386	2	39
100	Spatial Extent and Temporal Correlation of Chorus and Hiss: Statistical Results From Multipoint THEMIS Observations. *Journal of Geophysical Research: Space Physics*, **2018**, 123, 8317-8330	2.6	39
99	Storm-induced energization of radiation belt electrons: Effect of wave obliquity. *Geophysical Research Letters*, **2013**, 40, 4138-4143	4.9	38
98	EMIC wave scale size in the inner magnetosphere: Observations from the dual Van Allen Probes. *Geophysical Research Letters*, **2017**, 44, 1227-1233	4.9	37
97	Generation of nonlinear electric field bursts in the outer radiation belt through the parametric decay of whistler waves. *Geophysical Research Letters*, **2015**, 42, 3715-3722	4.9	37
96	Parametric validations of analytical lifetime estimates for radiation belt electron diffusion by whistler waves. *Annales Geophysicae*, **2013**, 31, 599-624	2	37
95	Diffusive scattering of electrons by electron holes around injection fronts. *Journal of Geophysical Research: Space Physics*, **2017**, 122, 3163-3182	2.6	36
94	Thermal electron acceleration by localized bursts of electric field in the radiation belts. *Geophysical Research Letters*, **2014**, 41, 5734-5739	4.9	36
93	Chorus wave-normal statistics in the Earth's radiation belts from ray tracing technique. *Annales Geophysicae*, **2012**, 30, 1223-1233	2	36

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91	Simultaneous Observations of Lower Band Chorus Emissions at the Equator and Microburst Precipitating Electrons in the Ionosphere. *Geophysical Research Letters*, **2018**, 45, 511-516	4.9	33
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89	Chorus whistler wave source scales as determined from multipoint Van Allen Probe measurements. *Geophysical Research Letters*, **2017**, 44, 2634-2642	4.9	32
88	Electron-acoustic solitary waves in the Earth's inner magnetosphere. *Physics of Plasmas*, **2018**, 25, 022905	2.1	31
87	A statistical study of the propagation characteristics of whistler waves observed by Cluster. *Geophysical Research Letters*, **2011**, 38, n/a-n/a	4.9	31
86	Multispacecraft observations of chorus emissions as a tool for the plasma density fluctuations' remote sensing. *Journal of Geophysical Research*, **2011**, 116, n/a-n/a		31
85	Near-relativistic electron acceleration by Landau trapping in time domain structures. *Geophysical Research Letters*, **2016**, 43, 508-514	4.9	31
84	Exclusion principle for very oblique and parallel lower band chorus waves. *Geophysical Research Letters*, **2016**, 43, 11,112	4.9	31
83	Magnetic field depression within electron holes. *Geophysical Research Letters*, **2015**, 42, 2123-2129	4.9	30
82	Stability of relativistic electron trapping by strong whistler or electromagnetic ion cyclotron waves. *Physics of Plasmas*, **2015**, 22, 082901	2.1	30
81	Correction to A statistical study of the propagation characteristics of whistler waves observed by Cluster *Geophysical Research Letters*, **2012**, 39,	4.9	30
80	Electron Scattering by High-frequency Whistler Waves at Earth Bow Shock. *Astrophysical Journal Letters*, **2017**, 842, L11	7.9	29
79	The development of a bursty precipitation front with intense localized parallel electric fields driven by whistler waves. *Geophysical Research Letters*, **2015**, 42, 2563-2570	4.9	29
78	Sunward-propagating Whistler Waves Collocated with Localized Magnetic Field Holes in the Solar Wind: Parker Solar Probe Observations at 35.7 R ? Radii. *Astrophysical Journal Letters*, **2020**, 891, L20	7.9	28
77	Probability of relativistic electron trapping by parallel and oblique whistler-mode waves in Earth's radiation belts. *Physics of Plasmas*, **2015**, 22, 112903	2.1	28
76	Solitary Waves Across Supercritical Quasi-Perpendicular Shocks. *Geophysical Research Letters*, **2018**, 45, 5809	4.9	26
75	Acceleration of radiation belts electrons by oblique chorus waves. *Journal of Geophysical Research*, **2012**, 117, n/a-n/a		26

74	Statistical study of chorus wave distributions in the inner magnetosphere using Ae and solar wind parameters. *Journal of Geophysical Research: Space Physics*, **2014**, 119, 6131-6144	2.6	25
73	Electron holes in the outer radiation belt: Characteristics and their role in electron energization. *Journal of Geophysical Research: Space Physics*, **2017**, 122, 120-135	2.6	24
72	Thermal electron acceleration by electric field spikes in the outer radiation belt: Generation of field-aligned pitch angle distributions. *Journal of Geophysical Research: Space Physics*, **2015**, 120, 8616-8632	2.6	24
71	Switchbacks as signatures of magnetic flux ropes generated by interchange reconnection in the corona. *Astronomy and Astrophysics*, **2021**, 650, A2	5.1	23
70	Localized Magnetic-field Structures and Their Boundaries in the Near-Sun Solar Wind from Parker Solar Probe Measurements. *Astrophysical Journal*, **2020**, 893, 93	4.7	23
69	Observation of chorus waves by the Van Allen Probes: Dependence on solar wind parameters and scale size. *Journal of Geophysical Research: Space Physics*, **2016**, 121, 7608-7621	2.6	22
68	Electrostatic Steepening of Whistler Waves. *Physical Review Letters*, **2018**, 120, 195101	7.4	22
67	Drift Resonance of Compressional ULF Waves and Substorm-Injected Protons From Multipoint THEMIS Measurements. *Journal of Geophysical Research: Space Physics*, **2018**, 123, 9406-9419	2.6	22
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61	Ballooning perturbations in the inner magnetosphere of the Earth: Spectrum, stability and eigenmode analysis. *Advances in Space Research*, **2008**, 41, 1682-1687	2.4	19
60	Relativistic electron scattering by magnetosonic waves: Effects of discrete wave emission and high wave amplitudes. *Physics of Plasmas*, **2015**, 22, 062901	2.1	18
59	Phase Decoherence Within Intense Chorus Wave Packets Constrains the Efficiency of Nonlinear Resonant Electron Acceleration. *Geophysical Research Letters*, **2020**, 47, e2020GL089807	4.9	18
58	Microburst Scale Size Derived From Multiple Bounces of a Microburst Simultaneously Observed With the FIREBIRD-II CubeSats. *Geophysical Research Letters*, **2018**, 45, 8811-8818	4.9	18
57	Analytical Chorus Wave Model Derived from Van Allen Probe Observations. *Journal of Geophysical Research: Space Physics*, **2019**, 124, 1063-1084	2.6	17

56	Polarization of ULF waves in the earth magnetosphere. *Kinematics and Physics of Celestial Bodies*, **2011**, 27, 117-123	0.6	16
55	Cross-Shock Potential in Rippled Versus Planar Quasi-Perpendicular Shocks Observed by MMS. *Geophysical Research Letters*, **2019**, 46, 2381-2389	4.9	15
54	Butterfly pitch angle distribution of relativistic electrons in the outer radiation belt: Evidence of nonadiabatic scattering. *Journal of Geophysical Research: Space Physics*, **2015**, 120, 4279-4297	2.6	15
53	Approximate analytical solutions for the trapped electron distribution due to quasi-linear diffusion by whistler mode waves. *Journal of Geophysical Research: Space Physics*, **2014**, 119, 9962-9977	2.6	15
52	GYROSURFING ACCELERATION OF IONS IN FRONT OF EARTH's QUASI-PARALLEL BOW SHOCK. *Astrophysical Journal*, **2013**, 771, 4	4.7	15
51	CIMI simulations with newly developed multiparameter chorus and plasmaspheric hiss wave models. *Journal of Geophysical Research: Space Physics*, **2017**, 122, 9344-9357	2.6	14
50	Statistical model of electron pitch angle diffusion in the outer radiation belt. *Journal of Geophysical Research*, **2012**, 117, n/a-n/a		14
49	Time Scales for Electron Quasi-linear Diffusion by Lower-Band Chorus Waves: The Effects of pe/ce Dependence on Geomagnetic Activity. *Geophysical Research Letters*, **2019**, 46, 6178-6187	4.9	13
48	EMIC Wave-Driven Bounce Resonance Scattering of Energetic Electrons in the Inner Magnetosphere. *Journal of Geophysical Research: Space Physics*, **2019**, 124, 2484	2.6	13
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45	Observations and modeling of forward and reflected chorus waves captured by THEMIS. *Annales Geophysicae*, **2011**, 29, 541-550	2	13
44	Statistical Analysis of Transverse Size of Lower Band Chorus Waves Using Simultaneous Multisatellite Observations. *Geophysical Research Letters*, **2019**, 46, 5725-5734	4.9	12
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38	Switchbacks: statistical properties and deviations from Alfvenicity. *Astronomy and Astrophysics*, **2021**, 650, A3	5.1	10
37	Contribution of ULF Wave Activity to the Global Recovery of the Outer Radiation Belt During the Passage of a High-Speed Solar Wind Stream Observed in September 2014. *Journal of Geophysical Research: Space Physics*, **2019**, 124, 1660-1678	2.6	9
36	A Census of Magnetospheric Electrons From Several eV to 30 keV. *Journal of Geophysical Research: Space Physics*, **2020**, 125, e2019JA027577	2.6	9
35	Evolution of electron phase space holes in inhomogeneous plasmas. *Physics of Plasmas*, **2017**, 24, 062311	2.1	9
34	Ducted propagation of chorus waves: Cluster observations. *Annales Geophysicae*, **2011**, 29, 1629-1634	2	9
33	On the origin of falling-tone chorus elements in Earth's inner magnetosphere. *Annales Geophysicae*, **2014**, 32, 1477-1485	2	9
32	Whistler wave occurrence and the interaction with strahl electrons during the first encounter of Parker Solar Probe. *Astronomy and Astrophysics*, **2021**, 650, A9	5.1	9
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30	Field-aligned chorus wave spectral power in Earth's outer radiation belt. *Annales Geophysicae*, **2015**, 33, 583-597	2	8
29	Evidence of Small Scale Plasma Irregularity Effects on Whistler Mode Chorus Propagation. *Geophysical Research Letters*, **2021**, 48, e2021GL092850	4.9	8
28	Extremely field-aligned cool electrons in the dayside outer magnetosphere. *Geophysical Research Letters*, **2017**, 44, 44-51	4.9	7
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26	Time Domain Structures and Dust in the Solar Vicinity: Parker Solar Probe Observations. *Astrophysical Journal, Supplement Series*, **2020**, 246, 50	8	7
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23	On the Generation of Probabilistic Forecasts From Deterministic Models. *Space Weather*, **2019**, 17, 455-475	3.7	5
22	Lifetimes of Relativistic Electrons as Determined From Plasmaspheric Hiss Scattering Rates Statistics: Effects of pe/pe and Wave Frequency Dependence on Geomagnetic Activity. *Geophysical Research Letters*, **2020**, 47, e2020GL088052	4.9	5
21	Localized Heating of the Martian Topside Ionosphere Through the Combined Effects of Magnetic Pumping by Large-Scale Magnetosonic Waves and Pitch Angle Diffusion by Whistler Waves. *Geophysical Research Letters*, **2020**, 47, e2019GL086408	4.9	5

20	Cyclotron resonance in plasma flow. *Physics of Plasmas*, **2013**, 20, 124502	2.1	5
19	Model of the propagation of very low-frequency beams in the Earth–ionosphere waveguide: principles of the tensor impedance method in multi-layered gyrotropic waveguides. *Annales Geophysicae*, **2020**, 38, 207-230	2	4
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17	Model of vortex tubes in the low-latitude plasma sheet of the earth magnetosphere. *Advances in Space Research*, **2001**, 28, 801-806	2.4	4
16	High-Energy Electron Flux Enhancement Pattern in the Outer Radiation Belt in Response to the Alfvenic Fluctuations Within High-Speed Solar Wind Stream: A Statistical Analysis. *Journal of Geophysical Research: Space Physics*, **2021**, 126, e2021JA029363	2.6	4
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11	Wave-particle interactions in the outer radiation belts. *Advances in Astronomy and Space Physics*, **2015**, 5, 68-74	0.2	1
10	Terrestrial Bow Shock Parameters From MMS Measurements: Dependence on Upstream and Downstream Time Ranges. *Journal of Geophysical Research: Space Physics*, **2020**, 125, e2019JA027231	2.6	1
9	Langmuir-Slow Extraordinary Mode Magnetic Signature Observations with Parker Solar Probe. *Astrophysical Journal*, **2022**, 927, 95	4.7	1
8	Flux Rope Merging and the Structure of Switchbacks in the Solar Wind. *Astrophysical Journal*, **2022**, 925, 213	4.7	0
7	Chorus and Hiss Scales in the Inner Magnetosphere: Statistics From High-Resolution Filter Bank (FBK) Van Allen Proves Multi-Point Measurements. *Journal of Geophysical Research: Space Physics*, **2021**, 126, e2020JA028998	2.6	0
6	A Survey of Dense Low Energy Ions in Earth's Outer Magnetosphere: Relation to Solar Wind Dynamic Pressure, IMF, and Magnetospheric Activity. *Journal of Geophysical Research: Space Physics*, **2021**, 126, e2021JA029208	2.6	0
5	Specific features of VLF wave propagation in the earth's inner magnetosphere. *Kinematics and Physics of Celestial Bodies*, **2013**, 29, 107-119	0.6	
4	Relativistic jets and non-thermal radiation from collapse of stars to black holes. *Proceedings of the International Astronomical Union*, **2006**, 2, 395-396	0.1	
3	Synchrotron emission of weakly-relativistic electron beams at midlatitude ionospheric altitudes. *Geomagnetism and Aeronomy*, **2006**, 46, 667-675	0.9	

2	A reconstruction method of electron density distribution in the equatorial region of magnetosphere. *Advances in Astronomy and Space Physics*, **2015**, 5, 104-108	0.2
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