Victor Popov

List of Publications by Year in descending order

		516215	433756
78	1,035	16	31
papers	citations	h-index	g-index

79	79	79	501
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Thin current sheets in collisionless plasma: Equilibrium structure, plasma instabilities, and particle acceleration. Plasma Physics Reports, 2011, 37, 118-160.	0.3	142
2	Nonlinear equilibrium structure of thin currents sheets: influence of electron pressure anisotropy. Nonlinear Processes in Geophysics, 2004, 11, 579-587.	0.6	94
3	Marginal stability of thin current sheets in the Earth's magnetotail. Journal of Atmospheric and Solar-Terrestrial Physics, 2008, 70, 325-333.	0.6	84
4	Embedded current sheets in the Earthâ€™s magnetotail. Journal of Geophysical Research, 2011, 116, .	3.3	78
5	Thin embedded current sheets: Cluster observations of ion kinetic structure and analytical models. Annales Geophysicae, 2009, 27, 4075-4087.	0.6	61
6	â€œMatreshkaâ€•model of multilayered current sheet. Geophysical Research Letters, 2006, 33, .	1.5	54
7	Splitting of thin current sheets in the Earthâ€™s magnetosphere. JETP Letters, 2003, 78, 296-299.	0.4	42
8	Asymmetric thin current sheets in the Earth's magnetotail. Geophysical Research Letters, 2007, 34, .	1.5	28
9	Kinetic models of current sheets with a sheared magnetic field. Plasma Physics Reports, 2012, 38, 300-314.	0.3	27
10	Kinetic models of two-dimensional plane and axially symmetric current sheets: Group theory approach. Physics of Plasmas, 2013, 20, .	0.7	27
11	Thin current sheets: from the work of Ginzburg and Syrovatskii to the present day. Physics-Uspekhi, 2016, 59, 1057-1090.	0.8	25
12	EVIDENCE FOR QUASI-ADIABATIC MOTION OF CHARGED PARTICLES IN STRONG CURRENT SHEETS IN THE SOLAR WIND. Astrophysical Journal, 2017, 834, 34.	1.6	25
13	Thin current sheets in the presence of a guiding magnetic field in Earth's magnetosphere. Journal of Geophysical Research, 2012, 117, .	3.3	24
14	Thin Current Sheets of Subâ€ion Scales observed by MAVEN in the Martian Magnetotail. Geophysical Research Letters, 2019, 46, 6214-6222.	1.5	21
15	Imprints of Quasiâ€Adiabatic Ion Dynamics on the Current Sheet Structures Observed in the Martian Magnetotail by MAVEN. Journal of Geophysical Research: Space Physics, 2017, 122, 10,176.	0.8	20
16	Fine structure of the priceâ€“demand relationship in the electricity market: Multi-scale correlation analysis. Energy Economics, 2015, 51, 215-226.	5.6	17
17	The structure of the Venusian current sheet. Planetary and Space Science, 2014, 96, 81-89.	0.9	16
18	Universal Scaling of Thin Current Sheets. Geophysical Research Letters, 2020, 47, e2020GL088422.	1.5	16

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19	Influence of Trapped Plasma on the Structure of Collisionless Thin Current Sheets. Cosmic Research, 2002, 40, 357-366.	0.2	15
20	Forced current sheets in the Earth's magnetotail: Their role and evolution due to nonadiabatic particle scattering. Advances in Space Research, 2002, 30, 1629-1638.	1.2	13
21	Antisunward structure of thin current sheets in the Earth's magnetotail: Implications of quasiâ€adiabatic theory. Journal of Geophysical Research: Space Physics, 2013, 118, 4308-4318.	0.8	12
22	Current sheets in planetary magnetospheres. Plasma Physics and Controlled Fusion, 2019, 61, 054002.	0.9	12
23	MMS Observations of Super Thin Electronâ€Scale Current Sheets in the Earth's Magnetotail. Journal of Geophysical Research: Space Physics, 2021, 126, e2021JA029641.	0.8	10
24	Formation of selfâ€organized shear structures in thin current sheets. Journal of Geophysical Research: Space Physics, 2015, 120, 4802-4824.	0.8	9
25	Neutrino conversions in random magnetic fields andÎ½Ìƒefrom the Sun. Physical Review D, 1999, 59, .	1.6	8
26	Effect of the normal component of the magnetic field on the kink instability of the Earthâ€™s magnetospheric current sheet. Plasma Physics Reports, 2008, 34, 771-779.	0.3	8
27	Tearing mode in thin current sheets of the Earthâ€™s magnetosphere: A scenario of transition to unstable state. Cosmic Research, 2009, 47, 352-360.	0.2	8
28	Current Sheet in a non-Maxwellian collisionless plasma: Self-consistent theory, simulation, and comparison with spacecraft observations. Plasma Physics Reports, 2010, 36, 841-858.	0.3	8
29	A multi-criteria approach to selecting an optimal portfolio of refinery upgrade projects under margin and tax regime uncertainty. Omega, 2017, 72, 50-58.	3.6	8
30	Evidence of temperature and precipitation change over the past 100â€‰years in a high-resolution pollen record from the boreal forest of Central European Russia. Holocene, 2017, 27, 740-751.	0.9	8
31	The Ukrainian crisis, economic sanctions, oil shock and commodity currency: Analysis based on EMD approach. Research in International Business and Finance, 2019, 48, 156-168.	3.1	8
32	Role of Electrostatic Effects in Thin Current Sheets. NATO Science Series Series II, Mathematics, Physics and Chemistry, 2005, , 275-288.	0.1	8
33	Model of Solar Wind in the Heliosphere at Low and High Latitudes. Plasma Physics Reports, 2018, 44, 80-91.	0.3	7
34	Structure of Current Sheets with Quasi-Adiabatic Dynamics of Particles in the Solar Wind. Cosmic Research, 2018, 56, 462-470.	0.2	7
35	Magnetohydrodynamic Modeling of the Solar Wind Key Parameters and Current Sheets in the Heliosphere: Radial and Solar Cycle Evolution. Astrophysical Journal, 2020, 892, 12.	1.6	7
36	Do phase portraits resist current sheet bifurcation?. Advances in Space Research, 2006, 37, 547-551.	1.2	6

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37	Vlasov modes in the theory of ion-acoustic turbulence. Plasma Physics Reports, 2014, 40, 298-305.	0.3	6
38	Acceleration of plasma in current sheet during substorm dipolarizations in the Earth's magnetotail: Comparison of different mechanisms. Physics of Plasmas, 2019, 26, 042901.	0.7	6
39	Formation of Multiple Current Sheets in the Heliospheric Plasma Sheet. Cosmic Research, 2020, 58, 411-425.	0.2	6
40	What humankind can expect with an inversion of Earth's magnetic field: threats real and imagined. Physics-Uspekhi, 2018, 61, 191-202.	0.8	5
41	Evolution of ion distribution functions during the â€œagingâ€•process of thin current sheets. Advances in Space Research, 2003, 31, 1207-1214.	1.2	4
42	A method for constructing the trajectory for an unmanned aerial vehicle in a city. Moscow University Physics Bulletin (English Translation of Vestnik Moskovskogo Universiteta, Fizika), 2016, 71, 161-167.	0.1	4
43	Plasma acceleration on multiscale temporal variations of electric and magnetic fields during substorm dipolarization in the Earthâ€™s magnetotail. Annals of Geophysics, 2018, 61, .	0.5	4
44	Heliospheric current sheet and effects of its interaction with solar cosmic rays. Plasma Physics Reports, 2016, 42, 749-760.	0.3	3
45	Structure of the current sheets in the near-Mars magnetotail. Maven observations. Solar System Research, 2017, 51, 347-361.	0.3	3
46	Energy problems of the rational use of the economic potential of the region. , 2014, , .		3
47	The kinetic model of the two dimensional cylindrical current sheet. Moscow University Physics Bulletin (English Translation of Vestnik Moskovskogo Universiteta, Fizika), 2012, 67, 37-42.	0.1	2
48	Drift modes of a quasi-two-dimensional current sheet. Plasma Physics Reports, 2012, 38, 207-218.	0.3	2
49	On the superdiffusive scalings of transport in plasma. Bulletin of the Lebedev Physics Institute, 2016, 43, 132-137.	0.1	2
50	Current Structures with Magnetic Shear in Space Plasma. JETP Letters, 2018, 108, 557-569.	0.4	2
51	Modeling of Magnetic Dipolarizations and Turbulence in Earthâ€™s Magnetotail as Factors of Plasma Acceleration and Transfer. Cosmic Research, 2018, 56, 453-461.	0.2	2
52	Radiation Belts during a Magnetic Field Reversal. Cosmic Research, 2020, 58, 227-233.	0.2	2
53	Influence of Oxygen Ions on the Structure of the Thin Current Sheet in the Earthâ€™s Magnetotail. Geomagnetism and Aeronomy, 2020, 60, 171-183.	0.2	2
54	Albert Galeev: The Problem of Metastability and Explosive Reconnection. Plasma Physics Reports, 2021, 47, 857-877.	0.3	2

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55	Atmospheric escape from the Earth during geomagnetic reversal. Annals of Geophysics, 2020, 63, .	0.5	2
56	Ulysses Flyby in the Heliosphere: Comparison of the Solar Wind Model with Observational Data. Universe, 2022, 8, 324.	0.9	2
57	Resonant scattering of electromagnetic waves by a lossy periodic dielectric waveguide. Mathematical and Computer Modelling, 2000, 32, 1059-1070.	2.0	1
58	Theory of turbulent heating of current DT plasma. Bulletin of the Lebedev Physics Institute, 2016, 43, 26-34.	0.1	1
59	Magnetopause charging and transfer of momentum and energy into magnetosphere. Bulletin of the Lebedev Physics Institute, 2017, 44, 99-105.	0.1	1
60	Acceleration and particle transport in collisionless plasma in the process of dipolarization and nonstationary turbulence. Cosmic Research, 2017, 55, 417-425.	0.2	1
61	Time Evolution of the Macroscopic Characteristics of a Thin Current Sheet in the Course of Its Formation in the Earthâ€™s Magnetotail. Plasma Physics Reports, 2018, 44, 424-437.	0.3	1
62	Earth's Magnetotail as the Reservoir of Accelerated Singleâ€•and Multicharged Oxygen Ions Replenishing Radiation Belts. Journal of Geophysical Research: Space Physics, 2021, 126, e2020JA028217.	0.8	1
63	Assessment under Covid-19: Exploring Undergraduate Studentsâ€™ Attitudes towards Their Online Thesis Proposal Presentations vs. Face-to-face. Journal of Language and Education, 2021, 7, 139-155.	0.2	1
64	Simulation of Intermediate Turbulence in Space Plasma. Cosmic Research, 2022, 60, 9-14.	0.2	1
65	Neutrino spin-flavor conversions and emission from the sun with random magnetic field. Nuclear Physics, Section B, Proceedings Supplements, 2000, 81, 124-129.	0.5	0
66	Nonstationary three-dimensional contrasting structures. Computational Mathematics and Mathematical Physics, 2007, 47, 62-64.	0.2	0
67	On Ohmâ€™s law in the thin current sheets of the Earthâ€™s magnetosphere. Moscow University Physics Bulletin (English Translation of Vestnik Moskovskogo Universiteta, Fizika), 2008, 63, 168-173.	0.1	0
68	Asymmetry effect on the development of instabilities in current sheets. Geomagnetism and Aeronomy, 2009, 49, 1170-1171.	0.2	0
69	Fast algorithm for the Markowitz critical line method. Mathematical Models and Computer Simulations, 2012, 4, 241-250.	0.1	0
70	The estimate of the Venus magnetotail length. Solar System Research, 2014, 48, 91-104.	0.3	0
71	Mode of turbulent heating of plasma by hot and cold ions. Bulletin of the Lebedev Physics Institute, 2014, 41, 68-70.	0.1	0
72	Solar Cycle Characteristics and Their Relationship with Dynamo Theory. Journal of Physics: Conference Series, 2015, 661, 012009.	0.3	0

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73	Modeling of different scenarios of thin current sheet equilibria in the Earthâ€™s magnetotail. Plasma Physics Reports, 2015, 41, 154-170.	0.3	0
74	Numerical simulation of ion-acoustic turbulence in the B. B. Kadomtsev model. Bulletin of the Lebedev Physics Institute, 2016, 43, 261-265.	0.1	0
75	A shear B field in the Earth's magnetotail and its variations in the current sheet. Journal of Atmospheric and Solar-Terrestrial Physics, 2018, 177, 46-53.	0.6	0
76	The Solar Wind and Heliospheric Current System in the Years of Maximum and Minimum Solar Activity. Cosmic Research, 2018, 56, 411-419.	0.2	0
77	Current Sheets with Multicomponent Plasma in Magnetospheres of Planets of the Solar System. Cosmic Research, 2020, 58, 426-435.	0.2	0
78	An Analytical Two-Dimensional Model of the Planetâ€™s Magnetosphere. Moscow University Physics Bulletin (English Translation of Vestnik Moskovskogo Universiteta, Fizika), 2021, 76, 392-397.	0.1	0