Victor Ilgisonis

List of Publications by Year
in descending order

48	400	687363 13	839539 18
papers	citations	h-index	g-index

49	49	49	246
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Magnetorotational instability in electrically driven flow of liquid metal: Spectral analysis of global modes. Physics of Fluids, 2006, 18, 124107.	4.0	29
2	Geodesic acoustic modes and zonal flows in toroidally rotating tokamak plasmas. Physics Letters, Section A: General, Atomic and Solid State Physics, 2010, 374, 4872-4875.	2.1	25
3	Continuum modes in rotating plasmas: General equations and continuous spectra for large aspect ratio tokamaks. Physics of Plasmas, 2011, 18, .	1.9	25
4	Effects of finite electron temperature on gradient drift instabilities in partially magnetized plasmas. Physics of Plasmas, 2018, 25, .	1.9	23
5	Equilibrium magnetohydrodynamic flows of liquid metals in magnetorotational instability experiments. Journal of Fluid Mechanics, 2010, 644, 257-280.	3.4	22
6	Anisotropic plasma with flows in tokamak: Steady state and stability. Physics of Plasmas, 1996, 3, 4577-4582.	1.9	20
7	Energy of eigenmodes in magnetohydrodynamic flows of ideal fluids. Physics of Plasmas, 2008, 15, .	1.9	20
8	Global geodesic acoustic mode in a tokamak with positive magnetic shear and a monotonic temperature profile. Plasma Physics and Controlled Fusion, 2014, 56, 035001.	2.1	18
9	Geodesic acoustic modes and zonal flows in rotating large-aspect-ratio tokamak plasmas. Plasma Physics and Controlled Fusion, 2011, 53, 065008.	2.1	15
10	Ion sound instability driven by the ion flows. Physics of Plasmas, 2015, 22, 052113.	1.9	15
11	Gradient-drift instability applied to Hall thrusters. Plasma Sources Science and Technology, 2019, 28, 015002.	3.1	15
12	Analytical solutions for global geodesic acoustic modes in tokamak plasmas. Plasma Physics Reports, 2014, 40, 843-854.	0.9	13
13	Gyromagnetic autoresonance plasma bunches in a magnetic mirror. Physics of Plasmas, 2017, 24, .	1.9	13
14	Equilibrium of flowing plasma in tokamak in the frame of Hall magnetohydrodynamics. Plasma Physics and Controlled Fusion, 2001, 43, 1255-1271.	2.1	12
15	Negative energy waves and MHD stability of rotating plasmas. Nuclear Fusion, 2009, 49, 035008.	3.5	12
16	Guidingâ€center theory for threeâ€dimensional collisionless finite Larmor radius plasmas. Physics of Fluids B, 1993, 5, 2387-2397.	1.7	11
17	Marginal stability, characteristic frequencies, and growth rates of gradient drift modes in partially magnetized plasmas with finite electron temperature. Physics of Plasmas, 2018, 25, .	1.9	11
18	MHD-model for low-frequency waves in a tokamak with toroidal plasma rotation and problem of existence of global geodesic acoustic modes. Plasma Physics Reports, 2015, 41, 975-982.	0.9	9

#	Article	IF	Citations
19	Nonlinear excitation of long-wavelength modes in Hall plasmas. Physics of Plasmas, 2016, 23, .	1.9	9
20	Variational approaches to the problems of plasma stability and of nonlinear plasma dynamics. JETP Letters, 2000, 72, 530-540.	1.4	8
21	B B Kadomtsev's classical results and the plasma rotation in modern tokamaks. Physics-Uspekhi, 2009, 52, 746-754.	2.2	8
22	Collisionless current generation in the center of the tokamak plasma by an isotropic source of Î±-particles. Plasma Physics Reports, 2010, 36, 1-14.	0.9	7
23	Discharge Oscillations in Morozovâ€™s Stationary Plasma Thruster as a Manifestation of Large-Scale Modes of Gradient Drift Instability. Plasma Physics Reports, 2019, 45, 1-10.	0.9	7
24	Transport barrier as a bifurcation of the equilibrium of a tokamak plasma. Plasma Physics Reports, 2002, 28, 83-93.	0.9	6
25	Bifurcation of the equilibrium of a current-carrying plasma column. Plasma Physics Reports, 2004, 30, 988-994.	0.9	5
26	Formal stability of three-dimensional flows of an ideal conducting fluid. JETP Letters, 2005, 82, 570-574.	1.4	5
27	Magnetorotational instability in a nonuniform magnetic field. JETP Letters, 2008, 86, 705-708.	1.4	5
28	On the influence of dissipative effects on instabilities of differentially-rotating plasmas. Journal of Experimental and Theoretical Physics, 2010, 110, 689-693.	0.9	5
29	Magnetic field in a finite toroidal domain. Journal of Experimental and Theoretical Physics, 2010, 110, 890-900.	0.9	5
30	Geodesic acoustic modes in noncircular cross section tokamaks. Plasma Physics Reports, 2017, 43, 271-279.	0.9	5
31	Large-scale azimuthal structures in Hall-type plasma discharges. Physics of Plasmas, 2019, 26, 090701.	1.9	4
32	Generation of Plasma Bunches under Conditions of Gyromagnetic Autoresonance in a Long Magnetic Mirror Machine: Computational Experiment. Plasma Physics Reports, 2020, 46, 756-764.	0.9	3
33	Finite beta plasma equilibrium in toroidally linked mirrors. Physics of Plasmas, 1994, 1, 881-890.	1.9	2
34	Radial electric field and rotation of the ensemble of plasma particles in tokamak. Plasma Physics Reports, 2012, 38, 279-289.	0.9	2
35	Passing particle toroidal precession induced by electric field in a tokamak. Physics of Plasmas, 2013, 20, 122502.	1.9	2
36	Lowâ€beta equilibrium and stability for anisotropic pressure closed field line plasma confinement systems. Physics of Plasmas, 1996, 3, 536-542.	1.9	1

#	Article	IF	Citations
37	What physics does affect the MRI threshold. , 2010, , .		1
38	Third adiabatic invariant and the collisionless distribution function of particles in a tokamak. JETP Letters, 2012, 94, 684-688.	1.4	1
39	Drift Motion of Charged Particles in Inhomogeneous Magnetic and Strong Electric Fields. Plasma Physics Reports, 2020, 46, 724-731.	0.9	1
40	Toroidal plasma betaâ€finite Larmor radius limit in a toroidally linked mirror system. Physics of Plasmas, 1994, 1, 3622-3634.	1.9	0
41	On the boundary of an equilibrium plasma near the magnetic separatrix in a tokamak. Plasma Physics Reports, 2002, 28, 779-786.	0.9	0
42	Comments on the equilibrium of a rotating plasma. Plasma Physics Reports, 2003, 29, 276-278.	0.9	0
43	Vitalii Dmitrievich Shafranov (on his 80th birthday). Physics-Uspekhi, 2010, 53, 101-102.	2.2	0
44	Response to â€œComment on â€˜Continuum modes in rotating plasmas: General equations and continuous spectra for large aspect ratio tokamaksâ€™â€‰â€•[Phys. Plasmas 19, 064701 (2012)]. Physics of Plasmas, 2012, 19, 064702.	1.9	0
45	In memory of Spartak Timofeevich Belyaev. Physics-Uspekhi, 2017, 60, 327-329.	2.2	0
46	On the Toroidal Surfaces of Revolution with Constant Mean Curvatures. Physics of Atomic Nuclei, 2017, 80, 1307-1312.	0.4	0
47	Equations of Plasma Equilibrium in a Magnetic Field with Three-Dimensional Magnetic Surfaces. Plasma Physics Reports, 2019, 45, 1093-1098.	0.9	0
48	Low-frequency zonal flow eigen-structures in tokamak plasmas. Nuclear Fusion, 2022, 62, 066002.	3.5	0