

# Valeriy Shklovskiy

## List of Publications by Year in descending order

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68  
papers

924  
citations

430874

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477307

29  
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69  
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69  
docs citations

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times ranked

502  
citing authors

#	ARTICLE	IF	CITATIONS
1	Magnon-phonon interactions in spin insulators. <i>Low Temperature Physics</i> , 2021, 47, 621-645.	0.6	0
2	Heat transport in insulator/ferromagnetic-insulator/insulator heterogeneous nanostructures at low temperatures. <i>Physical Review B</i> , 2021, 103, .	3.2	0
3	Reduction of Microwave Loss by Mobile Fluxons in Grooved Nb Films. <i>Physica Status Solidi - Rapid Research Letters</i> , 2019, 13, 1800223.	2.4	16
4	Local flux-flow instability in superconducting films near $T_c$ . <i>Physical Review B</i> , 2019, 99, .	3.2	33
5	Spin Seebeck effect and phonon energy transfer in heterostructures containing layers of a normal metal and a ferromagnetic insulator. <i>Physical Review B</i> , 2019, 99, .	3.2	5
6	Magnon-fluxon interaction in a ferromagnet/superconductor heterostructure. <i>Nature Physics</i> , 2019, 15, 477-482.	16.7	83
7	Temperature dependence of the magnon-phonon energy relaxation time in a ferromagnetic insulator. <i>Physical Review B</i> , 2019, 100, .	3.2	10
8	Radiofrequency generation by coherently moving fluxons. <i>Applied Physics Letters</i> , 2018, 112, .	3.3	28
9	Microwave emission from superconducting vortices in Mo/Si superlattices. <i>Nature Communications</i> , 2018, 9, 4927.	12.8	46
10	Role of magnons and the size effect in heat transport through an insulating ferromagnet/insulator interface. <i>Physical Review B</i> , 2018, 98, .	3.2	11
11	Nonlinear relaxation between magnons and phonons in insulating ferromagnets. <i>Physical Review B</i> , 2018, 98, .	3.2	9
12	Hot electrons in metal films at low temperatures (Review). <i>Low Temperature Physics</i> , 2018, 44, 165-183.	0.6	1
13	Kinetics of electron cooling in metal films at low temperatures and revision of the two-temperature model. <i>Journal of Physics Condensed Matter</i> , 2018, 30, 295001.	1.8	8
14	Mobile fluxons as coherent probes of periodic pinning in superconductors. <i>Scientific Reports</i> , 2017, 7, 13740.	3.3	39
15	Pinning effects on hot-electron vortex flow instability in superconducting films. <i>Physica C: Superconductivity and Its Applications</i> , 2017, 538, 20-26.	1.2	7
16	Pinning effects on flux flow instability in epitaxial Nb thin films. <i>Superconductor Science and Technology</i> , 2017, 30, 085002.	3.5	19
17	Zero-Bias Shapiro Steps in Asymmetric Pinning Nanolandscapes. <i>Journal of Superconductivity and Novel Magnetism</i> , 2017, 30, 735-741.	1.8	5
18	Pinning effects on self-heating and flux-flow instability in superconducting films near $T_c$ . <i>Physical Review B</i> , 2017, 95, .	3.2	19

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19	The role of conduction electrons in the formation of thermal boundary resistance of the metal-dielectric interface and resistivity of metal films, at low temperatures (Review Article). <i>Low Temperature Physics</i> , 2016, 42, 636-660.	0.6	7
20	High-frequency large-amplitude oscillations of a non-isothermal N/S boundary. <i>Low Temperature Physics</i> , 2016, 42, 905-915.	0.6	0
21	Interplay of flux guiding and Hall effect in Nb films with nanogrooves. <i>Superconductor Science and Technology</i> , 2016, 29, 065009.	3.5	9
22	Alternating current-driven microwave loss modulation in a fluxonic metamaterial. <i>Applied Physics Letters</i> , 2015, 107, .	3.3	35
23	Guided vortex motion and ratchet effect in an anisotropic superconductor with a periodic pinning potential. <i>Low Temperature Physics</i> , 2014, 40, 1048-1057.	0.6	2
24	Stochastic resonance of vortices in a washboard pinning potential. <i>Physica C: Superconductivity and Its Applications</i> , 2014, 503, 128-131.	1.2	1
25	Vortex ratchet reversal in an asymmetric washboard pinning potential subject to combined dc and ac stimuli. <i>Journal of Physics Condensed Matter</i> , 2014, 26, 025703.	1.8	27
26	Energy relaxation times in metal films from the response of electrical conductivity to periodic heating. <i>Physical Review B</i> , 2014, 89, .	3.2	6
27	DC to AC converter on Abrikosov vortices in a washboard pinning potential. <i>Journal of Physics: Conference Series</i> , 2014, 507, 012007.	0.4	0
28	Noise-Assisted Microwave Up-conversion by Vortices in Thin-Film Superconductors with a dc-Biased Washboard Pinning Potential. <i>Journal of Superconductivity and Novel Magnetism</i> , 2013, 26, 2079-2083.	1.8	1
29	Determination of coordinate dependence of a pinning potential from a microwave experiment with vortices. <i>Low Temperature Physics</i> , 2013, 39, 120-124.	0.6	4
30	Material composition "Pinning strength correlation in Nb thin films with focused ion beam-milled washboard nanostructures. <i>Physica C: Superconductivity and Its Applications</i> , 2013, 494, 102-105.	1.2	1
31	Dynamics of electron temperature and the relaxation times of electron-phonon system of a metal film. <i>Low Temperature Physics</i> , 2013, 39, 357-364.	0.6	7
32	Nonadiabatic ratchet effect in superconducting films with a tilted cosine pinning potential. <i>Journal of Physics: Conference Series</i> , 2012, 400, 022108.	0.4	0
33	Current-controlled Filter on Superconducting Films with a Tilted Washboard Pinning Potential. <i>Physics Procedia</i> , 2012, 36, 9-12.	1.2	1
34	Electrical transport and pinning properties of Nb thin films patterned with focused ion beam-milled washboard nanostructures. <i>New Journal of Physics</i> , 2012, 14, 113027.	2.9	39
35	Fabrication of Artificial Washboard Pinning Structures in Thin Niobium Films. <i>Journal of Superconductivity and Novel Magnetism</i> , 2011, 24, 375-380.	1.8	14
36	Vortex lattice matching effects in a washboard pinning potential induced by Co nanostripe arrays. <i>Physica C: Superconductivity and Its Applications</i> , 2011, 471, 449-452.	1.2	27

#	ARTICLE	IF	CITATIONS
37	Frequency-dependent ratchet effect in superconducting films with a tilted washboard pinning potential. <i>Physical Review B</i> , 2011, 84, .	3.2	36
38	Anisotropic magnetoresistive response in thin Nb films decorated by an array of Co stripes. <i>Superconductor Science and Technology</i> , 2010, 23, 125014.	3.5	33
39	The Hall effect and microwave absorption by vortices in an anisotropic superconductor with a periodic pinning potential. <i>Low Temperature Physics</i> , 2010, 36, 71-80.	0.6	6
40	Guiding of vortices and ratchet effect in superconducting films with asymmetric pinning potential. <i>Physical Review B</i> , 2009, 80, .	3.2	18
41	Nonlinear two-dimensional frequency- and temperature-dependent vortex dynamics in a tilted washboard pinning potential. <i>Journal of Physics: Conference Series</i> , 2009, 150, 052241.	0.4	1
42	Nonlinear two-dimensional temperature-dependent impedance and the ac power absorption by vortices in a tilted washboard pinning potential. <i>Journal of Physics: Conference Series</i> , 2009, 150, 052240.	0.4	1
43	ac-driven vortices and the Hall effect in a superconductor with a tilted washboard pinning potential. <i>Physical Review B</i> , 2008, 78, .	3.2	40
44	Guiding of vortices under competing isotropic and anisotropic pinning conditions: Theory and experiment. <i>Physical Review B</i> , 2007, 76, .	3.2	35
45	Influence of point-like disorder on the guiding of vortices in anisotropic superconductors. <i>Physica C: Superconductivity and Its Applications</i> , 2007, 460-462, 1257-1258.	1.2	0
46	Influence of point-like disorder on the guiding of vortices in a rotating current scheme. <i>Physica C: Superconductivity and Its Applications</i> , 2007, 460-462, 1253-1254.	1.2	1
47	Influence of pointlike disorder on the guiding of vortices and the Hall effect in a washboard planar pinning potential. <i>Physical Review B</i> , 2006, 74, .	3.2	30
48	Guiding of Vortices and New Voltages in Ratchet Washboard Pinning Potential. <i>AIP Conference Proceedings</i> , 2006, , .	0.4	2
49	New Hall Resistivity Scaling Relations in the Presence of Competition between Point-like and Anisotropic Planar Pinning Potential. <i>Journal of Low Temperature Physics</i> , 2005, 139, 289-297.	1.4	5
50	Title is missing!. <i>Journal of Low Temperature Physics</i> , 2003, 131, 899-905.	1.4	5
51	Title is missing!. <i>Journal of Low Temperature Physics</i> , 2003, 130, 407-414.	1.4	4
52	New Hall voltages in a planar pinning potential. <i>Physica C: Superconductivity and Its Applications</i> , 2003, 388-389, 655-656.	1.2	3
53	Guided vortex motion in Nb films on faceted substrate surfaces. <i>Physica C: Superconductivity and Its Applications</i> , 2003, 388-389, 773-774.	1.2	5
54	Odd resistive response in superconductors with bianisotropic pinning. <i>Low Temperature Physics</i> , 2003, 29, 16-29.	0.6	1

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55	Guiding of vortices and the Hall conductivity scaling in a bianisotropic planar pinning potential. Physical Review B, 2002, 65, .	3.2	15
56	Anisotropy of the critical current and the guided motion of vortices in a stochastic model of bianisotropic pinning. I. Theoretical model. Low Temperature Physics, 2002, 28, 254-259.	0.6	4
57	Anisotropy of the critical current and the guided motion of vortices in a stochastic model of bianisotropic pinning. II. Observed effects. Low Temperature Physics, 2002, 28, 312.	0.6	1
58	Nonlinear mixed-state longitudinal and transverse resistivities of superconductors with anisotropic pinning—a phenomenological approach. Low Temperature Physics, 1999, 25, 109-114.	0.6	6
59	Experimental observation of a new galvanomagnetic effect in YBaCuO single crystals with unidirected twins. Superconductor Science and Technology, 1998, 11, 1133-1136.	3.5	3
60	Resistivity investigations of plastic vortex creep in YBa <sub>2</sub> Cu <sub>3</sub> O <sub>6.95</sub> crystals. Physical Review B, 1998, 58, 2445-2447.	3.2	40
61	Anisotropic pinning and the mixed-state galvanothermomagnetic properties of superconductors—a phenomenological approach. Low Temperature Physics, 1997, 23, 853-856.	0.6	8
62	Pinning and dynamics of magnetic flux in YBaCuO single crystals for vortex motion along twin boundaries. Low Temperature Physics, 1997, 23, 962-967.	0.6	49
63	Temperature dependence and anisotropy due to twin planes of the critical current in ab-plane. European Physical Journal D, 1996, 46, 1771-1772.	0.4	0
64	Mixed state odd Hall effect in YBa <sub>2</sub> Cu <sub>3</sub> O <sub>7</sub> with unidirectional twins. Journal of Low Temperature Physics, 1996, 105, 963-968.	1.4	4
65	Nonlinear resonance study of the periodic motion of the explosive crystallization front in glasses. Physical Review B, 1996, 53, 3095-3106.	3.2	5
66	Brownian motion of particles in 1D arbitrary periodic potentials near a phase transition point. Journal of Physics A, 1994, 27, 5043-5051.	1.6	7
67	Thermal domains in inhomogeneous current-carrying superconductors. Current-voltage characteristics and dynamics of domain formation after current jumps. Journal of Low Temperature Physics, 1984, 57, 227-247.	1.4	14
68	Hot electrons in metals at low temperatures. Journal of Low Temperature Physics, 1980, 41, 375-396.	1.4	22