

Vladimir Eltsov

List of Publications by Year in descending order

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82
papers

2,644
citations

279487

23
h-index

189595

50
g-index

84
all docs

84
docs citations

84
times ranked

1150
citing authors

#	ARTICLE	IF	CITATIONS
1	Vortex formation in neutron-irradiated superfluid 3He as an analogue of cosmological defect formation. Nature, 1996, 382, 334-336.	13.7	521
2	Quartz Tuning Fork: Thermometer, Pressure- and Viscometer for Helium Liquids. Journal of Low Temperature Physics, 2007, 146, 537-562.	0.6	200
3	An intrinsic velocity-independent criterion for superfluid turbulence. Nature, 2003, 424, 1022-1025.	13.7	176
4	Double-quantum vortex in superfluid 3He-A. Nature, 2000, 404, 471-473.	13.7	167
5	Shear Flow and Kelvin-Helmholtz Instability in Superfluids. Physical Review Letters, 2002, 89, 155301.	2.9	153
6	Observation of a Time Quasicrystal and Its Transition to a Superfluid Time Crystal. Physical Review Letters, 2018, 120, 215301.	2.9	113
7	Observation of Half-Quantum Vortices in Topological Superfluid ^3He . Physical Review Letters, 2016, 117, 255301.	2.9	105
8	Defect Formation in Quench-Cooled Superfluid Phase Transition. Physical Review Letters, 1998, 80, 1465-1468.	2.9	86
9	Composite Defect Extends Analogy between Cosmology and ^3He . Physical Review Letters, 2000, 85, 4739-4742.	2.9	70
10	Dynamics of vortices and interfaces in superfluid ^3He . Reports on Progress in Physics, 2006, 69, 3157-3230.	8.1	65
11	Vibrating Quartz Fork – A Tool for Cryogenic Helium Research. Journal of Low Temperature Physics, 2008, 150, 525-535.	0.6	61
12	Quantum Turbulence in a Propagating Superfluid Vortex Front. Physical Review Letters, 2007, 99, 265301.	2.9	60
13	Twisted Vortex State. Physical Review Letters, 2006, 96, 215302.	2.9	53
14	Half-quantum vortices and walls bounded by strings in the polar-distorted phases of topological superfluid ^3He . Nature Communications, 2019, 10, 237.	5.8	53
15	AC Josephson effect between two superfluid time crystals. Nature Materials, 2021, 20, 171-174.	13.3	42
16	Transition to Superfluid Turbulence. Journal of Low Temperature Physics, 2006, 145, 89-106.	0.6	41
17	Self-Trapping of Magnon Bose-Einstein Condensates in the Ground State and on Excited Levels: From Harmonic to Box Confinement. Physical Review Letters, 2012, 108, 145303.	2.9	39
18	Light Higgs channel of the resonant decay of magnon condensate in superfluid ^3He -B. Nature Communications, 2016, 7, 10294.	5.8	36

#	ARTICLE	IF	CITATIONS
19	Stability and Dissipation of Laminar Vortex Flow in Superfluid $^3\text{He-B}$. Physical Review Letters, 2010, 105, 125301.	2.9	29
20	Structure of the Surface Vortex Sheet between Two Rotating ^3He Superfluids. Physical Review Letters, 2003, 90, 225301.	2.9	26
21	Exceeding the Landau speed limit with topological Bogoliubov Fermi surfaces. Physical Review Research, 2020, 2, .	1.3	26
22	Vortex Multiplication in Applied Flow: A Precursor to Superfluid Turbulence. Physical Review Letters, 2006, 96, 085301.	2.9	25
23	Superfluid Vortex Front at $T \neq 0$: Decoupling from the Reference Frame. Physical Review Letters, 2011, 107, 135302.	2.9	24
24	Transitions from Vortex Lines to Sheets: Interplay of Topology and Dynamics in an Anisotropic Superfluid. Physical Review Letters, 2002, 88, 065301.	2.9	21
25	Measurement of Turbulence in Superfluid $^3\text{He-B}$. Journal of Low Temperature Physics, 2004, 136, 249-279.	0.6	20
26	Bose-Einstein Condensation of Magnons and Spin Superfluidity in the Polar Phase of $^3\text{He-B}$. Physical Review Letters, 2018, 121, 025303.	2.9	18
27	Propagation of thermal excitations in a cluster of vortices in superfluid $^3\text{He-B}$. Physical Review B, 2011, 84, .	1.1	17
28	Energy and angular momentum balance in wall-bounded quantum turbulence at very low temperatures. Nature Communications, 2013, 4, 1614.	5.8	17
29	Vortex Formation and Annihilation in Rotating Superfluid $^3\text{He-B}$ at Low Temperatures. Journal of Low Temperature Physics, 2010, 161, 474-508.	0.6	16
30	Vortex Core Contribution to Textural Energy in $^3\text{He-B}$ Below $0.4T_c$. Journal of Low Temperature Physics, 2011, 162, 212-225.	0.6	16
31	Quantum turbulence in superfluids with wall-clamped normal component. Proceedings of the National Academy of Sciences of the United States of America, 2014, 111, 4711-4718.	3.3	16
32	Title is missing!. Journal of Low Temperature Physics, 1998, 110, 219-224.	0.6	15
33	Relaxation of Bose-Einstein Condensates of Magnons in Magneto-Textural Traps in Superfluid $^3\text{He-B}$. Journal of Low Temperature Physics, 2014, 175, 3-16.	0.6	15
34	Microkelvin Thermometry with Bose-Einstein Condensates of Magnons and Applications to Studies of the AB Interface in Superfluid ^3He . Journal of Low Temperature Physics, 2014, 175, 681-705.	0.6	15
35	Time-of-Flight Measurements on Quantized Vortex Lines in Rotating $^3\text{He-B}$. Journal of Low Temperature Physics, 2004, 134, 375-380.	0.6	14
36	Suppressing the Kibble-Zurek Mechanism by a Symmetry-Violating Bias. Physical Review Letters, 2021, 127, 115702.	2.9	14

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37	Propagation of self-localized Q-ball solitons in the He3 universe. Physical Review B, 2018, 97, .	1.1	13
38	Quasiparticle-scattering measurements of laminar and turbulent vortex flow in the spin-down of superfluid ^3He . Physical Review B, 2012, 85, .	1.1	12
39	Spin, Orbital, Weyl and Other Glasses in Topological Superfluids. Journal of Low Temperature Physics, 2019, 196, 82-101.	0.6	12
40	NMR Line Shape of Rotating ^3He -B at Large Counterflow Velocity. Journal of Low Temperature Physics, 2000, 120, 213-232.	0.6	11
41	Measurements of the anisotropic mass of magnons confined in a harmonic trap in superfluid ^3He -B. JETP Letters, 2015, 101, 802-807.	0.4	11
42	Nanomechanical Resonators for Cryogenic Research. Journal of Low Temperature Physics, 2019, 196, 283-292.	0.6	11
43	Vortex Formation in Neutron-Irradiated Rotating Superfluid ^3He -B. Journal of Low Temperature Physics, 2004, 135, 479-512.	0.6	10
44	Dynamic Remanent Vortices in Superfluid ^3He -B. Journal of Low Temperature Physics, 2007, 148, 311-316.	0.6	10
45	Mutual friction in superfluid ^3He -B in the low-temperature regime. Physical Review B, 2018, 97, .	1.1	10
46	Superflow-stabilized nonlinear NMR in rotating ^3He -B. Physical Review B, 1999, 59, 165-168.	1.1	9
47	New Modes of Stable Spin Precession in Superfluid ^3He -B. Journal of Low Temperature Physics, 1998, 113, 645-650.	0.6	8
48	Experiments on the Twisted Vortex State in Superfluid ^3He -B. Journal of Low Temperature Physics, 2008, 150, 373-383.	0.6	8
49	The Dynamics of Vortex Generation in Superfluid ^3He -B. Journal of Low Temperature Physics, 2008, 153, 197-227.	0.6	8
50	Textures of Superfluid ^3He -B in Applied Flow and Comparison with Hydrostatic Theory. Journal of Low Temperature Physics, 2011, 163, 238-261.	0.6	8
51	Bose analogs of the MIT bag model of hadrons in coherent precession. JETP Letters, 2012, 95, 544-548.	0.4	8
52	Effects of ^4He Film on Quartz Tuning Forks in ^3He at Ultra-low Temperatures. Journal of Low Temperature Physics, 2019, 196, 73-81.	0.6	8
53	Nonlinear two-level dynamics of quantum time crystals. Nature Communications, 2022, 13, .	5.8	8
54	Precessing Vortex Motion and Instability in a Rotating Column of Superfluid ^3He -B. Journal of Low Temperature Physics, 2009, 155, 98-113.	0.6	7

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55	Turbulent vortex flow responses at the AB interface in rotating superfluid $^3\text{He-B}$. Physical Review B, 2011, 84, .	1.1	7
56	Amplitude of Waves in the Kelvin-Wave Cascade. JETP Letters, 2020, 111, 389-391.	0.4	7
57	Dynamic response of the equilibrium vortex sheet in rotating $^3\text{He-A}$. Physica B: Condensed Matter, 2000, 284-288, 252-253.	1.3	6
58	Instability of AB interfaces of different shapes in rotating. Physica B: Condensed Matter, 2003, 329-333, 96-97.	1.3	6
59	Phase diagram of turbulence in superfluid $^3\text{He-B}$. Journal of Low Temperature Physics, 2005, 138, 567-576.	0.6	6
60	Vortices and other topological defects in non-equilibrium phase transitions of superfluid ^3He . Physica C: Superconductivity and Its Applications, 2010, 470, 803-808.	0.6	5
61	Dimensional control of tunneling two-level systems in nanoelectromechanical resonators. Physical Review B, 2022, 105, .	1.1	5
62	Title is missing!. Journal of Low Temperature Physics, 1998, 113, 525-530.	0.6	4
63	Superfluid He in Rotation: Single-Vortex Resolution and Requirements on Rotation. Journal of Low Temperature Physics, 2003, 132, 263-279.	0.6	4
64	Onset of Turbulence in Superfluid $^3\text{He-B}$ and its Dependence on Vortex Injection in Applied Flow. AIP Conference Proceedings, 2006, , .	0.3	4
65	Vortex-mediated relaxation of magnon BEC into light Higgs quasiparticles. Physical Review Research, 2021, 3, .	1.3	4
66	Numerical Simulations of the Multiply-connected Vortex Sheet in $^3\text{He-A}$. Journal of Low Temperature Physics, 2000, 121, 387-392.	0.6	3
67	Magnetically stabilized AB interface in rotating superfluid. Physica B: Condensed Matter, 2003, 329-333, 93-95.	1.3	3
68	Vortex flow in rotating superfluid $^4\text{He-B}$. Physica B: Condensed Matter, 2003, 329-333, 106-107.	1.3	3
69	AB interface in rotating superfluid : the first example of a superfluid shear-flow instability. Physica B: Condensed Matter, 2003, 329-333, 57-61.	1.3	3
70	Andreev reflection in rotating superfluid $^3\text{He-B}$. Journal of Experimental and Theoretical Physics, 2014, 119, 1069-1083.	0.2	3
71	Kelvin-Helmholtz instability of AB interface in superfluid ^3He . Physical Review B, 2019, 99, .	1.1	3
72	Superconducting Nb-film LC resonator. Review of Scientific Instruments, 2001, 72, 3682-3686.	0.6	2

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73	NMR Spectroscopy of the Double-Quantum Vortex in Superfluid $^3\text{He-A}$. Journal of Low Temperature Physics, 2001, 124, 123-146.	0.6	2
74	Optical spectra of the triplet molecules $^4\text{He}_2^*$ in superfluid helium in a magnetic field. European Physical Journal D, 1996, 46, 361-362.	0.4	1
75	Vortex line connections across the AB interface in superfluid. Physica B: Condensed Matter, 2003, 329-333, 91-92.	1.3	1
76	NMR Response of a Vortex Tangle in Rotating $^3\text{He-B}$. AIP Conference Proceedings, 2006, , .	0.3	1
77	Thermal Detection of Turbulent and Laminar Dissipation in Vortex Front Motion. Journal of Low Temperature Physics, 2013, 171, 473-484.	0.6	1
78	Reply to Comment on "Amplitude of Waves in the Kelvin-Wave Cascade"(JETP Letters 111, 389 (2020)). JETP Letters, 2020, 111, 600-601.	0.4	1
79	What Can Superconductivity Learn from Quantized Vorticity in ^3He Superfluids?. Springer Series in Solid-state Sciences, 2002, , 21-48.	0.3	1
80	Polar Phase of ^3He in Nematic Aerogel and Quartz Tuning Fork as Sensitive Detectors of Surface Boundary Conditions. Journal of Low Temperature Physics, 0, , 1.	0.6	1
81	NMR measurement of quantized vortex lines in rotating $^3\text{He-A}$. Physica B: Condensed Matter, 2000, 284-288, 250-251.	1.3	0
82	NMR measurement of quantized vortex lines in rotating $^3\text{He-B}$. Physica B: Condensed Matter, 2000, 284-288, 254-255.	1.3	0