

George Richard Pickett

List of Publications by Year in descending order

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83
papers

1,898
citations

279798

23
h-index

265206

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83
all docs

83
docs citations

83
times ranked

430
citing authors

#	ARTICLE	IF	CITATIONS
1	Beyond the two-fluid model: Transition from linear behavior to a velocity-independent force on a moving object in ^3He . <i>Physical Review Letters</i> , 1989, 63, 2566-2569.	7.8	152
2	The mechanical behavior of a vibrating wire in superfluid $^3\text{He-B}$ in the ballistic limit. <i>Journal of Low Temperature Physics</i> , 1986, 62, 511-523.	1.4	139
3	Potential Dark Matter Detector? The Detection of Low Energy Neutrons by Superfluid ^3He . <i>Physical Review Letters</i> , 1995, 75, 1887-1890.	7.8	130
4	Blackbody source and detector of ballistic quasiparticles in ^3He : Emission angle from a wire moving at supercritical velocity. <i>Physical Review Letters</i> , 1992, 69, 1073-1076.	7.8	126
5	Generation and Detection of Quantum Turbulence in Superfluid $^3\text{He-B}$. <i>Physical Review Letters</i> , 2001, 86, 244-247.	7.8	117
6	Emission of Discrete Vortex Rings by a Vibrating Grid In Superfluid $^3\text{He-B}$: A Precursor to Quantum Turbulence. <i>Physical Review Letters</i> , 2005, 95, 035302.	7.8	89
7	A microscopic calculation of the force on a wire moving through superfluid $^3\text{He-B}$ in the ballistic regime. <i>Journal of Low Temperature Physics</i> , 1991, 83, 225-235.	1.4	73
8	Thermodynamics of the ^3He Phase Transition and the Geometry of the A-Phase Gap Nodes in Superfluid ^3He at Low Temperatures. <i>Physical Review Letters</i> , 1999, 83, 3462-3465.	7.8	64
9	Transition to Turbulence for a Quartz Tuning Fork in Superfluid ^4He . <i>Journal of Low Temperature Physics</i> , 2009, 156, 116-131.	1.4	59
10	Crossover from hydrodynamic to acoustic drag on quartz tuning forks in normal and superfluid ^4He . <i>Physical Review B</i> , 2012, 85, .	3.2	57
11	Cooling liquid ^3He to around $100 \text{ \AA}\mu\text{K}$. <i>Nature</i> , 1983, 302, 695-696.	27.8	56
12	Quantum Turbulence in Superfluid ^3He Illuminated by a Beam of Quasiparticle Excitations. <i>Physical Review Letters</i> , 2004, 93, 235302.	7.8	49
13	The Damping of a Quartz Tuning Fork in Superfluid $^3\text{He-B}$ at Low Temperatures. <i>Journal of Low Temperature Physics</i> , 2009, 157, 476-501.	1.4	46
14	Direct measurement of the energy dissipated by quantum turbulence. <i>Nature Physics</i> , 2011, 7, 473-476.	16.7	44
15	An Advanced Dilution Refrigerator Designed for the New Lancaster Microkelvin Facility. <i>Journal of Low Temperature Physics</i> , 1999, 114, 547-570.	1.4	42
16	Turbulence generated by vibrating wire resonators in superfluid ^4He at low temperatures. <i>Journal of Low Temperature Physics</i> , 2005, 138, 493-498.	1.4	39
17	Relic topological defects from brane annihilation simulated in superfluid ^3He . <i>Nature Physics</i> , 2008, 4, 46-49.	16.7	38
18	Generation, evolution, and decay of pure quantum turbulence: A full Biot-Savart simulation. <i>Physical Review B</i> , 2010, 81, .	3.2	32

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19	Towards Superfluidity of 3He Diluted by 4He. Journal of Low Temperature Physics, 2002, 129, 531-545.	1.4	28
20	The Transition to Turbulent Drag for a Cylinder Oscillating in Superfluid 4He: A Comparison of Quantum and Classical Behavior. Journal of Low Temperature Physics, 2009, 154, 97-116.	1.4	27
21	A compact dilution refrigerator with vertical heat exchangers for operation to 2 mK. Journal of Low Temperature Physics, 1991, 83, 257-272.	1.4	26
22	Breaking the superfluid speed limit in a fermionic condensate. Nature Physics, 2016, 12, 1017-1021.	16.7	24
23	Vortex Generation in Superfluid 3He by a Vibrating Grid. Journal of Low Temperature Physics, 2004, 134, 381-386.	1.4	23
24	Frequency-dependent drag from quantum turbulence produced by quartz tuning forks in superfluid ^4He . Physical Review B, 2014, 89, .	3.2	23
25	Thirty-Minute Coherence in Free Induction Decay Signals in Superfluid 3He-B. Journal of Low Temperature Physics, 2000, 121, 303-308.	1.4	17
26	Operating Nanobeams in a Quantum Fluid. Scientific Reports, 2017, 7, 4876.	3.3	17
27	Visualizing Pure Quantum Turbulence in Superfluid ^4He and its Spectral Properties. Physical Review Letters, 2015, 115, 015302.	7.8	16
28	Stability of flow and the transition to turbulence around a quartz tuning fork in superfluid ^4He at very low temperatures. Physical Review B, 2014, 89, .	3.2	15
29	Measuring the Prong Velocity of Quartz Tuning Forks Used to Probe Quantum Fluids. Journal of Low Temperature Physics, 2010, 161, 536-547.	1.4	14
30	Nanoscale real-time detection of quantum vortices at millikelvin temperatures. Nature Communications, 2021, 12, 2645.	12.8	14
31	The Thermal Conductivity of Superfluid 3He in Aerogel: A Measurement of the Energy Gap. Journal of Low Temperature Physics, 2002, 126, 673-678.	1.4	13
32	Decay of persistent precessing domains in ^3He at very low temperatures. Physical Review B, 2012, 86, .	3.2	13
33	Probing Bogoliubov Quasiparticles in Superfluid ^3He with a "Vibrating-Wire Like" MEMS Device. Journal of Low Temperature Physics, 2016, 183, 284-291.	1.4	13
34	Probing superfluid ^4He with high-frequency nanomechanical resonators down to millikelvin temperatures. Physical Review B, 2019, 100, .	3.2	13
35	Spatial Manipulation of the Persistent Precessing Spin Domain in Superfluid 3He-B. Journal of Low Temperature Physics, 2004, 134, 351-356.	1.4	12
36	Thermometry in Normal Liquid 3He Using a Quartz Tuning Fork Viscometer. Journal of Low Temperature Physics, 2013, 171, 750-756.	1.4	12

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37	Fundamental dissipation due to bound fermions in the zero-temperature limit. Nature Communications, 2020, 11, 4742.	12.8	12
38	Grid Turbulence in Superfluid $^3\text{He-B}$ at Low Temperatures. Journal of Low Temperature Physics, 2008, 150, 364-372.	1.4	11
39	A Quasiparticle Detector for Imaging Quantum Turbulence in Superfluid $^3\text{He-B}$. Journal of Low Temperature Physics, 2014, 175, 725-738.	1.4	11
40	Mesoscopic behaviour of the neutral Fermi gas ^3He confined in quantum wires. Nature, 1998, 395, 578-580.	27.8	10
41	Thermal Conductivity of Normal Liquid ^3He in Aerogel. Journal of Low Temperature Physics, 2002, 129, 185-193.	1.4	10
42	Vortex Rings in Superfluid $^3\text{He-B}$ at Low Temperatures. Journal of Low Temperature Physics, 2007, 148, 235-243.	1.4	10
43	A New Device for Studying Low or Zero Frequency Mechanical Motion at Very Low Temperatures. Journal of Low Temperature Physics, 2011, 165, 114-131.	1.4	10
44	The European Microkelvin Platform. Nature Reviews Materials, 2018, 3, .	48.7	10
45	Detecting a phonon flux in superfluid He_4 by a nanomechanical resonator. Physical Review B, 2020, 101, .	3.2	9
46	A new twist to an old story. Nature, 2000, 404, 450-451.	27.8	8
47	History Dependence of Turbulence Generated by a Vibrating Wire in Superfluid ^4He at 1.5 K. Journal of Low Temperature Physics, 2011, 162, 375-382.	1.4	8
48	Response of a Mechanical Oscillator in Solid ^4He . Journal of Low Temperature Physics, 2014, 175, 140-146.	1.4	8
49	Probing Liquid ^4He with Quartz Tuning Forks Using a Novel Multifrequency Lock-in Technique. Journal of Low Temperature Physics, 2016, 184, 1080-1091.	1.4	8
50	Visualization of quantum turbulence in superfluid $^3\text{He-B}$: Combined numerical and experimental study of Andreev reflection. Physical Review B, 2017, 96, .	3.2	8
51	The Onset of Vortex Production by a Vibrating Wire in Superfluid $^3\text{He-B}$. Journal of Low Temperature Physics, 2013, 171, 582-588.	1.4	7
52	Hysteresis, Switching and Anomalous Behaviour of a Quartz Tuning Fork in Superfluid ^4He . Journal of Low Temperature Physics, 2014, 175, 379-384.	1.4	7
53	Andreev Reflection of Quasiparticles by a Vortex Tangle in Superfluid $^3\text{He-B}$?. Journal of Low Temperature Physics, 2000, 121, 393-398.	1.4	5
54	The Unique Superfluid ^3He A-B Interface: Surface Tension and Contact Angle. Journal of Low Temperature Physics, 2002, 126, 533-538.	1.4	5

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55	Superfluid ^3He in the Zero-Temperature Limit. Journal of Low Temperature Physics, 2004, 135, 385-397.	1.4	5
56	Observation of quantum turbulence in superfluid ^3He -B using reflection and transmission of ballistic thermal excitations. Physical Review B, 2017, 95, .	3.2	5
57	Novel Oscillating Aerogel Experiments in Superfluid ^3He at Ultralow Temperatures. Journal of Low Temperature Physics, 2000, 121, 555-560.	1.4	4
58	Magnetic Distortion of the B-like Phase of Superfluid ^3He Confined in Aerogel. Journal of Low Temperature Physics, 2008, 150, 445-452.	1.4	4
59	Plastic Properties of Solid ^4He Probed by a Moving Wire: Viscoelastic and Stochastic Behavior Under High Stress. Journal of Low Temperature Physics, 2014, 175, 147-153.	1.4	4
60	LEGO® Block Structures as a Sub-Kelvin Thermal Insulator. Scientific Reports, 2019, 9, 19642.	3.3	4
61	Producing and imaging quantum turbulence via pair-breaking in superfluid ^3He -B. Physical Review B, 2022, 105, .	3.2	4
62	The Thermal Damping of an Aerogel Resonator in Superfluid ^3He -B at Ultra Low Temperatures. Journal of Low Temperature Physics, 2005, 138, 123-128.	1.4	3
63	The Dynamic Texture of Superfluid ^3He -B at Very Low Temperatures and in High Magnetic Fields. Journal of Low Temperature Physics, 2005, 138, 583-588.	1.4	3
64	The Thermal Boundary Resistance of the Superfluid ^3He A-B Phase Interface in the Low Temperature Limit. AIP Conference Proceedings, 2006, , .	0.4	3
65	Thermal Transport by Ballistic Quasiparticles in Superfluid ^3He -B in the Low Temperature Limit. AIP Conference Proceedings, 2006, , .	0.4	3
66	Quantum turbulence. Physics World, 2006, 19, 22-27.	0.0	3
67	The Annihilation of Two Phase Interfaces in Superfluid ^3He : Simulated Brane Annihilation in the Laboratory. Journal of the Physical Society of Japan, 2008, 77, 111005.	1.6	3
68	Orbitropic Effect in Superfluid ^3He B-phase Boundaries. Scientific Reports, 2018, 8, 13965.	3.3	3
69	Multimode probing of superfluid ^4He by tuning forks. Applied Physics Letters, 2019, 115, .	3.3	3
70	Measurements on a Dynamic A-B Phase Boundary in Superfluid ^3He at Very Low Temperatures. Journal of Low Temperature Physics, 1998, 113, 651-659.	1.4	2
71	The Stability of the Superfluid ^3He AB Interface Pinned in an Aperture. Journal of Low Temperature Physics, 2004, 134, 387-392.	1.4	2
72	Coherent Spin Precession in Superfluid ^3He -B Excited in a Field Minimum at Low Temperatures. Journal of Low Temperature Physics, 2005, 138, 777-782.	1.4	2

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73	The AB Interface in Superfluid ^3He as a Simulated Cosmological Brane. Journal of Low Temperature Physics, 2007, 148, 465-473.	1.4	2
74	Anomalous Damping of a Low Frequency Vibrating Wire in Superfluid $^3\text{He-B}$ due to Vortex Shielding. Journal of Low Temperature Physics, 2014, 175, 372-378.	1.4	2
75	Orbital Damping of the Oscillating Superfluid ^3He A-B Interface at Low Temperatures. Journal of Low Temperature Physics, 2014, 175, 706-717.	1.4	2
76	Acoustic damping of quartz tuning forks in normal and superfluid He^3 . Physical Review B, 2019, 100, .	3.2	2
77	Title is missing!. Journal of Low Temperature Physics, 2002, 126, 1457-1470.	1.4	1
78	Preliminary Measurements of Andreev Reflection of Quasiparticles by Turbulence in Superfluid ^3He . Journal of Low Temperature Physics, 2001, 124, 113-122.	1.4	0
79	The Response of a Mechanical Oscillator at the Superfluid ^3He AB Interface. Journal of Low Temperature Physics, 2004, 134, 345-350.	1.4	0
80	The Generation Of Quantum Turbulence In $^3\text{He-B}$ By A Vibrating Grid At Low Temperatures. AIP Conference Proceedings, 2006, , .	0.4	0
81	The Decay of Quantum Turbulence Generated by a Vibrating Grid at Low Temperatures in Superfluid $^3\text{He-B}$. AIP Conference Proceedings, 2006, , .	0.4	0
82	Non-linear Mechanical Response of the A-like Phase of Superfluid ^3He in Aerogel. Journal of Low Temperature Physics, 2007, 148, 603-607.	1.4	0
83	Superfluid ^3He , a two-fluid system, with the normal-fluid dynamics dominated by Andreev reflection. Journal of Experimental and Theoretical Physics, 2014, 119, 1058-1068.	0.9	0