

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

42
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83
all docs

83
docs citations

83
times ranked

430
citing authors

#	ARTICLE	IF	CITATIONS
1	Producing and imaging quantum turbulence via pair-breaking in superfluid ^4He . <i>Physical Review B</i> , 2022, 105, .	3.2	4
2	Nanoscale real-time detection of quantum vortices at millikelvin temperatures. <i>Nature Communications</i> , 2021, 12, 2645.	12.8	14
3	Fundamental dissipation due to bound fermions in the zero-temperature limit. <i>Nature Communications</i> , 2020, 11, 4742.	12.8	12
4	Detecting a phonon flux in superfluid ^4He by a nanomechanical resonator. <i>Physical Review B</i> , 2020, 101, .	3.2	9
5	Probing superfluid ^4He with high-frequency nanomechanical resonators down to millikelvin temperatures. <i>Physical Review B</i> , 2019, 100, .	3.2	13
6	Multimode probing of superfluid ^4He by tuning forks. <i>Applied Physics Letters</i> , 2019, 115, .	3.3	3
7	Acoustic damping of quartz tuning forks in normal and superfluid ^3He . <i>Physical Review B</i> , 2019, 100, .	3.2	2
8	LEGO® Block Structures as a Sub-Kelvin Thermal Insulator. <i>Scientific Reports</i> , 2019, 9, 19642.	3.3	4
9	The European Microkelvin Platform. <i>Nature Reviews Materials</i> , 2018, 3, .	48.7	10
10	Orbitropic Effect in Superfluid ^3He B-phase Boundaries. <i>Scientific Reports</i> , 2018, 8, 13965.	3.3	3
11	Observation of quantum turbulence in superfluid ^3He -B using reflection and transmission of ballistic thermal excitations. <i>Physical Review B</i> , 2017, 95, .	3.2	5
12	Visualization of quantum turbulence in superfluid ^3He : Combined numerical and experimental study of Andreev reflection. <i>Physical Review B</i> , 2017, 96, .	3.2	8
13	Operating Nanobeams in a Quantum Fluid. <i>Scientific Reports</i> , 2017, 7, 4876.	3.3	17
14	Probing Bogoliubov Quasiparticles in Superfluid ^3He with a \sim Vibrating-Wire Like™ MEMS Device. <i>Journal of Low Temperature Physics</i> , 2016, 183, 284-291.	1.4	13
15	Probing Liquid ^4He with Quartz Tuning Forks Using a Novel Multifrequency Lock-in Technique. <i>Journal of Low Temperature Physics</i> , 2016, 184, 1080-1091.	1.4	8
16	Breaking the superfluid speed limit in a fermionic condensate. <i>Nature Physics</i> , 2016, 12, 1017-1021.	16.7	24
17	Visualizing Pure Quantum Turbulence in Superfluid ^3He : Andreev Reflection and its Spectral Properties. <i>Physical Review Letters</i> , 2015, 115, 015302.	7.8	16
18	Superfluid ^3He , a two-fluid system, with the normal-fluid dynamics dominated by Andreev reflection. <i>Journal of Experimental and Theoretical Physics</i> , 2014, 119, 1058-1068.	0.9	0

#	ARTICLE	IF	CITATIONS
19	Stability of flow and the transition to turbulence around a quartz tuning fork in superfluid ^4He . Frequency-dependent drag from quantum turbulence produced by quartz tuning forks in superfluid ^4He . Physical Review B, 2014, 89, .	3.2	15
20	Frequency-dependent drag from quantum turbulence produced by quartz tuning forks in superfluid ^4He . Physical Review B, 2014, 89, .	3.2	23
21	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
22	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
23	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
24	Response of a Mechanical Oscillator in Solid ^4He . Journal of Low Temperature Physics, 2014, 175, 140-146.	1.4	8
25	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
26	Orbital Damping of the Oscillating Superfluid $^3\text{He-B}$ Interface at Low Temperatures. Journal of Low Temperature Physics, 2014, 175, 706-717.	1.4	2
27	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
28	Thermometry in Normal Liquid ^3He Using a Quartz Tuning Fork Viscometer. Journal of Low Temperature Physics, 2013, 171, 750-756.	1.4	12
29	Decay of persistent precessing domains in $^3\text{He-B}$ at very low temperatures. Physical Review B, 2012, 86, .	3.2	13
30	Crossover from hydrodynamic to acoustic drag on quartz tuning forks in normal and superfluid ^4He . Physical Review B, 2012, 85, .	3.2	57
31	Direct measurement of the energy dissipated by quantum turbulence. Nature Physics, 2011, 7, 473-476.	16.7	44
32	History Dependence of Turbulence Generated by a Vibrating Wire in Superfluid ^4He at 1.5K . Journal of Low Temperature Physics, 2011, 162, 375-382.	1.4	8
33	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
34	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
35	Generation, evolution, and decay of pure quantum turbulence: A full Biot-Savart simulation. Physical Review B, 2010, 81, .	3.2	32
36	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

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37	Transition to Turbulence for a Quartz Tuning Fork in Superfluid 4He. Journal of Low Temperature Physics, 2009, 156, 116-131.	1.4	59
38	The Damping of a Quartz Tuning Fork in Superfluid 3He-B at Low Temperatures. Journal of Low Temperature Physics, 2009, 157, 476-501.	1.4	46
39	Grid Turbulence in Superfluid 3He-B at Low Temperatures. Journal of Low Temperature Physics, 2008, 150, 364-372.	1.4	11
40	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
41	Relic topological defects from brane annihilation simulated in superfluid 3He. Nature Physics, 2008, 4, 46-49.	16.7	38
42	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
43	Vortex Rings in Superfluid 3He-B at Low Temperatures. Journal of Low Temperature Physics, 2007, 148, 235-243.	1.4	10
44	The AB Interface in Superfluid 3He as a Simulated Cosmological Brane. Journal of Low Temperature Physics, 2007, 148, 465-473.	1.4	2
45	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
46	The Thermal Boundary Resistance of the Superfluid 3He A-B Phase Interface in the Low Temperature Limit. AIP Conference Proceedings, 2006, , .	0.4	3
47	The Generation Of Quantum Turbulence In 3He-B By A Vibrating Grid At Low Temperatures. AIP Conference Proceedings, 2006, , .	0.4	0
48	The Decay of Quantum Turbulence Generated by a Vibrating Grid at Low Temperatures in Superfluid 3He-B. AIP Conference Proceedings, 2006, , .	0.4	0
49	Thermal Transport by Ballistic Quasiparticles in Superfluid 3He-B in the Low Temperature Limit. AIP Conference Proceedings, 2006, , .	0.4	3
50	Quantum turbulence. Physics World, 2006, 19, 22-27.	0.0	3
51	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
52	Turbulence generated by vibrating wire resonators in superfluid 4He at low temperatures. Journal of Low Temperature Physics, 2005, 138, 493-498.	1.4	39
53	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
54	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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55	Emission of Discrete Vortex Rings by a Vibrating Grid In Superfluid ^3He : A Precursor to Quantum Turbulence. <i>Physical Review Letters</i> , 2005, 95, 035302.	7.8	89
56	Quantum Turbulence in Superfluid ^3He Illuminated by a Beam of Quasiparticle Excitations. <i>Physical Review Letters</i> , 2004, 93, 235302.	7.8	49
57	The Response of a Mechanical Oscillator at the Superfluid ^3He AB Interface. <i>Journal of Low Temperature Physics</i> , 2004, 134, 345-350.	1.4	0
58	Spatial Manipulation of the Persistent Precessing Spin Domain in Superfluid ^3He -B. <i>Journal of Low Temperature Physics</i> , 2004, 134, 351-356.	1.4	12
59	Vortex Generation in Superfluid ^3He by a Vibrating Grid. <i>Journal of Low Temperature Physics</i> , 2004, 134, 381-386.	1.4	23
60	The Stability of the Superfluid ^3He AB Interface Pinned in an Aperture. <i>Journal of Low Temperature Physics</i> , 2004, 134, 387-392.	1.4	2
61	Superfluid ^3He in the Zero-Temperature Limit. <i>Journal of Low Temperature Physics</i> , 2004, 135, 385-397.	1.4	5
62	The Thermal Conductivity of Superfluid ^3He in Aerogel: A Measurement of the Energy Gap. <i>Journal of Low Temperature Physics</i> , 2002, 126, 673-678.	1.4	13
63	The Unique Superfluid ^3He A-B Interface: Surface Tension and Contact Angle. <i>Journal of Low Temperature Physics</i> , 2002, 126, 533-538.	1.4	5
64	Title is missing!. <i>Journal of Low Temperature Physics</i> , 2002, 126, 1457-1470.	1.4	1
65	Thermal Conductivity of Normal Liquid ^3He in Aerogel. <i>Journal of Low Temperature Physics</i> , 2002, 129, 185-193.	1.4	10
66	Towards Superfluidity of ^3He Diluted by ^4He . <i>Journal of Low Temperature Physics</i> , 2002, 129, 531-545.	1.4	28
67	Preliminary Measurements of Andreev Reflection of Quasiparticles by Turbulence in Superfluid ^3He . <i>Journal of Low Temperature Physics</i> , 2001, 124, 113-122.	1.4	0
68	Generation and Detection of Quantum Turbulence in Superfluid ^3He . <i>Physical Review Letters</i> , 2001, 86, 244-247.	7.8	117
69	A new twist to an old story. <i>Nature</i> , 2000, 404, 450-451.	27.8	8
70	Thirty-Minute Coherence in Free Induction Decay Signals in Superfluid ^3He -B. <i>Journal of Low Temperature Physics</i> , 2000, 121, 303-308.	1.4	17
71	Novel Oscillating Aerogel Experiments in Superfluid ^3He at Ultralow Temperatures. <i>Journal of Low Temperature Physics</i> , 2000, 121, 555-560.	1.4	4
72	Andreev Reflection of Quasiparticles by a Vortex Tangle in Superfluid ^3He -B?. <i>Journal of Low Temperature Physics</i> , 2000, 121, 393-398.	1.4	5

#	ARTICLE	IF	CITATIONS
73	Thermodynamics of the A-B 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
74	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
75	Measurements on a Dynamic A-B Phase Boundary in Superfluid ^3He at Very Low Temperatures. <i>Journal of Low Temperature Physics</i> , 1998, 113, 651-659.	1.4	2
76	Mesoscopic behaviour of the neutral Fermi gas ^3He confined in quantum wires. <i>Nature</i> , 1998, 395, 578-580.	27.8	10
77	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
78	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
79	A microscopic calculation of the force on a wire moving through superfluid ^3He -B in the ballistic regime. <i>Journal of Low Temperature Physics</i> , 1991, 83, 225-235.	1.4	73
80	A compact dilution refrigerator with vertical heat exchangers for operation to 2 mK. <i>Journal of Low Temperature Physics</i> , 1991, 83, 257-272.	1.4	26
81	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
82	The mechanical behavior of a vibrating wire in superfluid ^3He -B in the ballistic limit. <i>Journal of Low Temperature Physics</i> , 1986, 62, 511-523.	1.4	139
83	Cooling liquid ^3He to around $100 \text{ \AA}\mu\text{K}$. <i>Nature</i> , 1983, 302, 695-696.	27.8	56