

# R P Haley

## List of Publications by Year in descending order

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60  
papers

972  
citations

482844

16  
h-index

466759

29  
g-index

60  
all docs

60  
docs citations

60  
times ranked

765  
citing authors

#	ARTICLE	IF	CITATIONS
1	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.	8.0	89
2	Thermodynamics of the $^3\text{He-B}$ Phase Transition and the Geometry of the A-Phase Gap Nodes in Superfluid $^3\text{He}$ at Low Temperatures. <i>Physical Review Letters</i> , 1999, 83, 3462-3465.	8.0	64
3	Transition to Turbulence for a Quartz Tuning Fork in Superfluid $^4\text{He}$ . <i>Journal of Low Temperature Physics</i> , 2009, 156, 116-131.	1.4	60
4	Crossover from hydrodynamic to acoustic drag on quartz tuning forks in normal and superfluid $^4\text{He}$ . <i>Physical Review B</i> , 2012, 85, .	3.3	57
5	Direct measurement of the energy dissipated by quantum turbulence. <i>Nature Physics</i> , 2011, 7, 473-476.	11.8	47
6	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
7	An Advanced Dilution Refrigerator Designed for the New Lancaster Microkelvin Facility. <i>Journal of Low Temperature Physics</i> , 1999, 114, 547-570.	1.4	45
8	Gate-Defined Quantum Confinement in InSe-Based van der Waals Heterostructures. <i>Nano Letters</i> , 2018, 18, 3950-3955.	9.5	42
9	Relic topological defects from brane annihilation simulated in superfluid $^3\text{He}$ . <i>Nature Physics</i> , 2008, 4, 46-49.	11.8	39
10	Nanoelectronic primary thermometry below $4\ \mu\text{K}$ . <i>Nature Communications</i> , 2016, 7, 10455.	13.2	36
11	Generation, evolution, and decay of pure quantum turbulence: A full Biot-Savart simulation. <i>Physical Review B</i> , 2010, 81, .	3.3	32
12	The Transition to Turbulent Drag for a Cylinder Oscillating in Superfluid $^4\text{He}$ : A Comparison of Quantum and Classical Behavior. <i>Journal of Low Temperature Physics</i> , 2009, 154, 97-116.	1.4	27
13	Breaking the superfluid speed limit in a fermionic condensate. <i>Nature Physics</i> , 2016, 12, 1017-1021.	11.8	27
14	Frequency-dependent drag from quantum turbulence produced by quartz tuning forks in superfluid $^4\text{He}$ . <i>Physical Review B</i> , 2014, 89, .	3.3	24
15	Progress in Cooling Nanoelectronic Devices to Ultra-Low Temperatures. <i>Journal of Low Temperature Physics</i> , 2020, 201, 772-802.	1.4	24
16	On-chip magnetic cooling of a nanoelectronic device. <i>Scientific Reports</i> , 2017, 7, 45566.	3.4	21
17	Operating Nanobeams in a Quantum Fluid. <i>Scientific Reports</i> , 2017, 7, 4876.	3.4	19
18	Microkelvin Thermometry with Bose-Einstein Condensates of Magnons and Applications to Studies of the AB Interface in Superfluid $^3\text{He}$ . <i>Journal of Low Temperature Physics</i> , 2014, 175, 681-705.	1.4	16

#	ARTICLE	IF	CITATIONS
19	Probing Bogoliubov Quasiparticles in Superfluid $^3\text{He}$ with a "Vibrating-Wire Like" MEMS Device. Journal of Low Temperature Physics, 2016, 183, 284-291.	1.4	15
20	Fundamental dissipation due to bound fermions in the zero-temperature limit. Nature Communications, 2020, 11, 4742.	13.2	15
21	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
22	Probing superfluid $^4\text{He}$ with high-frequency nanomechanical resonators down to millikelvin temperatures. Physical Review B, 2019, 100, .	3.3	14
23	Grid Turbulence in Superfluid $^3\text{He-B}$ at Low Temperatures. Journal of Low Temperature Physics, 2008, 150, 364-372.	1.4	13
24	Thermometry in Normal Liquid $^3\text{He}$ Using a Quartz Tuning Fork Viscometer. Journal of Low Temperature Physics, 2013, 171, 750-756.	1.4	13
25	Graphene-based tunable SQUIDs. Applied Physics Letters, 2017, 110, .	3.2	12
26	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
27	Vortex Rings in Superfluid $^3\text{He-B}$ at Low Temperatures. Journal of Low Temperature Physics, 2007, 148, 235-243.	1.4	10
28	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
29	Detecting a phonon flux in superfluid $\text{He}_4$ by a nanomechanical resonator. Physical Review B, 2020, 101, .	3.3	10
30	History Dependence of Turbulence Generated by a Vibrating Wire in Superfluid $^4\text{He}$ at 1.5 K. Journal of Low Temperature Physics, 2011, 162, 375-382.	1.4	8
31	Response of a Mechanical Oscillator in Solid $^4\text{He}$ . Journal of Low Temperature Physics, 2014, 175, 140-146.	1.4	8
32	Probing Liquid $^4\text{He}$ with Quartz Tuning Forks Using a Novel Multifrequency Lock-in Technique. Journal of Low Temperature Physics, 2016, 184, 1080-1091.	1.4	8
33	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
34	Hysteresis, Switching and Anomalous Behaviour of a Quartz Tuning Fork in Superfluid $^4\text{He}$ . Journal of Low Temperature Physics, 2014, 175, 379-384.	1.4	7
35	Effect of the boundary condition on the Kapitza resistance between superfluid $^4\text{He}$ and sintered metal. Physical Review B, 2020, 102, .	3.3	7
36	The Unique Superfluid $^3\text{He}$ A-B Interface: Surface Tension and Contact Angle. Journal of Low Temperature Physics, 2002, 126, 533-538.	1.4	6

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37	Producing and imaging quantum turbulence via pair-breaking in superfluid $^3\text{He}$ -B. <i>Physical Review B</i> , 2022, 105, .	3.3	6
38	Superfluid $^3\text{He}$ in the Zero-Temperature Limit. <i>Journal of Low Temperature Physics</i> , 2004, 135, 385-397.	1.4	5
39	Observation of quantum turbulence in superfluid $^3\text{He}$ -B using reflection and transmission of ballistic thermal excitations. <i>Physical Review B</i> , 2017, 95, .	3.3	5
40	Transport of bound quasiparticle states in a two-dimensional boundary superfluid. <i>Nature Communications</i> , 2023, 14, .	13.2	5
41	Magnetic Distortion of the B-like Phase of Superfluid $^3\text{He}$ Confined in Aerogel. <i>Journal of Low Temperature Physics</i> , 2008, 150, 445-452.	1.4	4
42	Plastic Properties of Solid $^4\text{He}$ Probed by a Moving Wire: Viscoelastic and Stochastic Behavior Under High Stress. <i>Journal of Low Temperature Physics</i> , 2014, 175, 147-153.	1.4	4
43	Orbitropic Effect in Superfluid $^3\text{He}$ B-phase Boundaries. <i>Scientific Reports</i> , 2018, 8, 13965.	3.4	4
44	Multimode probing of superfluid $^4\text{He}$ by tuning forks. <i>Applied Physics Letters</i> , 2019, 115, .	3.2	4
45	Microkelvin electronics on a pulse-tube cryostat with a gate Coulomb-blockade thermometer. <i>Physical Review Research</i> , 2022, 4, .	3.6	4
46	The Dynamic Texture of Superfluid $^3\text{He}$ -B at Very Low Temperatures and in High Magnetic Fields. <i>Journal of Low Temperature Physics</i> , 2005, 138, 583-588.	1.4	3
47	The Thermal Boundary Resistance of the Superfluid $^3\text{He}$ A-B Phase Interface in the Low Temperature Limit. <i>AIP Conference Proceedings</i> , 2006, , .	1.0	3
48	Thermal Transport by Ballistic Quasiparticles in Superfluid $^3\text{He}$ -B in the Low Temperature Limit. <i>AIP Conference Proceedings</i> , 2006, , .	1.0	3
49	The AB Interface in Superfluid $^3\text{He}$ as a Simulated Cosmological Brane. <i>Journal of Low Temperature Physics</i> , 2007, 148, 465-473.	1.4	3
50	The Annihilation of Two Phase Interfaces in Superfluid $^3\text{He}$ : Simulated Brane Annihilation in the Laboratory. <i>Journal of the Physical Society of Japan</i> , 2008, 77, 111005.	1.6	3
51	Orbital Damping of the Oscillating Superfluid $^3\text{He}$ A-B Interface at Low Temperatures. <i>Journal of Low Temperature Physics</i> , 2014, 175, 706-717.	1.4	3
52	Measurements on a Dynamic A-B Phase Boundary in Superfluid $^3\text{He}$ at Very Low Temperatures. <i>Journal of Low Temperature Physics</i> , 1998, 113, 651-659.	1.4	2
53	The Stability of the Superfluid $^3\text{He}$ AB Interface Pinned in an Aperture. <i>Journal of Low Temperature Physics</i> , 2004, 134, 387-392.	1.4	2
54	Anomalous Damping of a Low Frequency Vibrating Wire in Superfluid $^3\text{He}$ -B due to Vortex Shielding. <i>Journal of Low Temperature Physics</i> , 2014, 175, 372-378.	1.4	2

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55	Acoustic damping of quartz tuning forks in normal and superfluid He3. Physical Review B, 2019, 100, .	3.3	2
56	Thermal Transport in Nanoelectronic Devices Cooled by On-Chip Magnetic Refrigeration. Physical Review Letters, 2023, 131, .	8.0	2
57	The Response of a Mechanical Oscillator at the Superfluid <sup>3</sup> He AB Interface. Journal of Low Temperature Physics, 2004, 134, 345-350.	1.4	0
58	The Generation Of Quantum Turbulence In <sup>3</sup> He-B By A Vibrating Grid At Low Temperatures. AIP Conference Proceedings, 2006, , .	1.0	0
59	The Decay of Quantum Turbulence Generated by a Vibrating Grid at Low Temperatures in Superfluid <sup>3</sup> He-B. AIP Conference Proceedings, 2006, , .	1.0	0
60	Non-linear Mechanical Response of the A-like Phase of Superfluid <sup>3</sup> He in Aerogel. Journal of Low Temperature Physics, 2007, 148, 603-607.	1.4	0