

# Wei Guo

## List of Publications by Year in descending order

Source: <https://exaly.com/author-pdf/6925019/publications.pdf>

Version: 2024-02-01

70  
papers

1,084  
citations

471509

17  
h-index

454955

30  
g-index

76  
all docs

76  
docs citations

76  
times ranked

445  
citing authors

#	ARTICLE	IF	CITATIONS
1	Visualization Study of Counterflow in Superfluid $^4\text{He}$ using Metastable Helium Molecules. <i>Physical Review Letters</i> , 2010, 105, 045301.	7.8	99
2	Visualization of two-fluid flows of superfluid helium-4. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2014, 111, 4653-4658.	7.1	95
3	Visualization of the normal-fluid turbulence in counterflowing superfluid $^4\text{He}$ . <i>Physical Review B</i> , 2015, 91, .	3.2	82
4	Concept for a dark matter detector using liquid helium-4. <i>Physical Review D</i> , 2013, 87, .	4.7	59
5	Metastable Helium Molecules as Tracers in Superfluid $^4\text{He}$ . <i>Physical Review Letters</i> , 2009, 102, 235301.	7.8	53
6	Tracers of Quantum Turbulence in $^4\text{He}$ . <i>Physical Review Letters</i> , 2016, 116, 055301.	7.8	52
7	Decay of counterflow turbulence in superfluid $^4\text{He}$ . <i>JETP Letters</i> , 2016, 103, 648-652.	1.4	40
8	Experiments with single electrons in liquid helium. <i>Physical Review B</i> , 2009, 79, .	3.2	33
9	Energy spectrum of thermal counterflow turbulence in superfluid helium-4. <i>Physical Review B</i> , 2017, 96, .	3.2	32
10	Exploration of thermal counterflow in He II using particle tracking velocimetry. <i>Physical Review Fluids</i> , 2018, 3, .	2.5	29
11	Dissipation in quantum turbulence in superfluid He4 above 1 K. <i>Physical Review B</i> , 2018, 97, .	3.2	27
12	Determination of the effective kinematic viscosity for the decay of quasiclassical turbulence in superfluid He4. <i>Physical Review B</i> , 2016, 94, .	3.2	26
13	Fully Coupled Two-Fluid Dynamics in Superfluid $^4\text{He}$ . <i>Physical Review Letters</i> , 2020, 124, 155301.	7.8	26
14	Producing and imaging a thin line of $\text{He}_2^+$ — molecular tracers in helium-4. <i>Review of Scientific Instruments</i> , 2015, 86, 093904.	1.3	25
15	Single electrons on solid neon as a solid-state qubit platform. <i>Nature</i> , 2022, 605, 46-50.	27.8	22
16	Intermittency enhancement in quantum turbulence in superfluid $^4\text{He}$ . <i>Physical Review Fluids</i> , 2018, 3, .	2.5	21
17	Particle tracking velocimetry applied to thermal counterflow in superfluid He4 : Motion of the normal fluid at small heat fluxes. <i>Physical Review Fluids</i> , 2019, 4, .	2.5	19
18	The Shape of Electron Bubbles in Liquid Helium and the Line Width of Optical Transitions. <i>Journal of Low Temperature Physics</i> , 2004, 137, 491-507.	1.4	18

#	ARTICLE	IF	CITATIONS
19	Statistics of turbulence and intermittency enhancement in superfluid He4 counterflow. Physical Review B, 2018, 98, .	3.2	18
20	Observations of the Motion of Single Electrons in Liquid Helium. Journal of Low Temperature Physics, 2007, 148, 199-206.	1.4	17
21	Stability of multielectron bubbles in liquid helium. Physical Review B, 2008, 78, .	3.2	17
22	Electrons in Superfluid Helium-4. Journal of Low Temperature Physics, 2010, 158, 307-316.	1.4	14
23	Superdiffusion of quantized vortices uncovering scaling laws in quantum turbulence. Proceedings of the National Academy of Sciences of the United States of America, 2021, 118, .	7.1	13
24	Characterizing vortex tangle properties in steady-state He II counterflow using particle tracking velocimetry. Physical Review Fluids, 2019, 4, .	2.5	13
25	Vortex nucleation induced phonon radiation from a moving electron bubble in superfluid $H$	3.2	12
26	An apparatus for generation and quantitative measurement of homogeneous isotropic turbulence in He $e$	1.3	12
27	Statistical properties of homogeneous and isotropic turbulence in He II measured via particle tracking velocimetry. Physical Review Fluids, 2020, 5, .	2.5	12
28	Visualization Technique for Determining the Structure Functions of Normal-Fluid Turbulence in Superfluid Helium-4. Journal of Low Temperature Physics, 2013, 171, 497-503.	1.4	11
29	Observation of Crossover from Ballistic to Diffusion Regime for Excimer Molecules in Superfluid 4He. Journal of Low Temperature Physics, 2013, 171, 207-213.	1.4	11
30	Statistical Measurement of Counterflow Turbulence in Superfluid Helium-4 Using $\text{He}_2$ Tracer-Line Tracking Technique. Journal of Low Temperature Physics, 2017, 187, 490-496.	1.4	11
31	Studying the Normal-Fluid Flow in Helium-II Using Metastable Helium Molecules. Journal of Low Temperature Physics, 2010, 158, 346-352.	1.4	10
32	Eulerian and Lagrangian second-order statistics of superfluid He4 grid turbulence. Physical Review B, 2021, 103, .	3.2	10
33	Properties of Moving Electron Bubbles in Superfluid Helium. AIP Conference Proceedings, 2006, , .	0.4	9
34	Scintillation and charge yield from the tracks of energetic electrons in superfluid helium-4. Journal of Instrumentation, 2012, 7, P01002-P01002.	1.2	9
35	Heat and mass transfer during a sudden loss of vacuum in a liquid helium cooled tube “ Part I: Interpretation of experimental observations. International Journal of Heat and Mass Transfer, 2019, 129, 1144-1150.	4.8	8
36	Transient heat transfer of superfluid $\text{He}_4$ in nonhomogeneous geometries: Second sound, rarefaction, and thermal layer. Physical Review B, 2021, 103, .	3.2	8

#	ARTICLE	IF	CITATIONS
37	Low temperature piezoelectric and dielectric properties of lead magnesium niobate titanate single crystals. Journal of Applied Physics, 2007, 102, 084104.	2.5	7
38	Flows with fractional quantum circulation in Bose-Einstein condensates induced by nontopological phase defects. Physical Review A, 2018, 97, .	2.5	7
39	Quench-Spot Detection for Superconducting Accelerator Cavities Via Flow Visualization in Superfluid Helium-4. Physical Review Applied, 2019, 11, .	3.8	7
40	Molecular Tagging Velocimetry in Superfluid Helium-4: Progress, Issues, and Future Development. Journal of Low Temperature Physics, 2019, 196, 60-72.	1.4	6
41	True Mechanism of Spontaneous Order from Turbulence in Two-Dimensional Superfluid Manifolds. Physical Review Letters, 2021, 127, 095301.	7.8	6
42	Calculation of the Shape of S-State Electron Bubbles in Liquid Helium. Journal of Low Temperature Physics, 2007, 148, 207-211.	1.4	5
43	The design and testing of a liquid helium cooled tube system for simulating sudden vacuum loss in particle accelerators. Cryogenics, 2019, 100, 92-96.	1.7	5
44	Stereoscopic detection of hot spots in superfluid 4He (He II) for accelerator-cavity diagnosis. International Journal of Heat and Mass Transfer, 2020, 161, 120259.	4.8	5
45	Universal Anomalous Diffusion of Quantized Vortices in Ultraquantum Turbulence. Physical Review Letters, 2022, 129, .	7.8	5
46	Study of Particle Motion in He II Counterflow Across a Wide Heat Flux Range. Journal of Low Temperature Physics, 2017, 187, 446-452.	1.4	4
47	Heat and mass transfer during a sudden loss of vacuum in a liquid helium cooled tube " Part II: Theoretical modeling. International Journal of Heat and Mass Transfer, 2020, 146, 118883.	4.8	4
48	Torque and Angular-Momentum Transfer in Merging Rotating Bose-Einstein Condensates. Physical Review Letters, 2020, 124, 105302.	7.8	4
49	Imaging Fluorescence of $He^{2+}$ Excimers Created by Neutron Capture in Liquid Helium II. Physical Review Letters, 2020, 124, 134502.	7.8	4
50	Shape fluctuations and optical transition of $He^{2+}$ excimer tracers in superfluid $He^{2+}$ . Physical Review B, 2020, 101, .	3.2	4
51	Physical Review D, 2022, 105, .	4.7	4
52	A study of the motion of single electrons in liquid helium. Journal of Physics: Conference Series, 2007, 92, 012001.	0.4	3
53	Calculation of the Cross-Section for Optical Transitions of an Electron Bubble to D States. Journal of Low Temperature Physics, 2007, 148, 213-217.	1.4	3
54	Theory of the stability of multielectron bubbles in liquid helium. Journal of Physics: Conference Series, 2009, 150, 032027.	0.4	3

#	ARTICLE	IF	CITATIONS
55	Merging of Rotating Bose-Einstein Condensates. Journal of Low Temperature Physics, 2019, 195, 37-50.	1.4	3
56	A cryogenic-helium pipe flow facility with unique double-line molecular tagging velocimetry capability. Review of Scientific Instruments, 2020, 91, 053901.	1.3	3
57	Heat and mass transfer during a sudden loss of vacuum in a liquid helium cooled tube - Part III: Heat deposition in He II. International Journal of Heat and Mass Transfer, 2021, 181, 121885.	4.8	3
58	Repeatability of Cryogenic Multilayer Insulation. IOP Conference Series: Materials Science and Engineering, 2017, 278, 012196.	0.6	2
59	Gas propagation following a sudden loss of vacuum in a pipe cooled by He I and He II. IOP Conference Series: Materials Science and Engineering, 2017, 278, 012068.	0.6	2
60	Repeatability Measurements of Apparent Thermal Conductivity of Multilayer Insulation (MLI). IOP Conference Series: Materials Science and Engineering, 2017, 278, 012195.	0.6	2
61	Generation of $4\text{He } ^2_2$ . Journal of Low Temperature Physics, 2019, 196, 275-282.	1.4	2
62	Effect of mass flow rate on gas propagation after vacuum break in a liquid helium cooled tube. IOP Conference Series: Materials Science and Engineering, 2020, 755, 012112.	0.6	2
63	A magnetic levitation based low-gravity simulator with an unprecedented large functional volume. Npj Microgravity, 2021, 7, 40.	3.7	2
64	A backing detector for order-keV neutrons. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 2022, 1039, 166981.	1.6	2
65	Experiments with single electrons in liquid helium. Journal of Physics: Conference Series, 2009, 150, 022020.	0.4	1
66	A finite-temperature density functional study of electron self-trapping in $^3\text{He}$ and $^4\text{He}$ . Journal of Chemical Physics, 2012, 136, 244510.	3.0	1
67	Calculation of the Cross-Section for the $1s^+2p$ Transition of an Electron Bubble in Helium II. AIP Conference Proceedings, 2006, .	0.4	0
68	Visualization of grid-generated turbulence in He II using PTV. IOP Conference Series: Materials Science and Engineering, 2017, 278, 012081.	0.6	0
69	An experimental setup for creating and imaging $^4\text{He}_2^*$ excimer cluster tracers in superfluid helium-4 via neutron- $^3\text{He}$ absorption reaction. Review of Scientific Instruments, 2020, 91, 033318.	1.3	0
70	Proof-of-principle Experiment of $^4\text{He}$ Excimer Cluster Generation via Neutron- $^3\text{He}$ Absorption Reaction for Visualization of Velocity Fields in Superfluid $^4\text{He}$ . Hamon, 2020, 30, 192-196.	0.0	0