

William Halperin

List of Publications by Year in descending order

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108
papers

2,583
citations

201674

27
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48
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112
all docs

112
docs citations

112
times ranked

1263
citing authors

#	ARTICLE	IF	CITATIONS
1	Effects of the Order Parameter Anisotropy on the Vortex Lattice in UPt ₃ . <i>Frontiers in Electronic Materials</i> , 2022, 2, .	3.1	1
2	Reversible ordering and disordering of the vortex lattice in $U\text{Pt}_3$. <i>Physical Review B</i> , 2022, 105, .	3.2	2
3	Electron-beam floating-zone refined UCoGe. <i>Physical Review Materials</i> , 2021, 5, .	2.4	1
4	Fingerprinting triangular-lattice antiferromagnet by excitation gaps. <i>Physical Review B</i> , 2021, 103, .	3.2	4
5	RKKY coupled local-moment magnetism in $\text{NaFe}_{1-x}\text{Cu}_x\text{As}$. <i>Physical Review B</i> , 2021, 104, .	3.2	1
6	Broken time-reversal symmetry in the topological superconductor UPt ₃ . <i>Nature Physics</i> , 2020, 16, 531-535.	16.7	41
7	Stripe antiferromagnetism and disorder in the Mott insulator $\text{NaFe}_1-x\text{Cu}_x\text{As}$. <i>Physical Review Letters</i> , 2020, 124, 025302.	3.2	6
8	Effect of Magnetic Impurities on Superfluid ^3He . <i>Journal of Low Temperature Physics</i> , 2019, 195, 358-364.	7.8	10
9	NMR Frequency Shifts and Phase Identification in Superfluid ^3He . <i>Journal of Low Temperature Physics</i> , 2019, 195, 358-364.	1.4	5
10	Toward the Mott state with magnetic cluster formation in heavily Cu-doped $\text{NaFe}_{1-x}\text{Cu}_x\text{As}$. <i>Physical Review B</i> , 2019, 99, .	3.2	5
11	Corrections to Higgs mode masses in superfluid He ³ from acoustic spectroscopy. <i>Physical Review B</i> , 2019, 99, .	3.2	4
12	Superfluid helium-3 in confined quarters. <i>Physics Today</i> , 2018, 71, 30-36.	0.3	10
13	Orbital-Flop Transition of Angular Momentum in a Topological Superfluid. <i>Physical Review Letters</i> , 2018, 121, 255303.	7.8	3
14	Location of the oxygen dopant in the high temperature superconductor $\text{HgBa}_2\text{CuO}_4$ from ¹⁹⁹ Hg NMR. <i>Physica C: Superconductivity and Its Applications</i> , 2018, 555, 24-27.	1.2	0
15	Eighty years of superfluidity. <i>Nature</i> , 2018, 553, 413-414.	27.8	3
16	Magnetic-field-induced vortex-lattice transition in $\text{HgBa}_2\text{CuO}_4$. <i>Physical Review B</i> , 2017, 95, .	3.2	2
17	Coherent charge and spin density waves in underdoped $\text{HgBa}_2\text{CuO}_4$. <i>New Journal of Physics</i> , 2017, 19, 033024.	2.9	6
18	Recent Progress and New Challenges in Quantum Fluids and Solids. <i>Journal of Low Temperature Physics</i> , 2017, 189, 1-14.	1.4	8

#	ARTICLE	IF	CITATIONS
19	Spin susceptibility of the topological superconductor $U\text{Pt}_3$ from polarized neutron diffraction. <i>Physical Review B</i> , 2017, 96, .	3.2	6
20	Caught speeding. <i>Nature Physics</i> , 2016, 12, 993-993.	16.7	0
21	Persistence of slow fluctuations in the overdoped regime of Ba_2As_2 . <i>Physical Review B</i> , 2016, 93, .		
22	Crystallization of He_4 in aerogel via mass flow from surrounding solid He_4 . <i>Physical Review B</i> , 2016, 94, .	3.2	7
23	Anisotropic Phases of Superfluid He_3 in Compressed Aerogel. <i>Physical Review Letters</i> , 2015, 114, 105302.	7.8	11
24	Nodal gap structure and order parameter symmetry of the unconventional superconductor $U\text{Pt}_3$. <i>New Journal of Physics</i> , 2015, 17, 023041.	2.9	21
25	Dissipation signatures of the normal and superfluid phases in torsion pendulum experiments with He_3 in aerogel. <i>Physical Review B</i> , 2014, 89, .	3.2	4
26	Enhanced self-diffusion of adsorbed methanol in silica aerogel. <i>Physical Review B</i> , 2014, 90, .	3.2	5
27	Stability of Superfluid He_3 in Compressed Aerogel. <i>Physical Review Letters</i> , 2014, 112, 115303.	7.8	12
28	Orientation of the Angular Momentum in Superfluid $^3\text{He-A}$ in a Stretched Aerogel. <i>Journal of Low Temperature Physics</i> , 2014, 175, 31-36.	1.4	10
29	Observation of broken time-reversal symmetry in the heavy-fermion superconductor $U\text{Pt}_3$. <i>Science</i> , 2014, 345, 190-193.	12.6	177
30	The impact of helium shortages on basic research. <i>Nature Physics</i> , 2014, 10, 467-470.	16.7	27
31	Anisotropy of Silica Aerogels Induced by Small Strain. <i>Journal of Low Temperature Physics</i> , 2013, 171, 745-749.	1.4	10
32	Zeeman Splitting and Nonlinear Field-Dependence in Superfluid ^3He . <i>Journal of Low Temperature Physics</i> , 2013, 171, 214-219.	1.4	14
33	The superfluid glass phase of $^3\text{He-A}$. <i>Nature Physics</i> , 2013, 9, 775-779.	16.7	31
34	Microscopic coexistence of a two-component incommensurate spin density wave with superconductivity in underdoped NaFeCo_2 . <i>Physical Review B</i> , 2013, 87, .	3.2	10
35	Nonlinear field dependence and f-wave interactions in superfluid ^3He . <i>Physical Review B</i> , 2013, 87, .	3.2	4
36	Spin pairing and penetration depth measurements from nuclear magnetic resonance in $\text{NaFe}_0.975\text{Co}_0.025\text{As}$. <i>Physical Review B</i> , 2013, 87, .	3.2	10

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37		3.2 16
38	Absence of Static Loop-Current Magnetism at the Apical Oxygen Site in $\text{HgBa}_2\text{CuO}_4$ from NMR. Physical Review Letters, 2013, 111, 187003.	7.8 38
39	Charge-Induced Vortex Lattice Relaxation in the s State of Ba	3.2 4
40	Pressure Dependence of the Longitudinal Resonance Frequency of ^3He Superfluid Phases in Aerogel. Journal of Physics: Conference Series, 2012, 400, 012039.	0.4 2
41	New chiral phases of superfluid ^3He stabilized by anisotropic silica aerogel. Nature Physics, 2012, 8, 317-320.	16.7 40
42	Modification of the ^3He Phase Diagram by Anisotropic Disorder. Physical Review Letters, 2011, 107, 235504.	7.8 12
43	Charge-induced vortex lattice instability. Nature Physics, 2011, 7, 125-128.	16.7 7
44	Mass Coupling and $Q \sim 1$ of Impurity-Limited Normal ^3He in Si Torsion Pendulum. Journal of Low Temperature Physics, 2011, 162, 174-181.	1.4 2
45	Nuclear magnetic resonance studies of vortices in high temperature superconductors. Frontiers of Physics, 2011, 6, 450-462.	5.0 4
46	Nanoparticle-Loaded Aerogels and Layered Aerogels Cast from Sol-Gel Mixtures. Small, 2011, 7, 2568-2572.	10.0 10
47	Nanoparticle-Aerogel Composites: Nanoparticle-Loaded Aerogels and Layered Aerogels Cast from Sol-Gel Mixtures (Small 18/2011). Small, 2011, 7, 2542-2542.	10.0 0
48	Identification of Superfluid Phases of ^3He in Uniformly Isotropic 98.2% Aerogel. Physical Review Letters, 2011, 107, 195301.	7.8 23
49	Spin-Density Wave near the Vortex Cores in the High-Temperature Superconductor Sr_2RuO_4	7.4 4
50	Pressure Dependence of the Longitudinal Resonance Frequency of ^3He Superfluid Phases in Aerogel. Journal of Physics: Conference Series, 2012, 400, 012039.	0.4 2

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55	Low temperature thermal resistance for a new design of silver sinter heat exchanger. Journal of Physics: Conference Series, 2009, 150, 012037.	0.4	7
56	High Frequency Sound in Superfluid 3He-B. Journal of Low Temperature Physics, 2008, 153, 1-14.	1.4	6
57	Discovery of an excited pair state in superfluid 3He. Nature Physics, 2008, 4, 571-575.	16.7	19
58	Magneto-resistance of UPt3. New Journal of Physics, 2008, 10, 043006.	2.9	1
59	Anomalous Attenuation of Transverse Sound in ^3He Evidence for intrinsic impurities in the high-temperature superconductor $\text{Bi}_2\text{Sr}_2\text{CaCu}_2\text{O}_{8-x}$. Physical Review Letters, 2008, 101, 085301.	7.8	30
60	Stability of the axial phase of superfluid ^3He in aerogel with globally anisotropic Magnetoacoustic Spectroscopy in Superfluid ^3He . Physical Review Letters, 2008, 100, 015301.	3.2	11
61	Impurity Effects of Aerogel in Superfluid ^3He . Journal of the Physical Society of Japan, 2008, 77, 111002.	3.2	7
62	Strong coupling corrections to the Ginzburg-Landau theory of superfluid ^3He . Physical Review B, 2007, 75, .	7.8	12
63	Two-dimensional vortices in superconductors. Nature Physics, 2007, 3, 239-242.	16.7	39
64	Imaginary Squashing Mode Spectroscopy of Helium Three B. Journal of Low Temperature Physics, 2007, 148, 501-505.	1.4	0
65	Analysis of Strong-Coupling Parameters for Superfluid 3He. Journal of Low Temperature Physics, 2007, 148, 507-511.	1.4	0
66	Anisotropic Aerogels for Studying Superfluid 3He. Journal of Low Temperature Physics, 2007, 148, 579-583.	1.4	2
67	Magneto-resistance of UPt3. Journal of Low Temperature Physics, 2007, 148, 863-867.	1.4	2
68	Acoustic Spectroscopy of Superfluid 3He in Aerogel. AIP Conference Proceedings, 2006, .	0.4	3
69	Compressed Silica Aerogels for the Study of Superfluid 3He. AIP Conference Proceedings, 2006, .	0.4	1
70	Anisotropy and penetration depth of MgB2 from ^{11}B NMR. New Journal of Physics, 2006, 8, 274-274.	2.9	4

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73	Surface Specific Heat of He ³ and Andreev Bound States. Physical Review Letters, 2006, 96, 125301.	7.8	44
74	Collective Modes and f-Wave Pairing Interactions in Superfluid He ³ . Physical Review Letters, 2006, 97, 115301.	7.8	15
75	A ¹ and A ² transitions of superfluid He ³ in aerogel and the effect of anisotropic scattering. Physical Review B, 2005, 72, .	3.2	35
76	Specific Heat of Disordered Superfluid He ³ . Physical Review Letters, 2004, 93, 145301.	7.8	22
77	A ¹ and A ² Transitions in Superfluid He ³ in 98% Porosity Aerogel. Physical Review Letters, 2004, 93, 145302.	7.8	22
78	Impurity phases of superfluid in aerogel. Physica B: Condensed Matter, 2003, 329-333, 288-291.	2.7	6
79	Alkali ion "cryptand" interactions and their effects on electrolyte conductivity. Physical Chemistry Chemical Physics, 2003, 5, 2072-2081.	2.8	2
80	Antiferromagnetism in the vortex cores of YBa ₂ Cu ₃ O _{7-δ} . Physical Review B, 2003, 67, .	3.2	39
81	Nucleation and Interfacial Coupling between Pure and Dirty Superfluid Phases of ³ He. Physical Review Letters, 2002, 88, 045505.	7.8	16
82	Pseudogap in YBa ₂ Cu ₃ O _{7-δ} from NMR in high magnetic fields. Physical Review B, 2002, 66, .	3.2	12
83	Phase diagram of the superfluid phases of ³ He in 98% aerogel. Physical Review B, 2002, 66, .	3.2	38
84	Acoustics of a "Dirty" Fermi Liquid: ³ He in Aerogel. Journal of Low Temperature Physics, 2001, 122, 1-10.	1.4	12
85	Spatially resolved electronic structure inside and outside the vortex cores of a high-temperature superconductor. Nature, 2001, 413, 501-504.	27.8	172
86	Modification of the Superfluid ³ He Phase Diagram by Impurity Scattering. Physical Review Letters, 2001, 87, 035701.	7.8	38
87	Progressive saturation NMR relaxation. Physical Review B, 2001, 64, .	3.2	17
88	High-Frequency Acoustics of ³ He in Aerogel. Physical Review Letters, 2000, 85, 4325-4328.	7.8	26
89	Anisotropic dc Magnetization of Superconducting UPt ₃ and Antiferromagnetic Ordering Below 20 mK. Physical Review Letters, 1999, 82, 2378-2381.	7.8	28
90	Discovery of the acoustic Faraday effect in superfluid ³ He-B. Nature, 1999, 400, 431-433.	27.8	54

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91	High-Field Vortex Dynamics in $\text{YBa}_2\text{Cu}_3\text{O}_7$ from ^1H Nuclear Magnetic Resonance. <i>Physical Review Letters</i> , 1998, 80, 1726-1729.	7.8	23
92	Suppression of superconductivity in UPt_3 single crystals. <i>Physical Review B</i> , 1998, 58, R603-R606.	3.2	31
93	Vortex melting in polycrystalline $\text{YBa}_2\text{Cu}_3\text{O}_7$ from ^1H NMR. <i>Physical Review B</i> , 1997, 55, R14737-R14740.	3.2	27
94	High resolution sound velocity measurement in liquid ^3He using path length modulation technique. <i>European Physical Journal D</i> , 1996, 46, 59-60.	0.4	0
95	High frequency acoustic measurements in liquid ^3He near the transition temperature. <i>Journal of Low Temperature Physics</i> , 1996, 103, 265-272.	1.4	7
96	Nonlinear Spin Dynamics and Magnetic Field Distortion of the Superfluid ^3He -B Order Parameter. <i>Physical Review Letters</i> , 1996, 77, 1314-1317.	7.8	51
97	Effect of Magnetic Scattering on the ^3He Superfluid State in Aerogel. <i>Physical Review Letters</i> , 1996, 77, 4568-4571.	7.8	108
98	Pore Structure Evolution and State of Pore Water in Hydrating Cement Paste at Cryogenic Temperatures. , 1996, , 600.		1
99	Homogeneous Equal-Spin Pairing Superfluid State of ^3He in Aerogel. <i>Physical Review Letters</i> , 1995, 75, 661-664.	7.8	202
100	Thallium magnetic resonance in superconducting $\text{Tl}_2\text{Ba}_2\text{Ca}_2\text{Cu}_3\text{O}_{10+\delta}$. <i>Physical Review B</i> , 1989, 40, 817-820.	3.2	17
101	Internal Structure of Porous Silica: A Model System for Characterization by Nuclear Magnetic Resonance. <i>Journal of the American Ceramic Society</i> , 1989, 72, 2126-2130.	3.8	31
102	Energy gap and Korringa constant in the high-temperature superconductor $\text{La}_{1.83}\text{Sr}_{0.17}\text{CuO}_4$ determined by NMR. <i>Physical Review B</i> , 1987, 36, 2378-2381.	3.2	23
103	NMR and Quantum Effects in Metal Particles. <i>Materials Research Society Symposia Proceedings</i> , 1987, 111, 79.	0.1	2
104	Collective modes in ^3He -B. <i>AIP Conference Proceedings</i> , 1983, , .	0.4	0
105	Measurements of High-Frequency Sound Propagation in ^3He -B. <i>Physical Review Letters</i> , 1980, 45, 266-269.	7.8	114
106	Properties of melting ^3He : Specific heat, entropy, latent heat, and temperature. <i>Journal of Low Temperature Physics</i> , 1978, 31, 617-698.	1.4	164
107	Observation of Nuclear Magnetic Order in Solid ^3He . <i>Physical Review Letters</i> , 1974, 32, 927-930.	7.8	153
108	The AB Transition in Superfluid ^3He . <i>Journal of Low Temperature Physics</i> , 0, , 1.	1.4	1