

Andreas Glatz

List of Publications by Year in descending order

Source: <https://exaly.com/author-pdf/3356782/publications.pdf>

Version: 2024-02-01

85
papers

1,309
citations

394421

19
h-index

395702

33
g-index

86
all docs

86
docs citations

86
times ranked

1335
citing authors

#	ARTICLE	IF	CITATIONS
1	Dynamical preparation of an atomic condensate in a Hofstadter band. <i>Physical Review A</i> , 2022, 105, .	2.5	1
2	Solving Large-Scale Linear Systems of Equations by a Quantum Hybrid Algorithm. <i>Annalen Der Physik</i> , 2022, 534, .	2.4	8
3	Magnetic circuit for Abrikosov vortices: Vortex motion in a periodic labyrinth of magnetic T and I-shaped elements under a superconducting film. <i>Journal of Magnetism and Magnetic Materials</i> , 2022, 557, 169476.	2.3	1
4	Challenges and transformative opportunities in superconductor vortex physics. <i>Journal of Applied Physics</i> , 2021, 130, .	2.5	18
5	Emergence and dynamics of unconfined self-organised vortices in active magnetic roller liquids. <i>Soft Matter</i> , 2021, 17, 10536-10544.	2.7	4
6	The Quest for High Critical Current in Applied High-Temperature Superconductors. <i>Journal of Superconductivity and Novel Magnetism</i> , 2020, 33, 127-141.	1.8	15
7	Analysis of the ghost and mirror fields in the Nernst signal induced by superconducting fluctuations. <i>Physical Review B</i> , 2020, 102, .	3.2	2
8	Asymmetric crossing of the attractive and repulsive magnetic potential by Abrikosov vortices. <i>Physical Review B</i> , 2020, 102, .	3.2	3
9	Instabilities of the normal state in current-biased narrow superconducting strips. <i>Physical Review B</i> , 2020, 101, .	3.2	2
10	Realization of the Werner-Holevo and Landau-Streater Quantum Channels for Qutrits on Quantum Computers. <i>Journal of Russian Laser Research</i> , 2020, 41, 40-53.	0.6	2
11	Emergence of self-organized multivortex states in flocks of active rollers. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2020, 117, 9706-9711.	7.1	46
12	Edge effect pinning in mesoscopic superconducting strips with non-uniform distribution of defects. <i>Scientific Reports</i> , 2019, 9, 211.	3.3	12
13	Targeted evolution of pinning landscapes for large superconducting critical currents. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2019, 116, 10291-10296.	7.1	20
14	Extensions and analysis of worst-case parameter in weighted Jacobi's method for solving second order implicit PDEs. <i>Results in Applied Mathematics</i> , 2019, 1, 100003.	1.3	2
15	Fluctuation spectroscopy: From Rayleigh-Jeans waves to Abrikosov vortex clusters. <i>Reviews of Modern Physics</i> , 2018, 90, .	45.6	44
16	The physics of baking good pizza. <i>Physics Education</i> , 2018, 53, 065011.	0.5	4
17	Peak effect due to competing vortex ground states in superconductors with large inclusions. <i>Physical Review B</i> , 2018, 98, .	3.2	13
18	Strong-pinning regimes by spherical inclusions in anisotropic type-II superconductors. <i>Superconductor Science and Technology</i> , 2018, 31, 014001.	3.5	35

#	ARTICLE	IF	CITATIONS
19	Phase slips in superconducting weak links. Physical Review B, 2017, 95, .	3.2	7
20	Effect of hexagonal patterned arrays and defect geometry on the critical current of superconducting films. Physical Review B, 2017, 95, .	3.2	31
21	Parallel magnetic field suppresses dissipation in superconducting nanostrips. Proceedings of the National Academy of Sciences of the United States of America, 2017, 114, E10274-E10280.	7.1	20
22	Direct Lattice Shaking of Bose Condensates: Finite Momentum Superfluids. Physical Review Letters, 2017, 118, 220401.	7.8	6
23	<i>in silico</i> optimization of critical currents in superconductors. Physical Review E, 2017, 96, 013318.	2.1	13
24	In situ magnetic flux vortex visualization in time-dependent Ginzburg-Landau superconductor simulations. , 2017, , .		7
25	Toward Superconducting Critical Current by Design. Advanced Materials, 2016, 28, 4593-4600.	21.0	53
26	Geometrical vortex lattice pinning and melting in YBaCuO submicron bridges. Scientific Reports, 2016, 6, 38677.	3.3	14
27	Large spin-orbit coupling and helical spin textures in 2D heterostructure [Pb2BiS3][AuTe2]. Scientific Reports, 2016, 6, 35313.	3.3	11
28	Vortex cutting in superconductors. Physical Review B, 2016, 94, .	3.2	14
29	Vortices in high-performance high-temperature superconductors. Reports on Progress in Physics, 2016, 79, 116501.	20.1	157
30	Simulation of the Vortex Dynamics in a Real Pinning Landscape of YBaCuO Physical Review Applied, 2016, 5, .	3.2	17
31	Optimization of vortex pinning by nanoparticles using simulations of the time-dependent Ginzburg-Landau model. Physical Review B, 2016, 93, .	3.2	41
32	Tracking vortices in superconductors: Extracting singularities from a discretized complex scalar field evolving in time. Physical Review E, 2016, 93, 023305.	2.1	2
33	Extracting, Tracking, and Visualizing Magnetic Flux Vortices in 3D Complex-Valued Superconductor Simulation Data. IEEE Transactions on Visualization and Computer Graphics, 2016, 22, 827-836.	4.4	10
34	Anisotropic superconductors in tilted magnetic fields. Physical Review B, 2015, 91, .	3.2	9
35	Effect of fluctuations on the NMR relaxation beyond the Abrikosov vortex state. Physical Review B, 2015, 92, .	3.2	1
36	Flux cutting in high- T_c superconductors. Physical Review B, 2015, 91, .	3.2	17

#	ARTICLE	IF	CITATIONS
37	Detecting vortices in superconductors: Extracting one-dimensional topological singularities from a discretized complex scalar field. <i>Physical Review E</i> , 2015, 91, 023311.	2.1	10
38	Stable large-scale solver for Ginzburg-Landau equations for superconductors. <i>Journal of Computational Physics</i> , 2015, 294, 639-654.	3.8	62
39	Generic equilibration dynamics of planar defects in trapped atomic superfluids. <i>Physical Review A</i> , 2015, 91, .	2.5	3
40	Dirac fermions and superconductivity in the homologous structures		

#	ARTICLE	IF	CITATIONS
55	Nucleation of spontaneous vortices in trapped Fermi gases undergoing a BCS-BEC crossover. Physical Review B, 2011, 84, .	3.2	9
56	Resonant Andreev transmission in two-dimensional array of SNS junctions. Physica C: Superconductivity and Its Applications, 2010, 470, S810-S812.	1.2	1
57	Model for dynamic self-assembled magnetic surface structures. Physical Review E, 2010, 82, 015301.	2.1	29
58	Heating effects in a chain of quantum dots. Physical Review B, 2010, 82, .	3.2	6
59	Single grain heating due to inelastic cotunneling. Physical Review B, 2010, 81, .	3.2	10
60	Statistics of the subgap states of $\langle \text{mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"} \rangle \langle \text{mml:mrow} \rangle \langle \text{mml:msub} \rangle \langle \text{mml:mi} \rangle s \langle \text{mml:mi} \rangle \langle \text{mml:mo} \rangle A_{\pm} \langle \text{mml:mo} \rangle \langle \text{mml:mrow} \rangle \langle \text{mml:math} \rangle$ superconducting junctions. Physical Review B, 2010, 82, .	3.2	21
61	SurretÅal.Reply:. Physical Review Letters, 2010, 105, .	7.8	1
62	Synchronized Andreev transmission in SNS junction arrays. Physical Review B, 2010, 82, .	3.2	6
63	Thermoelectric performance of granular semiconductors. Physical Review B, 2009, 80, .	3.2	16
64	Thermoelectric properties of granular metals. Physical Review B, 2009, 79, .	3.2	17
65	Thermoelectric performance of weakly coupled granular materials. Europhysics Letters, 2009, 87, 57009.	2.0	9
66	Thermoelectric and Seebeck coefficients of granular metals. Physical Review B, 2009, 79, .	3.2	11
67	Giant magnetoresistance in nanogranular magnets. Europhysics Letters, 2008, 82, 47002.	2.0	4
68	The Coulomb gap and low energy statistics for Coulomb glasses. Journal of Statistical Mechanics: Theory and Experiment, 2008, 2008, P06006.	2.3	12
69	Publisher's Note: Transport properties of semiconducting nanocrystal arrays at low temperatures [Phys. Rev. B75, 052302 (2007)]. Physical Review B, 2007, 75, .	3.2	1
70	Electron Transport in Nanogranular Ferromagnets. Physical Review Letters, 2007, 99, 066602.	7.8	27
71	Statistics of Deep Energy States in Coulomb Glasses. Physical Review Letters, 2007, 98, 196401.	7.8	14
72	Transport properties of semiconducting nanocrystal arrays at low temperatures. Physical Review B, 2007, 75, .	3.2	13

#	ARTICLE	IF	CITATIONS
73	Frequency-temperature crossover in the conductivity of disordered Luttinger liquids. Physical Review B, 2007, 76, .	3.2	4
74	Thermal Fluctuations in One-Dimensional Disordered Quantum Systems. , 2006, , 91-117.		0
75	1/ f noise in a one-dimensional charge density wave system. Europhysics Letters, 2004, 66, 385-391.	2.0	0
76	Displacement Profile of Charge Density Waves and Domain Walls at Critical Depinning. Physical Review Letters, 2004, 92, 257205.	7.8	1
77	Models for the magnetic ac susceptibility of granular superferromagnetic CoFe \hat{e} •Al ₂ O ₃ . Physical Review B, 2004, 70, .	3.2	41
78	Influence of thermal fluctuations on quantum phase transitions in one-dimensional disordered systems: Charge density waves and Luttinger liquids. Physical Review B, 2004, 69, .	3.2	7
79	Superferromagnetic domain state dynamics in discontinuous CoFe/Al ₂ O ₃ multilayers. Journal of Magnetism and Magnetic Materials, 2004, 272-276, E1201-E1203.	2.3	2
80	Search for flicker noise in one-dimensional charge density wave systems. , 2004, , .		0
81	Domain Wall Depinning in Random Media by ac Fields. Physical Review Letters, 2003, 90, 047201.	7.8	43
82	One-Dimensional Disordered Density Waves and Superfluids: The Role of Quantum Phase Slips and Thermal Fluctuations. Physical Review Letters, 2002, 88, 256401.	7.8	12
83	Quantum phase slips and thermal fluctuations in one-dimensional disordered density waves. European Physical Journal Special Topics, 2002, 12, 123-126.	0.2	0
84	Domain walls in random media driven by AC fields. European Physical Journal Special Topics, 2002, 12, 275-275.	0.2	0
85	Collective dynamics of one-dimensional charge density waves. Physical Review B, 2001, 64, .	3.2	4