Hao Guo

List of Publications by Year
in descending order

48 papers	536 citations	687363 13 h-index	677142 22 g-index
49 all docs	49 docs citations	49 times ranked	309 citing authors

#	Article	IF	Citations
1	BCS-BEC crossover of atomic Fermi superfluid in a spherical bubble trap. Physical Review A, 2022, 105, .	2.5	5
2	Machine learning of the XY model on a spherical Fibonacci lattice. Physical Review Research, 2022, 4, .	3.6	2
3	Metamorphic dynamical quantum phase transition in double-quench processes at finite temperatures. Physical Review B, 2022, 106, .	3.2	4
4	Fate of Majorana zero modes, exact location of critical states, and unconventional real-complex transition in non-Hermitian quasiperiodic lattices. Physical Review B, 2021, 103, .	3.2	32
5	Finite-temperature topological phase transitions of spin-j systems in Uhlmann processes: General formalism and experimental protocols. Physical Review A, 2021, 104, .	2.5	9
6	Generalized Aubry-André self-duality and mobility edges in non-Hermitian quasiperiodic lattices. Physical Review B, 2020, 102, .	3.2	73
7	Ubiquity of zeros of the Loschmidt amplitude for mixed states in different physical processes and its implication. Physical Review B, 2020, 102, .	3.2	15
8	Dynamic process and Uhlmann process: Incompatibility and dynamic phase of mixed quantum states. Physical Review B, 2020, 101, .	3.2	8
9	Thermostatistics of a q -deformed relativistic ideal Fermi gas. Journal of Statistical Mechanics: Theory and Experiment, 2020, 2020, 113402.	2.3	3
10	Finite temperature behaviors of q-deformed Fermi gases. Modern Physics Letters B, 2019, 33, 1950294.	1.9	2
11	Dynamical quantum phase transitions on cross-stitch flat band networks. Physical Review B, 2019, 99, .	3.2	6
12	Dynamic density structure factor of a unitary Fermi gas at finite temperature. Journal of Physics Communications, 2018, 2, 045008.	1.2	1
13	*q*-deformed fermion in many-particle systems and its application to BCS theory. Journal of Statistical Mechanics: Theory and Experiment, 2018, 2018, 123101.	2.3	5
14	BCS thermal vacuum of fermionic superfluids and its perturbation theory. Scientific Reports, 2018, 8, 11995.	3.3	0
15	Topological phase transition in the quasiperiodic disordered Su–Schrffer–Heeger chain. Physics Letters, Section A: General, Atomic and Solid State Physics, 2018, 382, 3287-3292.	2.1	19
16	Mobility edges in off-diagonal disordered tight-binding models. Physical Review B, 2018, 98, .	3.2	12
17	Thermal Uhlmann-Chern number from the Uhlmann connection for extracting topological properties of mixed states. Physical Review B, 2018, 97, .	3.2	13
18	Shear Viscosity of Uniform Fermi Gases with Population Imbalance. Scientific Reports, 2018, 8, 3981.	3.3	3

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19	Screening masses of photons interacting with a two-species fermionic system in relativistic BCS–BEC crossover. International Journal of Modern Physics B, 2017, 31, 1750078.	2.0	0
20	Establishing gauge invariant linear response of fermionic superfluids with pair fluctuations: A diagrammatic approach. Physics Letters, Section A: General, Atomic and Solid State Physics, 2017, 381, 1603-1610.	2.1	2
21	Berry phase, entanglement entropy, and algebraic properties of ground states of BCS and BEC superfluids. Physics Letters, Section A: General, Atomic and Solid State Physics, 2017, 381, 351-361.	2.1	3
22	Localization and mobility edges in the off-diagonal quasiperiodic model with slowly varying potentials. Physics Letters, Section A: General, Atomic and Solid State Physics, 2017, 381, 3683-3687.	2.1	14
23	Relation connecting thermodynamics and transport of atomic unitary Fermi superfluids. Physical Review A, 2017, 95, .	2.5	2
24	The boundary effects of transverse field Ising model. Journal of Statistical Mechanics: Theory and Experiment, 2017, 2017, 093101.	2.3	12
25	Fate of topological states and mobility edges in one-dimensional slowly varying incommensurate potentials. Physical Review B, 2017, 96, .	3.2	8
26	Conservation of energy–momentum tensor in fermionic superfluid phase: Effects of $U(1)$ broken symmetry. Physics Letters, Section A: General, Atomic and Solid State Physics, 2016, 380, 2430-2436.	2.1	1
27	Theoretical Approach to the Gauge Invariant Linear Response Theories for Ultracold Fermi Gases with Pseudogap. Advances in Condensed Matter Physics, 2015, 2015, 1-9.	1.1	0
28	Density and spin linear response of atomic Fermi superfluids with population imbalance in the BCS–BEC crossover. Journal of Physics B: Atomic, Molecular and Optical Physics, 2014, 47, 085302.	1.5	4
29	Topological defect with nonzero Hopf invariant in Yang–Mills–Higgs model. Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics, 2014, 739, 83-89.	4.1	2
30	Shear viscosity and imperfect fluidity in bosonic and fermionic superfluids. Physical Review B, 2014, 90, .	3.2	1
31	Carrier-envelope phase control electron transport in an asymmetric double quantum dot irradiated by a few-cycle pulse. Optics Communications, 2014, 328, 96-101.	2.1	6
32	Exotic phase separation and phase diagrams of a Fermi-Fermi mixture in a trap at finite temperature. Physical Review A, 2013, 87, .	2.5	11
33	Theories of Linear Response in BCS Superfluids and How They Meet Fundamental Constraints. Journal of Low Temperature Physics, 2013, 172, 5-46.	1.4	18
34	FUNDAMENTAL CONSTRAINTS ON LINEAR RESPONSE THEORIES OF FERMI SUPERFLUIDS ABOVE AND BELOW T_c. International Journal of Modern Physics B, 2013, 27, 1330010.	2.0	4
35	Compressibility in strongly correlated superconductors and superfluids: From the BCS regime to Bose-Einstein condensates. Physical Review A, 2013, 88, .	2.5	9
36	Two-component optical conductivity in the cuprates: A necessary consequence of preformed pairs. Physical Review B, 2012, 86, .	3.2	6

#	ARTICLE	IF	CITATIONS
37	Efficiency and its bounds for a quantum Einstein engine at maximum power. Physical Review E, 2012, 86, 051135.	2.1	10
38	Comment on "Density and Spin Response of a Strongly Interacting Fermi Gas in the Attractive and Quasirepulsive Regime". Physical Review Letters, 2012, 109, 118901; author reply 118902.	7.8	2
39	Efficiency and its bounds for thermal engines at maximum power using Newton's law of cooling. Physical Review E, 2012, 85, 011146.	2.1	20
40	Gauge-invariant linear response theory of relativistic Bardeen-Cooper-Schrieffer superfluids. Physical Review D, 2012, 85, .	4.7	5
41	Microscopic Approach to Shear Viscosities of Unitary Fermi Gases above and below the Superfluid Transition. Physical Review Letters, 2011, 107, 020403.	7.8	29
42	Perfect fluids and bad metals: insights from ultracold Fermi gases. New Journal of Physics, 2011, 13, 075011.	2.9	29
43	Spin transport in cold Fermi gases: A pseudogap interpretation of spin diffusion experiments at unitarity. Physical Review A, 2011, 83, .	2.5	16
44	Conductivity in pseudogapped superconductors: A sum-rule-consistent preformed-pair scenario. Physical Review B, 2011, 84, .	3.2	8
45	Establishing the Presence of Coherence in Atomic Fermi Superfluids: Spin-Flip and Spin-Preserving Bragg Scattering at Finite Temperatures. Physical Review Letters, 2010, 105, 120401.	7.8	33
46	Comparative study of BCS-BEC crossover theories above T_c: The nature of the pseudogap in ultracold atomic Fermi gases. Physical Review A, 2010, 81, .	2.5	42
47	Finite-temperature behavior of an interspecies fermionic superfluid with population imbalance. Physical Review A, 2009, 80, .	2.5	16
48	Relativistic BCS–BEC crossover of a two-species Fermi gas with number density asymmetry at zero temperature. Nuclear Physics A, 2009, 823, 83-98.	1.5	11