AndrÃ© Eckardt

List of Publications by Year
in descending order

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Version: 2024-02-01

69 papers	5,410 citations	172457 29 h-index	95266 68 g-index
69 all docs	69 docs citations	69 times ranked	2878 citing authors

#	Article	IF	Citations
1	Measurable signatures of bosonic fractional Chern insulator states and their fractional excitations in a quantum-gas microscope. SciPost Physics, 2022, 12, .	4.9	8
2	Cooling and state preparation in an optical lattice via Markovian feedback control. Physical Review Research, 2022, 4, .	3.6	7
3	Robust and ultrafast state preparation by ramping artificial gauge potentials. New Journal of Physics, 2021, 23, 063017.	2.9	5
4	Lindbladian approximation beyond ultraweak coupling. Physical Review E, 2021, 104, 014110.	2.1	14
5	Floquet chiral hinge modes and their interplay with Weyl physics in a three-dimensional lattice. Physical Review B, 2021, 104, .	3.2	5
6	High-frequency expansions for time-periodic Lindblad generators. Physical Review B, 2021, 104, .	3.2	14
7	Nonequilibrium mode competition in a pumped dye-filled cavity. Physical Review A, 2021, 104, .	2.5	1
8	Prethermal memory loss in interacting quantum systems coupled to thermal baths. Physical Review B, 2020, 101, .	3.2	5
9	Is there a Floquet Lindbladian?. Physical Review B, 2020, 101, .	3.2	25
10	Realization of an anomalous Floquet topological system with ultracold atoms. Nature Physics, 2020, 16, 1058-1063.	16.7	163
11	Design and characterization of a quantum heat pump in a driven quantum gas. Physical Review E, 2020, 101, 042109.	2.1	1
12	Optimal frequency window for Floquet engineering in optical lattices. Physical Review Research, 2020, 2, .	3.6	13
13	Bath-Induced Decay of Stark Many-Body Localization. Physical Review Letters, 2019, 123, 030602.	7.8	23
14	How to Directly Measure Floquet Topological Invariants in Optical Lattices. Physical Review Letters, 2019, 122, 253601.	7.8	24
15	Quantifying and Controlling Prethermal Nonergodicity in Interacting Floquet Matter. Physical Review X, 2019, 9, .	8.9	36
16	Describing many-body localized systems in thermal environments. New Journal of Physics, 2019, 21, 063026.	2.9	15
17	Measuring topology from dynamics by obtaining the Chern number from a linking number. Nature Communications, 2019, 10, 1728.	12.8	130
18	Phasonic Spectroscopy of a Quantum Gas in a Quasicrystalline Lattice. Physical Review Letters, 2019, 123, 223201.	7.8	16

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19	Hopf characterization of two-dimensional Floquet topological insulators. Physical Review Research, 2019, 1, .	3.6	43
20	Controlled two-mode emission from the interplay of driving and thermalization in a dye-filled photonic cavity. Physical Review Research, 2019, 1, .	3.6	5
21	On the number of Bose-selected modes in driven-dissipative ideal Bose gases. Physical Review E, 2018, 97, 032136.	2.1	11
22	Creating, probing, and manipulating fractionally charged excitations of fractional Chern insulators in optical lattices. Physical Review A, 2018, 98, .	2.5	35
23	Measuring the Single-Particle Density Matrix for Fermions and Hard-Core Bosons in an Optical Lattice. Physical Review Letters, 2018, 121, 260401.	7.8	20
24	Charge density wave and charge pump of interacting fermions in circularly shaken hexagonal optical lattices. Physical Review A, 2018, 98, .	2.5	15
25	Unified theory for excited-state, fragmented, and equilibriumlike Bose condensation in pumped photonic many-body systems. Physical Review A, 2018, 97, .	2.5	4
26	Floquet Engineering of Optical Solenoids and Quantized Charge Pumping along Tailored Paths in Two-Dimensional Chern Insulators. Physical Review Letters, 2018, 120, 243602.	7.8	27
27	Colloquium: Atomic quantum gases in periodically driven optical lattices. Reviews of Modern Physics, 2017, 89, .	45.6	737
28	High-Temperature Nonequilibrium Bose Condensation Induced by a Hot Needle. Physical Review Letters, 2017, 119, 140602.	7.8	12
29	Pump-Power-Driven Mode Switching in a Microcavity Device and Its Relation to Bose-Einstein Condensation. Physical Review X, 2017, 7, .	8.9	18
30	Interaction Dependent Heating and Atom Loss in a Periodically Driven Optical Lattice. Physical Review Letters, 2017, 119, 200402.	7.8	73
31	Mode switching in bimodal microcavities and its connection to Bose condensation. , 2017, , .		0
32	Semisynthetic zigzag optical lattice for ultracold bosons. Physical Review A, 2016, 94, .	2.5	51
33	Interband Heating Processes in a Periodically Driven Optical Lattice. Zeitschrift Fur Naturforschung - Section A Journal of Physical Sciences, 2016, 71, 909-920.	1.5	20
34	Modified interactions in a Floquet topological system on a square lattice and their impact on a bosonic fractional Chern insulator state. Physical Review A, 2016, 93, .	2.5	17
35	Floquet Realization and Signatures of One-Dimensional Anyons in an Optical Lattice. Physical Review Letters, 2016, 117, 205303.	7.8	66
36	Multiphoton interband excitations of quantum gases in driven optical lattices. Physical Review A, 2015, 92, .	2.5	65

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37	Role of real-space micromotion for bosonic and fermionic Floquet fractional Chern insulators. Physical Review B, 2015, 91, .	3.2	43
38	Nonequilibrium steady states of ideal bosonic and fermionic quantum gases. Physical Review E, 2015, 92, 062119.	2.1	29
39	High-frequency approximation for periodically driven quantum systems from a Floquet-space perspective. New Journal of Physics, 2015, 17, 093039.	2.9	422
40	Orbital-driven melting of a bosonic Mott insulator in a shaken optical lattice. Physical Review A, 2015, 91, .	2.5	14
41	Relaxation Dynamics of an Isolated Large-Spin Fermi Gas Far from Equilibrium. Physical Review X, 2014, 4, .	8.9	10
42	Giant Spin Oscillations in an Ultracold Fermi Sea. Science, 2014, 343, 157-160.	12.6	46
43	Tomography of Band Insulators from Quench Dynamics. Physical Review Letters, 2014, 113, 045303.	7.8	102
44	Engineering Ising-XY spin-models in a triangular lattice using tunable artificial gauge fields. Nature Physics, 2013, 9, 738-743.	16.7	286
45	Generalized Bose-Einstein Condensation into Multiple States in Driven-Dissipative Systems. Physical Review Letters, 2013, 111, 240405.	7.8	80
46	Spontaneous Time-Reversal Symmetry Breaking for Spinless Fermions on a Triangular Lattice. Physical Review Letters, 2013, 110, 096405.	7.8	14
47	Engineering Spin Waves in a High-Spin Ultracold Fermi Gas. Physical Review Letters, 2013, 110, 250402.	7.8	20
48	Quantum crystal growing: adiabatic preparation of a bosonic antiferromagnet in the presence of a parabolic inhomogeneity. New Journal of Physics, 2013, 15, 033028.	2.9	6
49	Tunable gauge potential for spinless particles in driven lattices. EPJ Web of Conferences, 2013, 57, 01004.	0.3	1
50	Non-Abelian Gauge Fields and Topological Insulators in Shaken Optical Lattices. Physical Review Letters, 2012, 109, 145301.	7.8	287
51	Kilohertz-Driven Boseâ€“Einstein Condensates in Optical Lattices. Advances in Atomic, Molecular and Optical Physics, 2012, 61, 515-547.	2.3	45
52	Tunable Gauge Potential for Neutral and Spinless Particles in Driven Optical Lattices. Physical Review Letters, 2012, 108, 225304.	7.8	523
53	Spin segregation via dynamically induced long-range interactions in a system of ultracold fermions. Physical Review A, 2011, 84, .	2.5	11
54	Quantum Simulation of Frustrated Classical Magnetism in Triangular Optical Lattices. Science, 2011, 333, 996-999.	12.6	543

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55	Boseâ€“Hubbard model with occupation-dependent parameters. New Journal of Physics, 2011, 13, 023019.	2.9	50
56	Controlled hole doping of a Mott insulator of ultracold fermionic atoms. Physical Review A, 2010, 82, .	2.5	15
57	Frustrated quantum antiferromagnetism with ultracold bosons in a triangular lattice. Europhysics Letters, 2010, 89, 10010.	2.0	131
58	Process-chain approach to high-order perturbation calculus for quantum lattice models. Physical Review B, 2009, 79, .	3.2	25
59	Exploring dynamic localization with a Bose-Einstein condensate. Physical Review A, 2009, 79, .	2.5	180
60	Bose-Hubbard phase diagram with arbitrary integer filling. Physical Review B, 2009, 79, .	3.2	54
61	Process-chain approach to the Bose-Hubbard model: Ground-state properties and phase diagram. Physical Review B, 2009, 79, .	3.2	48
62	Avoided-Level-Crossing Spectroscopy with Dressed Matter Waves. Physical Review Letters, 2008, 101, 245302.	7.8	47
63	Dressed matter waves. Journal of Physics: Conference Series, 2008, 99, 012007.	0.4	17
64	AC-induced superfluidity. Europhysics Letters, 2007, 80, 50004.	2.0	58
65	Analog of Photon-Assisted Tunneling in a Bose-Einstein Condensate. Physical Review Letters, 2005, 95, 200401.	7.8	111
66	Superfluid-Insulator Transition in a Periodically Driven Optical Lattice. Physical Review Letters, 2005, 95, 260404.	7.8	446
67	Ground-state energy and depletions for a dilute binary Bose gas. Physical Review A, 2004, 70, .	2.5	15
68	Ground-state energy of a homogeneous Bose-Einstein condensate beyond Bogoliubov. Europhysics Letters, 2004, 68, 8-14.	2.0	2
69	Ground-State Energy of a Weakly Interacting Bose Gas: Calculation Without Regularization. Zeitschrift Fur Naturforschung - Section A Journal of Physical Sciences, 2004, 59, 1-13.	1.5	5