Monika Aidelsburger

List of Publications by Year
in descending order

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Version: 2024-02-01

43	5,989	257450	315739
papers	citations	24 h-index	38 g-index

47	47	47	3657
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Realization of the Hofstadter Hamiltonian with Ultracold Atoms in Optical Lattices. Physical Review Letters, 2013, 111, 185301.	7.8	1,102
2	Measuring the Chern number of Hofstadter bands with ultracold bosonic atoms. Nature Physics, 2015, 11, 162-166.	16.7	777
3	Direct measurement of the Zak phase in topological Bloch bands. Nature Physics, 2013, 9, 795-800.	16.7	751
4	Experimental Realization of Strong Effective Magnetic Fields in an Optical Lattice. Physical Review Letters, 2011, 107, 255301.	7.8	629
5	A Thouless quantum pump with ultracold bosonic atoms in an optical superlattice. Nature Physics, 2016, 12, 350-354.	16.7	449
6	Observation of chiral currents with ultracold atoms in bosonic ladders. Nature Physics, 2014, 10, 588-593.	16.7	375
7	Floquet approach to â„2 lattice gauge theories with ultracold atoms in optical lattices. Nature Physics, 2019, 15, 1168-1173.	16.7	214
8	Realization of an anomalous Floquet topological system with ultracold atoms. Nature Physics, 2020, 16, 1058-1063.	16.7	163
9	Observation of Many-Body Localization in a One-Dimensional System with a Single-Particle Mobility Edge. Physical Review Letters, 2019, 122, 170403.	7.8	151
10	Artificial gauge fields in materials and engineered systems. Comptes Rendus Physique, 2018, 19, 394-432.	0.9	143
11	Controlling Correlated Tunneling and Superexchange Interactions with ac-Driven Optical Lattices. Physical Review Letters, 2011, 107, 210405.	7.8	142
12	Single-electron pulses for ultrafast diffraction. Proceedings of the National Academy of Sciences of the United States of America, 2010, 107, 19714-19719.	7.1	141
13	Observing non-ergodicity due to kinetic constraints in tilted Fermi-Hubbard chains. Nature Communications, 2021, 12, 4490.	12.8	123
14	Periodically driven quantum matter: The case of resonant modulations. Physical Review A, 2015, 91, .	2.5	119
15	Experimental Realization of Plaquette Resonating Valence-Bond States with Ultracold Atoms in Optical Superlattices. Physical Review Letters, 2012, 108, 205301.	7.8	80
16	Coupling ultracold matter to dynamical gauge fields in optical lattices: From flux attachment to â„ ₂ lattice gauge theories. Science Advances, 2019, 5, eaav7444.	10.3	75
17	Cold atoms meet lattice gauge theory. Philosophical Transactions Series A, Mathematical, Physical, and Engineering Sciences, 2022, 380, 20210064.	3.4	72
18	Sound Propagation in a Uniform Superfluid Two-Dimensional Bose Gas. Physical Review Letters, 2018, 121, 145301.	7.8	65

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19	Experimental realization of strong effective magnetic fields in optical superlattice potentials. Applied Physics B: Lasers and Optics, 2013, 113, 1-11.	2.2	53
20	Transmission of near-resonant light through a dense slab of cold atoms. Physical Review A, 2017, 96, .	2.5	51
21	Relaxation Dynamics in the Merging of <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:mi>N</mml:mi></mml:math> Independent Condensates. Physical Review Letters, 2017, 119, 190403.	7.8	41
22	Topological charge pumping in the interacting bosonic Rice-Mele model. Physical Review B, 2018, 98, .	3.2	41
23	Loading and compression of a single two-dimensional Bose gas in an optical accordion. Physical Review A, 2017, 95, .	2.5	39
24	Nonequilibrium Mass Transport in the 1D Fermi-Hubbard Model. Physical Review Letters, 2018, 121, 130402.	7.8	39
25	Methods for detecting charge fractionalization and winding numbers in an interacting fermionic ladder. New Journal of Physics, 2015, 17, 105001.	2.9	24
26	<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:msub><mml:mi mathvariant="double-struck">Z</mml:mi><mml:mn>2</mml:mn></mml:msub></mml:math> lattice gauge theories and Kitaev's toric code: A scheme for analog quantum simulation. Physical Review B, 2021, 104, .	3.2	23
27	Parametric Instabilities of Interacting Bosons in Periodically Driven 1D Optical Lattices. Physical Review X, 2020, 10, .	8.9	21
28	Artificial gauge fields and topology with ultracold atoms in optical lattices. Journal of Physics B: Atomic, Molecular and Optical Physics, 2018, 51, 193001.	1.5	12
29	Resonant-light diffusion in a disordered atomic layer. Physical Review A, 2018, 97, .	2.5	12
30	Topological proximity effects in a Haldane graphene bilayer system. Physical Review B, 2019, 100, .	3.2	12
31	Thouless Pumps and Bulk-Boundary Correspondence in Higher-Order Symmetry-Protected Topological Phases. Physical Review Letters, 2022, 128, .	7.8	11
32	Fast long-distance transport of cold cesium atoms. Physical Review A, 2022, 105, .	2.5	10
33	Bosonic Pfaffian state in the Hofstadter-Bose-Hubbard model. Physical Review B, 2021, 103, .	3.2	8
34	Benchmarking a Novel Efficient Numerical Method for Localized 1D Fermi-Hubbard Systems on a Quantum Simulator. PRX Quantum, 2021, 2, .	9.2	6
35	Cold atoms twisting spin and momentum. Science, 2016, 354, 35-36.	12.6	3
36	Rotor Jackiw-Rebbi Model: A Cold-Atom Approach to Chiral Symmetry Restoration and Charge Confinement. PRX Quantum, 2020, 1, .	9.2	3

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37	Artificial Gauge Fields with Laser-Assisted Tunneling. Springer Theses, 2016, , 27-49.	0.1	1
38	Quantenâ€Hallâ€Physik mit ultrakalten Atomen. Physik in Unserer Zeit, 2015, 46, 111-112.	0.0	0
39	Harper-Hofstadter Model and Spin Hall Effect. Springer Theses, 2016, , 101-117.	0.1	0
40	Chern-Number Measurement of Hofstadter Bands. Springer Theses, 2016, , 137-159.	0.1	0
41	Overview of the Experimental Setup and Measurement Techniques. Springer Theses, 2016, , 51-66.	0.1	0
42	Staggered Magnetic Flux. Springer Theses, 2016, , 67-100.	0.1	0
43	All-Optical Setup for Flux Rectification. Springer Theses, 2016, , 119-135.	0.1	0