

Erich J Mueller

List of Publications by Year in descending order

Source: <https://exaly.com/author-pdf/89300/publications.pdf>

Version: 2024-02-01

115
papers

3,609
citations

172386

29
h-index

138417

58
g-index

118
all docs

118
docs citations

118
times ranked

2252
citing authors

#	ARTICLE	IF	CITATIONS
1	Spin-imbalance in a one-dimensional Fermi gas. <i>Nature</i> , 2010, 467, 567-569.	13.7	454
2	Fragmentation of Bose-Einstein condensates. <i>Physical Review A</i> , 2006, 74, .	1.0	244
3	Two-Component Bose-Einstein Condensates with a Large Number of Vortices. <i>Physical Review Letters</i> , 2002, 88, 180403.	2.9	176
4	Artificial electromagnetism for neutral atoms: Escher staircase and Laughlin liquids. <i>Physical Review A</i> , 2004, 70, .	1.0	170
5	High Temperature Expansion Applied to Fermions near Feshbach Resonance. <i>Physical Review Letters</i> , 2004, 92, 160404.	2.9	132
6	Quasi-One-Dimensional Polarized Fermi Superfluids. <i>Physical Review Letters</i> , 2007, 99, 250403.	2.9	123
7	Exact Parent Hamiltonian for the Quantum Hall States in a Lattice. <i>Physical Review Letters</i> , 2010, 105, 215303.	2.9	119
8	Superfluidity and mean-field energy loops: Hysteretic behavior in Bose-Einstein condensates. <i>Physical Review A</i> , 2002, 66, .	1.0	110
9	Quantum Monte Carlo study of one-dimensional trapped fermions with attractive contact interactions. <i>Physical Review A</i> , 2008, 78, .	1.0	105
10	Profiles of near-resonant population-imbalanced trapped Fermi gases. <i>Physical Review A</i> , 2006, 73, .	1.0	103
11	Detecting antiferromagnetism of atoms in an optical lattice via optical Bragg scattering. <i>Physical Review A</i> , 2010, 81, .	1.0	85
12	Surface Tension in Unitary Fermi Gases with Population Imbalance. <i>Physical Review Letters</i> , 2006, 97, 070402.	2.9	80
13	Spin textures in slowly rotating Bose-Einstein condensates. <i>Physical Review A</i> , 2004, 69, .	1.0	74
14	Floquet edge states with ultracold atoms. <i>Physical Review A</i> , 2014, 89, .	1.0	66
15	Optical-lattice Hamiltonians for relativistic quantum electrodynamics. <i>Physical Review A</i> , 2011, 83, .	1.0	65
16	Theory of bosons in two-leg ladders with large magnetic fields. <i>Physical Review A</i> , 2014, 89, .	1.0	61
17	Stability of a Floquet Bose-Einstein condensate in a one-dimensional optical lattice. <i>Physical Review A</i> , 2014, 90, .	1.0	57
18	Majorana fermions in one-dimensional spin-orbit-coupled Fermi gases. <i>Physical Review A</i> , 2012, 86, .	1.0	52

#	ARTICLE	IF	CITATIONS
19	Review of pseudogaps in strongly interacting Fermi gases. Reports on Progress in Physics, 2017, 80, 104401.	8.1	49
20	Local Versus Global Equilibration near the Bosonic Mott-Insulator–Superfluid Transition. Physical Review Letters, 2011, 106, 125301.	2.9	47
21	Non-Abelian Braiding of Lattice Bosons. Physical Review Letters, 2012, 108, 066802.	2.9	47
22	Finite-temperature collapse of a Bose gas with attractive interactions. Physical Review A, 2000, 62, .	1.0	42
23	Techniques to measure quantum criticality in cold atoms. Physical Review A, 2011, 84, .	1.0	37
24	Imaging of spinor gases. Journal of Physics B: Atomic, Molecular and Optical Physics, 2004, 37, S115-S125.	0.6	36
25	Dynamics of correlations in a dilute Bose gas following an interaction quench. Physical Review A, 2013, 87, .	1.0	36
26	Vortex lattices of bosons in deep rotating optical lattices. Physical Review A, 2008, 77, .	1.0	34
27	Transverse collisional instabilities of a Bose-Einstein condensate in a driven one-dimensional lattice. Physical Review A, 2015, 91, .	1.0	34
28	Multiply connected Bose-Einstein-condensed alkali-metal gases: Current-carrying states and their decay. Physical Review A, 1998, 57, R1505-R1508.	1.0	31
29	Evolution of the pseudogap in a polarized Fermi gas. Physical Review A, 2011, 83, .	1.0	31
30	Final-State Effects in the Radio Frequency Spectrum of Strongly Interacting Fermions. Physical Review Letters, 2008, 101, 060405.	2.9	28
31	Absence of pressure-driven supersolid flow at low frequency. Physical Review B, 2009, 80, .	1.1	28
32	On-site correlations in optical lattices: Band mixing to coupled quantum Hall puddles. Physical Review A, 2010, 81, .	1.0	27
33	Lattice bosons with infinite-range checkerboard interactions. Physical Review A, 2016, 94, .	1.0	27
34	Nonequilibrium fractional Hall response after a topological quench. Physical Review A, 2016, 94, .	1.0	27
35	Observation of a new superfluid phase for ^3He embedded in nematically ordered aerogel. Nature Communications, 2016, 7, 12975.	5.8	27
36	Density Profile of a Harmonically Trapped Ideal Fermi Gas in Arbitrary Dimension. Physical Review Letters, 2004, 93, 190404.	2.9	26

#	ARTICLE	IF	CITATIONS
37	Wigner crystallization in inhomogeneous one-dimensional wires. <i>Physical Review B</i> , 2005, 72, .	1.1	26
38	Interpreting Torsional Oscillator Measurements: Effect of Shear Modulus and Supersolidity. <i>Journal of Low Temperature Physics</i> , 2012, 168, 175-193.	0.6	24
39	Vortex ring dynamics in trapped Bose-Einstein condensates. <i>Physical Review A</i> , 2013, 88, .	1.0	23
40	Anomalous spin segregation in a weakly interacting two-component Fermi gas. <i>Physical Review A</i> , 2009, 79, .	1.0	22
41	Fractional quantum Hall states in the vicinity of Mott plateaus. <i>Physical Review A</i> , 2010, 81, .	1.0	22
42	Theory of the normal-superfluid interface in population-imbalanced Fermi gases. <i>Physical Review A</i> , 2009, 79, .	1.0	21
43	Magnetic-field dependence of Raman coupling in alkali-metal atoms. <i>Physical Review A</i> , 2013, 87, .	1.0	20
44	Anomalous charge pumping in a one-dimensional optical superlattice. <i>Physical Review A</i> , 2015, 92, .	1.0	19
45	Realizing the Haldane Phase with Bosons in Optical Lattices. <i>Physical Review Letters</i> , 2018, 120, 085301.	2.9	18
46	Coherent generation of photonic fractional quantum Hall states in a cavity and the search for anyonic quasiparticles. <i>Physical Review A</i> , 2018, 97, .	1.0	18
47	Stability of bosonic atomic and molecular condensates near a Feshbach resonance. <i>Physical Review A</i> , 2008, 78, .	1.0	17
48	Fulde-Ferrell-Larkin-Ovchinnikov versus Bose-Fermi mixture in a polarized one-dimensional Fermi gas at a Feshbach resonance: A three-body study. <i>Physical Review A</i> , 2010, 81, .	1.0	17
49	Pairing, ferromagnetism, and condensation of a normal spin-1 Bose gas. <i>Physical Review A</i> , 2011, 84, .	1.0	17
50	Collective oscillations of a Fermi gas near a Feshbach resonance. <i>Physical Review A</i> , 2005, 72, .	1.0	16
51	Evolution of condensate fraction during rapid lattice ramps. <i>Physical Review A</i> , 2012, 85, .	1.0	16
52	Competing ground states of strongly correlated bosons in the Harper-Hofstadter-Mott model. <i>Physical Review A</i> , 2016, 93, .	1.0	16
53	Hyperfine spectra of trapped bosons in optical lattices. <i>Physical Review A</i> , 2007, 76, .	1.0	15
54	Finite-size scaling and the role of the thermodynamic ensemble in the transition temperature of a dilute Bose gas. <i>Journal of Physics B: Atomic, Molecular and Optical Physics</i> , 2001, 34, 4561-4570.	0.6	14

#	ARTICLE	IF	CITATIONS
55	Vortices near the Mott phase of a trapped Bose-Einstein condensate. <i>Physical Review A</i> , 2009, 79, .	1.0	14
56	Stability of a Bose-Einstein condensate in a driven optical lattice: Crossover between weak and tight transverse confinement. <i>Physical Review A</i> , 2015, 92, .	1.0	14
57	Stirring trapped atoms into fractional quantum Hall puddles. <i>Physical Review A</i> , 2008, 78, .	1.0	13
58	Optical-field-dependent electron-electron scattering effects and gain generation in the intersubband transitions of n-doped quantum wells. <i>Journal of Physics Condensed Matter</i> , 1998, 10, 2489-2503.	0.7	12
59	Looking for Hofstadter's Butterfly in Cold Atoms. <i>Physics Magazine</i> , 2013, 6, .	0.1	12
60	Dimensional crossover in a spin-imbalanced Fermi gas. <i>Physical Review A</i> , 2016, 94, .	1.0	12
61	Commensurability and hysteretic evolution of vortex configurations in rotating optical lattices. <i>Physical Review A</i> , 2009, 79, .	1.0	11
62	Two-body recombination in a quantum-mechanical lattice gas: Entropy generation and probing of short-range magnetic correlations. <i>Physical Review A</i> , 2010, 82, .	1.0	11
63	Rewiring stabilizer codes. <i>New Journal of Physics</i> , 2018, 20, 083030.	1.2	11
64	Stripe formation in Bose-Einstein condensates with large numbers of vortices. <i>Physical Review A</i> , 2003, 67, .	1.0	10
65	Spin waves in a spin-1 normal Bose gas. <i>Physical Review A</i> , 2010, 81, .	1.0	10
66	Many-body physics in the radio-frequency spectrum of lattice bosons. <i>Physical Review A</i> , 2010, 81, .	1.0	10
67	Dynamics of correlations in shallow optical lattices. <i>Physical Review A</i> , 2013, 87, .	1.0	10
68	Heating from continuous number density measurements in optical lattices. <i>Physical Review A</i> , 2014, 90, .	1.0	10
69	Collective Modes of a Soliton Train in a Fermi Superfluid. <i>Physical Review Letters</i> , 2017, 118, 260402.	2.9	10
70	Evolution of coherence during ramps across the Mott-insulator-superfluid phase boundary. <i>Physical Review A</i> , 2016, 93, .	1.0	9
71	Core filling and snaking instability of dark solitons in spin-imbalanced superfluid Fermi gases. <i>Physical Review A</i> , 2017, 95, .	1.0	9
72	Thermal transport of helium-3 in a strongly confining channel. <i>Nature Communications</i> , 2020, 11, 4843.	5.8	9

#	ARTICLE	IF	CITATIONS
73	Unconventional valley-dependent optical selection rules and Landau level mixing in bilayer graphene. Nature Communications, 2020, 11, 2941.	5.8	9
74	Vortex structures of a two-component Bose-Einstein condensate for large anisotropies. Physical Review A, 2011, 84, .	1.0	8
75	Pair Density Waves and Vortices in an Elongated Spin- $\frac{1}{2}$ Fermi Gas. Physical Review Letters, 2012, 108, 245301.	2.9	8
76	Kinetics of Bose-Einstein condensation in a dimple potential. Physical Review A, 2015, 91, .	1.0	8
77	Variational study of polarons and bipolarons in a one-dimensional Bose lattice gas in both the superfluid and the Mott-insulator regimes. Physical Review A, 2013, 88, .	1.0	7
78	Absence of the twisted superfluid state in a mean-field model of bosons on a honeycomb lattice. Physical Review A, 2013, 87, .	1.0	7
79	Dynamics of pattern-loaded fermions in bichromatic optical lattices. Physical Review A, 2016, 93, .	1.0	7
80	Superfluidity in the one-dimensional Bose-Hubbard model. Physical Review B, 2022, 105, .	1.1	7
81	Even-odd correlation functions on an optical lattice. Physical Review A, 2010, 82, .	1.0	6
82	Domain-wall dynamics in a two-component Bose-Mott insulator. Physical Review A, 2010, 82, .	1.0	6
83	Role of interactions in time-of-flight expansion of atomic clouds from optical lattices. Physical Review A, 2010, 82, .	1.0	6
84	Quasiparticle dispersions and lifetimes in the normal state of the BCS-BEC crossover. Physical Review A, 2015, 91, .	1.0	6
85	Collisionless spin dynamics in a magnetic field gradient. Physical Review A, 2015, 91, .	1.0	6
86	Protocol to engineer Fulde-Ferrell-Larkin-Ovchinnikov states in a cold Fermi gas. Physical Review A, 2017, 96, .	1.0	6
87	Dynamics of Bose-Einstein recondensation in higher bands. Physical Review A, 2020, 101, .	1.0	6
88	Correlated insulators in twisted bilayer graphene. Physical Review B, 2021, 103, .	1.1	6
89	Driven-dissipative control of cold atoms in tilted optical lattices. Physical Review A, 2021, 103, .	1.0	6
90	Spin-Orbit Coupling Comes in From the Cold. Physics Magazine, 2012, 5, .	0.1	5

#	ARTICLE	IF	CITATIONS
91	Universal quantum computation with Majorana fermion edge modes through microwave spectroscopy of quasi-one-dimensional cold gases in optical lattices. <i>Physical Review A</i> , 2013, 88, .	1.0	5
92	Proposal to directly observe the Kondo effect through enhanced photoinduced scattering of cold fermionic and bosonic atoms. <i>Physical Review A</i> , 2016, 93, .	1.0	5
93	Superfluid ^3He $\langle \mathbf{A} \rangle$	2.9	5
94	Generic features of the spectrum of trapped polarized fermions. <i>Physical Review A</i> , 2008, 78, .	1.0	4
95	Influence of Film-Mediated Interactions on the Microwave and Radio Frequency Spectrum of Spin-Polarized Hydrogen on Helium Films. <i>Physical Review Letters</i> , 2008, 101, 165301.	2.9	4
96	Quantum dimer models emerging from large-spin ultracold atoms. <i>Physical Review A</i> , 2019, 99, .	1.0	4
97	Exact topological flat bands from continuum Landau levels. <i>Physical Review A</i> , 2020, 101, .	1.0	4
98	Transport in the two-dimensional Fermi-Hubbard model: Lessons from weak coupling. <i>Physical Review B</i> , 2021, 104, .	1.1	4
99	Candidate theories to explain the anomalous spectroscopic signatures of atomic H in molecular H_2 . <i>Physical Review B</i> , 2010, 82, .	1.1	3
100	Dispersion and wave-function symmetry in cold atoms experiencing artificial gauge fields. <i>Physical Review A</i> , 2012, 85, .	1.0	2
101	Study of Supersolidity and Shear Modulus Anomaly of ^4He in a Triple Compound Oscillator. <i>Journal of Physics: Conference Series</i> , 2012, 400, 012047.	0.3	2
102	Magnetic polarons in two-component hard-core bosons. <i>Physical Review A</i> , 2013, 87, .	1.0	2
103	Radio-frequency spectrum of fermions near a narrow Feshbach resonance. <i>Physical Review A</i> , 2013, 88, .	1.0	2
104	Corrections to the continuous time semiclassical coherent state path integral. <i>European Physical Journal: Special Topics</i> , 2015, 224, 591-596.	1.2	2
105	Collective dynamics and atom loss in bright-soliton matter waves. <i>Physical Review A</i> , 2019, 99, .	1.0	2
106	Emission of particles from a parametrically driven condensate in a one-dimensional lattice. <i>Physical Review A</i> , 2021, 104, .	1.0	2
107	Density Matrix Renormalization Group for Continuous Quantum Systems. <i>Physical Review Letters</i> , 2022, 128, .	2.9	2
108	Strong Staggered Flux Lattices for Cold Atoms. <i>Physics Magazine</i> , 2011, 4, .	0.1	1

#	ARTICLE	IF	CITATIONS
109	On the ladder. Nature Physics, 2014, 10, 554-555.	6.5	1
110	Disappearance of quasiparticles in a Bose lattice gas. Physical Review A, 2016, 94, .	1.0	1
111	Cooling quantum gases with entropy localization. New Journal of Physics, 2017, 19, 023045.	1.2	1
112	Drag in Bose-Fermi mixtures. Physical Review A, 2021, 103, .	1.0	1
113	Influence of sublattice bias on superfluid to Mott insulator transitions. Physical Review A, 2021, 103, .	1.0	1
114	Rotating Bose gas dynamically entering the lowest Landau level. Physical Review A, 2022, 105, .	1.0	1
115	Route to observing topological edge modes in ultracold fermions. Physical Review A, 2014, 89, .	1.0	0