

Mark Andrew Edwards

List of Publications by Year in descending order

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56
papers

3,528
citations

201575

27
h-index

149623

56
g-index

56
all docs

56
docs citations

56
times ranked

1674
citing authors

#	ARTICLE	IF	CITATIONS
1	Modeling Atom Interferometry Experiments with Bose-Einstein Condensates in Power-Law Potentials. <i>Atoms</i> , 2022, 10, 34.	0.7	1
2	Roadmap on Atomtronics: State of the art and perspective. <i>AVS Quantum Science</i> , 2021, 3, .	1.8	87
3	Thermal stability of a quantum rotation sensor. <i>Physical Review A</i> , 2021, 104, .	1.0	2
4	Producing flow in racetrack atom circuits by stirring. <i>Physical Review A</i> , 2020, 102, .	1.0	7
5	Nonlinear waves in an experimentally motivated ring-shaped Bose-Einstein-condensate setup. <i>Physical Review A</i> , 2019, 99, .	1.0	2
6	Tools for designing atom interferometers in a microgravity environment. <i>Physical Review A</i> , 2019, 99, .	1.0	1
7	Mechanism of stimulated Hawking radiation in a laboratory Bose-Einstein condensate. <i>Physical Review A</i> , 2017, 96, .	1.0	21
8	Induced density correlations in a sonic black hole condensate. <i>SciPost Physics</i> , 2017, 3, .	1.5	22
9	Superfluid transport dynamics in a capacitive atomtronic circuit. <i>Physical Review A</i> , 2016, 94, .	1.0	17
10	Self-heterodyne detection of the <i>in situ</i> phase of an atomic superconducting quantum interference device. <i>Physical Review A</i> , 2015, 92, .	1.0	27
11	Resonant wavepackets and shock waves in an atomtronic SQUID. <i>New Journal of Physics</i> , 2015, 17, 125012.	1.2	23
12	Resistive Flow in a Weakly Interacting Bose-Einstein Condensate. <i>Physical Review Letters</i> , 2014, 113, 045305.	2.9	99
13	Hysteresis in a quantized superfluid atomtronic circuit. <i>Nature</i> , 2014, 506, 200-203.	13.7	286
14	Probing the circulation of ring-shaped Bose-Einstein condensates. <i>Physical Review A</i> , 2013, 88, .	1.0	45
15	Atom SQUID. <i>Nature Physics</i> , 2013, 9, 68-69.	6.5	12
16	Approximate mean-field equations of motion for quasi-two-dimensional Bose-Einstein-condensate systems. <i>Physical Review E</i> , 2012, 86, 056710.	0.8	11
17	Prototyping method for Bragg-type atom interferometers. <i>Physical Review A</i> , 2011, 84, .	1.0	6
18	Momentum-space engineering of gaseous Bose-Einstein condensates. <i>Physical Review A</i> , 2010, 82, .	1.0	22

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19	Symmetry-breaking and symmetry-restoring dynamics of a mixture of Bose-Einstein condensates in a double well. <i>Physical Review A</i> , 2009, 79, .	1.0	68
20	Dynamical pattern formation during growth of a dual-species Bose-Einstein condensate. <i>Physical Review A</i> , 2008, 78, .	1.0	39
21	Tunneling phase gate for neutral atoms in a double-well lattice. <i>Physical Review A</i> , 2008, 77, .	1.0	18
22	A hybrid Lagrangian variational method for Bose-Einstein condensates in optical lattices. <i>Journal of Physics B: Atomic, Molecular and Optical Physics</i> , 2005, 38, 363-376.	0.6	6
23	Bogoliubov approach to superfluidity of atoms in an optical lattice. <i>Journal of Physics B: Atomic, Molecular and Optical Physics</i> , 2003, 36, 825-841.	0.6	88
24	Consequence of Superfluidity on the Expansion of a Rotating Bose-Einstein Condensate. <i>Physical Review Letters</i> , 2002, 88, 070405.	2.9	19
25	The Bogoliubov approach to number squeezing of atoms in an optical lattice. <i>Journal of Physics B: Atomic, Molecular and Optical Physics</i> , 2002, 35, 1671-1678.	0.6	38
26	Relative number squeezing in Bose-Einstein condensates. <i>Physical Review A</i> , 2001, 64, .	1.0	14
27	Gapless mean-field theory of Bose-Einstein condensates. <i>Journal of Physics B: Atomic, Molecular and Optical Physics</i> , 2000, 33, 3825-3846.	0.6	82
28	Imaging the Phase of an Evolving Bose-Einstein Condensate Wave Function. <i>Physical Review Letters</i> , 2000, 85, 2040-2043.	2.9	91
29	Coherence properties of an atom laser. <i>Journal of Physics B: Atomic, Molecular and Optical Physics</i> , 2000, 33, 47-54.	0.6	27
30	Two-gas description of dilute Bose-Einstein condensates at finite temperature. <i>Journal of Physics B: Atomic, Molecular and Optical Physics</i> , 1999, 32, 4107-4115.	0.6	8
31	Measurement of the Coherence of a Bose-Einstein Condensate. <i>Physical Review Letters</i> , 1999, 83, 3112-3115.	2.9	169
32	Temporal, Matter-Wave-Dispersion Talbot Effect. <i>Physical Review Letters</i> , 1999, 83, 5407-5411.	2.9	195
33	Properties of a Raman atom-laser output coupler. <i>Journal of Physics B: Atomic, Molecular and Optical Physics</i> , 1999, 32, 2935-2950.	0.6	28
34	Collective excitations of Bose-Einstein-condensed gases at finite temperatures. <i>Physical Review A</i> , 1998, 57, R32-R35.	1.0	110
35	Nonlinear mixing of quasiparticles in an inhomogeneous Bose condensate. <i>Physical Review A</i> , 1998, 57, 3818-3829.	1.0	59
36	Trapped Bose-einstein Condensates at Finite Temperature: a Two-gas Model. <i>Acta Physica Polonica A</i> , 1998, 93, 45-53.	0.2	12

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37	Excitation spectroscopy of vortex states in dilute Bose-Einstein condensed gases. <i>Physical Review A</i> , 1997, 56, 587-590.	1.0	113
38	Characterizing the coherence of Bose-Einstein condensates and atom lasers. <i>Optics Express</i> , 1997, 1, 284.	1.7	25
39	Role of attractive interactions on Bose-Einstein condensation. <i>Physical Review A</i> , 1996, 54, 661-664.	1.0	138
40	Population trapping in short-pulse multiphoton ionization. <i>Journal of the Optical Society of America B: Optical Physics</i> , 1996, 13, 101.	0.9	6
41	Zero-temperature, mean-field theory of atomic Bose-Einstein condensates. <i>Journal of Research of the National Institute of Standards and Technology</i> , 1996, 101, 553.	0.4	59
42	Probing the linear and nonlinear excitations of Bose-condensed neutral atoms in a trap. <i>Physical Review A</i> , 1996, 54, 4178-4187.	1.0	114
43	Collective Excitations of Atomic Bose-Einstein Condensates. <i>Physical Review Letters</i> , 1996, 77, 1671-1674.	2.9	287
44	Properties of a Bose-Einstein condensate in an anisotropic harmonic potential. <i>Physical Review A</i> , 1996, 53, R1950-R1953.	1.0	111
45	Time-dependent solution of the nonlinear Schrödinger equation for Bose-condensed trapped neutral atoms. <i>Physical Review A</i> , 1995, 51, 4704-4711.	1.0	520
46	Numerical solution of the nonlinear Schrödinger equation for small samples of trapped neutral atoms. <i>Physical Review A</i> , 1995, 51, 1382-1386.	1.0	226
47	Approximate atomic structure calculations using a microcomputer. <i>Computers in Physics</i> , 1993, 7, 465.	0.6	2
48	Calculation of multiphoton-ionization Green's functions using the Wentzel-Kramers-Brillouin approximation. II. <i>Physical Review A</i> , 1992, 46, 7228-7234.	1.0	1
49	Calculation of multiphoton-ionization Green's functions using the Wentzel-Kramers-Brillouin approximation. <i>Physical Review A</i> , 1992, 45, 409-419.	1.0	3
50	Multiphoton ionization by intense fields: Corrections to lowest order perturbation theory, with an application to photoionization of H. <i>Zeitschrift für Physik D-Atoms Molecules and Clusters</i> , 1988, 8, 51-56.	1.0	9
51	Multiphoton absorption by alkali-metal atoms above the ionization threshold. II. Further results on Cs and Rb ionization. <i>Physical Review A</i> , 1987, 35, 3758-3767.	1.0	28
52	Multiphoton absorption by alkali-metal atoms above the ionization threshold. <i>Physical Review A</i> , 1986, 33, 4444-4445.	1.0	19
53	Model study of above threshold multiphoton ionisation in strong fields. <i>Journal of Physics B: Atomic and Molecular Physics</i> , 1985, 18, 1927-1946.	1.6	44
54	Model study of multiphoton ionisation in strong fields. <i>Journal of Physics B: Atomic and Molecular Physics</i> , 1984, 17, L515-L520.	1.6	48

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55	Effect of adiabatic and near-adiabatic field turn-on on the resonance fluorescence spectrum of a two-level atom. <i>Journal of Physics B: Atomic and Molecular Physics</i> , 1983, 16, 767-784.	1.6	8
56	Variation of the effective order of non-linearity near a minimum in the two-photon ionisation cross section of Cs. <i>Journal of Physics B: Atomic and Molecular Physics</i> , 1980, 13, L497-L500.	1.6	5