Bogdan Damski

List of Publications by Year in descending order

45 papers	3,858 citations	257450 24 h-index	265206 42 g-index
45 all docs	45 docs citations	45 times ranked	2430 citing authors

#	Article	IF	Citations
1	Ultracold atomic gases in optical lattices: mimicking condensed matter physics and beyond. Advances in Physics, 2007, 56, 243-379.	14.4	1,712
2	Atomic Bose and Anderson Glasses in Optical Lattices. Physical Review Letters, 2003, 91, 080403.	7.8	280
3	The Simplest Quantum Model Supporting the Kibble-Zurek Mechanism of Topological Defect Production: Landau-Zener Transitions from a New Perspective. Physical Review Letters, 2005, 95, 035701.	7.8	280
4	Creation of a Dipolar Superfluid in Optical Lattices. Physical Review Letters, 2003, 90, 110401.	7.8	147
5	Mott-Insulator States of Ultracold Atoms in Optical Resonators. Physical Review Letters, 2008, 100, 050401.	7.8	136
6	Adiabatic-impulse approximation for avoided level crossings: From phase-transition dynamics to Landau-Zener evolutions and back again. Physical Review A, 2006, 73, .	2.5	134
7	Soliton Creation During a Bose-Einstein Condensation. Physical Review Letters, 2010, 104, 160404.	7.8	122
8	Dynamics of the Bose-Hubbard model: Transition from a Mott insulator to a superfluid. Physical Review A, 2007, 75, .	2.5	99
9	Dynamics of a Quantum Phase Transition in a Ferromagnetic Bose-Einstein Condensate. Physical Review Letters, 2007, 99, 130402.	7.8	98
10	Quantum Fidelity in the Thermodynamic Limit. Physical Review Letters, 2011, 106, 055701.	7.8	97
11	Formation of shock waves in a Bose-Einstein condensate. Physical Review A, 2004, 69, .	2.5	85
12	Critical dynamics of decoherence. Physical Review A, 2011, 83, .	2.5	79
13	Quantum gases in trimerized kagomÃ© lattices. Physical Review A, 2005, 72, .	2.5	55
14	Exact results for fidelity susceptibility of the quantum Ising model: the interplay between parity, system size, and magnetic field. Journal of Physics A: Mathematical and Theoretical, 2014, 47, 025303.	2.1	53
15	Fidelity susceptibility of the quantum Ising model in a transverse field: The exact solution. Physical Review E, 2013, 87, 052131.	2.1	43
16	Scaling of ground-state fidelity in the thermodynamic limit:XYmodel and beyond. Physical Review A, 2011, 84, .	2.5	41
17	Shock waves in a one-dimensional Bose gas: From a Bose-Einstein condensate to a Tonks gas. Physical Review A, 2006, 73, .	2.5	33
18	Mott-insulator phase of the one-dimensional Bose-Hubbard model: A high-order perturbative study. Physical Review A, 2006, 74, .	2.5	32

#	Article	IF	Citations
19	Counterdiabatic driving of the quantum Ising model. Journal of Statistical Mechanics: Theory and Experiment, 2014, 2014, P12019.	2.3	32
20	Quantum phase transition in space in a ferromagnetic spin-1 Boseâ€“Einstein condensate. New Journal of Physics, 2009, 11, 063014.	2.9	30
21	Atomic Fermi Gas in the Trimerized KagomÃ© Lattice at2/3Filling. Physical Review Letters, 2005, 95, 060403.	7.8	27
22	Shock waves in ultracold Fermi (Tonks) gases. Journal of Physics B: Atomic, Molecular and Optical Physics, 2004, 37, L85-L91.	1.5	26
23	Mean-field theory of Boseâ€“Fermi mixtures in optical lattices. Optics Communications, 2004, 243, 23-31.	2.1	25
24	Simple method for excitation of a Bose-Einstein condensate. Physical Review A, 2001, 65, .	2.5	24
25	Numerical studies of ground-state fidelity of the Bose-Hubbard model. Physical Review A, 2014, 89, .	2.5	21
26	How to fix a broken symmetry: quantum dynamics of symmetry restoration in a ferromagnetic Boseâ€“Einstein condensate. New Journal of Physics, 2008, 10, 045023.	2.9	20
27	Changes of the topological charge of vortices. Journal of Physics A, 2003, 36, 2339-2345.	1.6	15
28	One-half of the Kibbleâ€“Zurek quench followed by free evolution. Journal of Statistical Mechanics: Theory and Experiment, 2018, 2018, 073105.	2.3	14
29	Dynamics of longitudinal magnetization in transverse-field quantum Ising model: from symmetry-breaking gap to Kibbleâ€“Zurek mechanism. Journal of Statistical Mechanics: Theory and Experiment, 2020, 2020, 013108.	2.3	13
30	A quantum phase transition in a quantum external field: Superposing two magnetic phases. Scientific Reports, 2012, 2, 655.	3.3	11
31	Locating quantum critical points with Kibble-Zurek quenches. Physical Review B, 2020, 102, .	3.2	11
32	Collective excitation of trapped degenerate Fermi gases. Journal of Physics B: Atomic, Molecular and Optical Physics, 2002, 35, L153-L159.	1.5	9
33	Locating the quantum critical point of the Bose-Hubbard model through singularities of simple observables. Scientific Reports, 2016, 6, 38340.	3.3	9
34	Stirring a BoseÂEinstein condensate. Journal of Physics B: Atomic, Molecular and Optical Physics, 2002, 35, 4051-4057.	1.5	8
35	Critical points of the three-dimensional Bose-Hubbard model from on-site atom number fluctuations. Scientific Reports, 2019, 9, 8687.	3.3	8
36	Spatial Kibbleâ€“Zurek mechanism through susceptibilities: the inhomogeneous quantum Ising model case. Journal of Statistical Mechanics: Theory and Experiment, 2017, 2017, 103105.	2.3	6

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37	The quantum Ising model: finite sums and hyperbolic functions. Scientific Reports, 2015, 5, 15779.	3.3	5
38	Dynamics of a quantum quench in an ultracold atomic BCS superfluid. Physical Review A, 2010, 82, .	2.5	4
39	Properties of the one-dimensional Boseâ€“Hubbard model from a high-order perturbative expansion. New Journal of Physics, 2015, 17, 125010.	2.9	4
40	Fidelity Approach to Quantum Phase Transitions in Quantum Ising Model. , 2015, , .		4
41	Electromagnetic angular momentum of the electron: One-loop studies. Nuclear Physics B, 2019, 949, 114828.	2.5	3
42	Impact of gauge fixing on angular momentum operators of the covariantly quantized electromagnetic field. Physical Review D, 2021, 104, .	4.7	2
43	Angular momentum of the electron: One-loop studies. Nuclear Physics B, 2020, 955, 115042.	2.5	1
44	Title is missing!. Acta Physica Polonica B, 2012, 43, 381.	0.8	0
45	Evidence from on-site atom number fluctuations for a quantum Berezinskii-Kosterlitz-Thouless transition in the one-dimensional Bose-Hubbard model. Physical Review B, 2021, 104, .	3.2	0