

Kaspar Sakmann

List of Publications by Year in descending order

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27
papers

842
citations

687363

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996975

15
g-index

29
all docs

29
docs citations

29
times ranked

367
citing authors

#	ARTICLE	IF	CITATIONS
1	Exact Quantum Dynamics of a Bosonic Josephson Junction. <i>Physical Review Letters</i> , 2009, 103, 220601.	7.8	163
2	Reduced density matrices and coherence of trapped interacting bosons. <i>Physical Review A</i> , 2008, 78, .	2.5	124
3	Numerically exact quantum dynamics of bosons with time-dependent interactions of harmonic type. <i>Physical Review A</i> , 2012, 86, .	2.5	92
4	Exact ground state of finite Bose-Einstein condensates on a ring. <i>Physical Review A</i> , 2005, 72, .	2.5	64
5	Single-shot simulations of dynamic quantum many-body systems. <i>Nature Physics</i> , 2016, 12, 451-454.	16.7	60
6	How an interacting many-body system tunnels through a potential barrier to open space. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2012, 109, 13521-13525.	7.1	55
7	Quantum dynamics of attractive versus repulsive bosonic Josephson junctions: Bose-Hubbard and full-Hamiltonian results. <i>Physical Review A</i> , 2010, 82, .	2.5	52
8	Accurate multi-boson long-time dynamics in triple-well periodic traps. <i>Physical Review A</i> , 2011, 83, .	2.5	45
9	Universality of fragmentation in the Schrödinger dynamics of bosonic Josephson junctions. <i>Physical Review A</i> , 2014, 89, .	2.5	44
10	Excitation spectra of many-body systems by linear response: General theory and applications to trapped condensates. <i>Physical Review A</i> , 2013, 88, .	2.5	32
11	Recursive formulation of the multiconfigurational time-dependent Hartree method for fermions, bosons and mixtures thereof in terms of one-body density operators. <i>Chemical Physics</i> , 2012, 401, 2-14.	1.9	23
12	Optimal time-dependent lattice models for nonequilibrium dynamics. <i>New Journal of Physics</i> , 2011, 13, 043003.	2.9	21
13	Many-Body Schrödinger Dynamics of Bose-Einstein Condensates. , 2011, , .		17
14	Dynamics and symmetries of a repulsively bound atom pair in an infinite optical lattice. <i>Physical Review A</i> , 2012, 86, .	2.5	14
15	Single-shot three-dimensional imaging of dilute atomic clouds. <i>Optics Letters</i> , 2014, 39, 5317.	3.3	7
16	Number fluctuations of cold, spatially split bosonic objects. <i>Physical Review A</i> , 2011, 84, .	2.5	6
17	MCTDHB Physics and Technologies: Excitations and Vorticity, Single-Shot Detection, Measurement of Fragmentation, and Optimal Control in Correlated Ultra-Cold Bosonic Many-Body Systems. , 2016, , 23-49.		5
18	Many-Body Effects in Fragmented, Depleted, and Condensed Bosonic Systems in Traps and Optical Cavities by MCTDHB and MCTDH-X. , 2018, , 93-115.		4

#	ARTICLE	IF	CITATIONS
19	Numerically-Exact Schrödinger Dynamics of Closed and Open Many-Boson Systems with the MCTDHB Package. , 2013, , 81-92.		4
20	Quantum Many-Body Dynamics of Trapped Bosons with the MCTDHB Package: Towards New Horizons with Novel Physics. , 2015, , 63-86.		4
21	Vorticity, Variance, and the Vigor of Many-Body Phenomena in Ultracold Quantum Systems: MCTDHB and MCTDH-X. , 2016, , 79-96.		3
22	Exact Quantum Dynamics of a Bosonic Josephson Junction. , 2011, , 65-80.		3
23	Multiconfigurational Time-Dependent Hartree Methods for Bosonic Systems: Theory and Applications. Cold Atoms, 2013, , 147-157.	0.3	0
24	General Theory. , 2011, , 9-22.		0
25	Reduced Density Matrices and Coherence of Trapped Interacting Bosons. , 2011, , 39-64.		0
26	Quantum Dynamics of Attractive Versus Repulsive Bosonic Josephson Junctions: Bose-Hubbard and Full-Hamiltonian Results. , 2011, , 81-88.		0
27	Optimal Time-Dependent Lattice Models for Nonequilibrium Dynamics. , 2011, , 89-103.		0