Martin Holthaus

List of Publications by Year in descending order

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71102 85541 5,352 115 41 71 citations h-index g-index papers 115 115 115 2376 docs citations times ranked citing authors all docs

#	Article	lF	Citations
1	Floquet theory of the analytical solution of a periodically driven two-level system. Applicable Analysis, 2021, 100, 992-1009.	1.3	7
2	Following Floquet states in high-dimensional Hilbert spaces. Physical Review Research, 2021, 3, .	3.6	0
3	Environment-controlled Floquet-state paramagnetism. Physical Review Research, 2020, 2, .	3.6	3
4	Periodic thermodynamics of the parametrically driven harmonic oscillator. Physical Review E, 2019, 100, 012102.	2.1	8
5	Periodic thermodynamics of the Rabi model with circular polarization for arbitrary spin quantum numbers. Physical Review E, 2019, 100, 042141.	2.1	10
6	Quantum critical properties of Bose–Hubbard models. Journal of Physics A: Mathematical and Theoretical, 2019, 52, 255001.	2.1	5
7	Floquet-state cooling. Scientific Reports, 2019, 9, 17614.	3.3	8
8	Hypergeometric continuation of divergent perturbation series: II. Comparison with Shanks transformation and Pad \tilde{A} © approximation. Journal of Physics A: Mathematical and Theoretical, 2017, 50, 465302.	2.1	12
9	Hypergeometric continuation of divergent perturbation series: I. Critical exponents of the Bose–Hubbard model. New Journal of Physics, 2017, 19, 103036.	2.9	11
10	Adiabatic preparation of Floquet condensates. Journal of Modern Optics, 2016, 63, 1768-1776.	1.3	16
11	Entropy Production Within a Pulsed Bose–Einstein Condensate. Zeitschrift Fur Naturforschung - Section A Journal of Physical Sciences, 2016, 71, 875-881.	1.5	3
12	Floquet engineering with quasienergy bands of periodically driven optical lattices. Journal of Physics B: Atomic, Molecular and Optical Physics, 2016, 49, 013001.	1.5	170
13	Hypergeometric analytic continuation of the strong-coupling perturbation series for the 2d Bose-Hubbard model. Europhysics Letters, 2015, 111, 20002.	2.0	7
14	Emergence and destruction of macroscopic wave functions. Europhysics Letters, 2015, 111, 30006. <pre></pre>	2.0	3
15	xmins:xocs="http://www.eisevier.com/xmi/xocs/dtd" xmins:xs="http://www.w3.org/2001/XMLSchema" xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance" xmlns="http://www.elsevier.com/xml/ja/dtd" xmlns:ja="http://www.elsevier.com/xml/ja/dtd" xmlns:mml="http://www.w3.org/1998/Math/MathML" xmlns:tb="http://www.elsevier.com/xml/common/table/dtd"	2.8	4
16	xmins:sb="http://www.elsevier.com/xmi/common/struct-bib/dtd" xmins:se="http://www.elsevier.com/xmi/common/struct-bib/dtd" Quasiparticle tunneling in a periodically driven bosonic Josephson junction. Physical Review A, 2014, 90, .	2.5	3
17	Trojan quasiparticles. New Journal of Physics, 2014, 16, 093009.	2.9	9
18	Fluctuations of the order parameter of a mesoscopic Floquet condensate. Physical Review A, 2014, 90, .	2.5	6

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19	Energy flow in periodic thermodynamics. Physical Review E, 2014, 89, 012101.	2.1	47
20	Perturbative calculation of critical exponents for the Bose–Hubbard model. Applied Physics B: Lasers and Optics, 2013, 113, 57-67.	2.2	8
21	Kilohertz-Driven Bose–Einstein Condensates in Optical Lattices. Advances in Atomic, Molecular and Optical Physics, 2012, 61, 515-547.	2.3	45
22	ac Stark shift and multiphotonlike resonances in low-frequency-driven optical lattices. Physical Review A, 2012, 85, .	2.5	3
23	Sub- and superluminal kink-like waves in the kinetic limit of Maxwell–Bloch equations. Journal of Physics A: Mathematical and Theoretical, 2011, 44, 025301.	2.1	0
24	Controlled wave-packet manipulation with driven optical lattices. Physical Review A, 2011, 84, .	2.5	14
25	Generalized acceleration theorem for spatiotemporal Bloch waves. Physical Review B, 2011, 84, .	3.2	25
26	Shape-dependence of near-field heat transfer between a spheroidal nanoparticle and a flat surface. EPJ Applied Physics, 2010, 50, 10603.	0.7	34
27	Driven optical lattices as strong-field simulators. Physical Review A, 2010, 81, .	2.5	19
28	Reference data for phase diagrams of triangular and hexagonal bosonic lattices. Europhysics Letters, 2010, 91, 10004.	2.0	19
29	Second-order calculation of the local density of states above a nanostructured surface. Physical Review B, 2010, 82, .	3.2	7
30	Spheroidal nanoparticles as thermal near-field sensors. Journal of Applied Physics, 2010, 108, 014312.	2.5	11
31	Exploring dynamic localization with a Bose-Einstein condensate. Physical Review A, 2009, 79, .	2.5	180
32	Bose-Hubbard phase diagram with arbitrary integer filling. Physical Review B, 2009, 79, .	3.2	54
33	Process-chain approach to the Bose-Hubbard model: Ground-state properties and phase diagram. Physical Review B, 2009, 79, .	3.2	48
34	Perturbation theory for plasmonic eigenvalues. Physical Review B, 2009, 80, .	3.2	11
35	Avoided-Level-Crossing Spectroscopy with Dressed Matter Waves. Physical Review Letters, 2008, 101, 245302.	7.8	47
36	AC-induced superfluidity. Europhysics Letters, 2007, 80, 50004.	2.0	58

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37	Mobility edges in bichromatic optical lattices. Physical Review A, 2007, 75, .	2.5	114
38	Thermal radiation and near-field energy density of thin metallic films. European Physical Journal B, 2007, 55, 237-251.	1.5	48
39	Fluctuations in Ideal and Interacting Bose–Einstein Condensates: From the Laser Phase Transition Analogy to Squeezed States and Bogoliubov Quasiparticles. Advances in Atomic, Molecular and Optical Physics, 2006, , 291-411.	2.3	74
40	Many-particle tunnelling in a driven Bosonic Josephson junction. Chemical Physics, 2006, 322, 118-126.	1.9	36
41	Analog of Photon-Assisted Tunneling in a Bose-Einstein Condensate. Physical Review Letters, 2005, 95, 200401.	7.8	111
42	Near-Field Heat Transfer in a Scanning Thermal Microscope. Physical Review Letters, 2005, 95, 224301.	7.8	356
43	Superfluid-Insulator Transition in a Periodically Driven Optical Lattice. Physical Review Letters, 2005, 95, 260404.	7.8	446
44	Bogoliubov speed of sound for a dilute Bose-Einstein condensate in a 3d optical lattice. Europhysics Letters, 2004, 67, 887-892.	2.0	14
45	Ground-state energy and depletions for a dilute binary Bose gas. Physical Review A, 2004, 70, .	2.5	15
46	Factorising numbers with a Bose–Einstein condensate. Physica A: Statistical Mechanics and Its Applications, 2004, 341, 586-606.	2.6	14
47	Ground-State Energy of a Weakly Interacting Bose Gas: Calculation Without Regularization. Zeitschrift Fur Naturforschung - Section A Journal of Physical Sciences, 2004, 59, 1-13.	1.5	5
48	Cumulants of partitions. Journal of Physics A, 2003, 36, 1827-1844.	1.6	10
49	s-wave pseudopotential for anisotropic traps. Physical Review A, 2003, 68, .	2.5	4
50	Quantum approach to electromagnetic energy transfer between two dielectric bodies. Physical Review A, 2003, 68, .	2.5	27
51	Influence of boundary conditions on statistical properties of ideal Bose-Einstein condensates. Physical Review E, 2002, 65, 036129.	2.1	11
52	Pseudopotential approximation in a harmonic trap. Physical Review A, 2002, 65, .	2.5	46
53	Canonical Statistics of Occupation Numbers for Ideal and Weakly Interacting Bose-Einstein Condensates. Lecture Notes in Physics, 2002, , 332-368.	0.7	0
54	Asymptotics of the number partitioning distribution. Europhysics Letters, 2002, 59, 486-492.	2.0	16

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55	Coherent control of the self-trapping transition. European Physical Journal B, 2001, 20, 451-467.	1.5	70
56	Master equation vs. partition function: canonical statistics of ideal Bose–Einstein condensates. Physica A: Statistical Mechanics and Its Applications, 2001, 300, 433-467.	2.6	22
57	Towards coherent control of a Bose-Einstein condensate in a double well. Physical Review A, 2001, 64,	2.5	92
58	Bloch oscillations and Zener breakdown in an optical lattice. Journal of Optics B: Quantum and Semiclassical Optics, 2000, 2, 589-604.	1.4	68
59	Universal renormalization of saddle-point integrals for condensed Bose gases. Physical Review E, 1999, 60, 6534-6537.	2.1	4
60	Floquet theory for short laser pulses. European Physical Journal D, 1999, 5, 119-134.	1.3	99
61	The Saddle-Point Method for Condensed Bose Gases. Annals of Physics, 1999, 276, 321-360.	2.8	39
62	Towards lowering dissipation bounds for turbulent flows. European Physical Journal B, 1999, 10, 385-396.	1.5	11
63	Coherent Control of Quantum Localization. , 1999, , 171-182.		0
64	Condensate Fluctuations in Trapped Bose Gases: Canonical vs. Microcanonical Ensemble. Annals of Physics, 1998, 270, 198-230.	2.8	78
65	Perturbative and nonperturbative processes in adiabatic population transfer. European Physical Journal D, 1998, 3, 73-86.	1.3	30
66	The background flow method. Part 1. Constructive approach to bounds on energy dissipation. Journal of Fluid Mechanics, 1998, 363, 281-300.	3.4	34
67	The background flow method. Part 2. Asymptotic theory of dissipation bounds. Journal of Fluid Mechanics, 1998, 363, 301-323.	3.4	16
68	Exploring a Metal-Insulator Transition with Ultracold Atoms in Standing Light Waves?. Physical Review Letters, 1997, 78, 2932-2935.	7.8	53
69	Variational Bound on Energy Dissipation in Turbulent Shear Flow. Physical Review Letters, 1997, 79, 4170-4173.	7.8	11
70	Variational bound on energy dissipation in plane Couette flow. Physical Review E, 1997, 56, 6774-6786.	2.1	19
71	Phase diagram for a modified Harper model. Physical Review B, 1997, 55, R14693-R14696.	3.2	7
72	Fluctuations of the Particle Number in a Trapped Bose-Einstein Condensate. Physical Review Letters, 1997, 79, 3557-3560.	7.8	88

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73	Maxwell's Demon at work: Two types of Bose condensate fluctuations in power-law traps. Optics Express, 1997, 1, 262.	3.4	49
74	Improved variational principle for bounds on energy dissipation in turbulent shear flow. Physica D: Nonlinear Phenomena, 1997, 101, 178-190.	2.8	53
75	Ultracold atoms in modulated standing light waves. Chemical Physics, 1997, 217, 201-219.	1.9	33
76	Anderson localization in an ac-driven two-band model. Journal of Physics Condensed Matter, 1996, 8, 1193-1206.	1.8	14
77	Classical and Quantum Dynamics of a Periodically Driven Particle in a Triangular Well. Annals of Physics, 1996, 245, 113-146.	2.8	27
78	Localization effects in ac-driven tight-binding lattices. The Philosophical Magazine: Physics of Condensed Matter B, Statistical Mechanics, Electronic, Optical and Magnetic Properties, 1996, 74, 105-137.	0.6	84
79	Microcanonical fluctuations of a Bose system's ground state occupation number. Physical Review E, 1996, 54, 3495-3498.	2.1	77
80	Bose -Einstein Condensation and Condensate Tunneling. Zeitschrift Fur Naturforschung - Section A Journal of Physical Sciences, 1995, 50, 323-326.	1.5	47
81	On Bose-Einstein condensation in harmonic traps. Physics Letters, Section A: General, Atomic and Solid State Physics, 1995, 208, 188-192.	2.1	203
82	On the classical-quantum correspondence for periodically time dependent systems. Chaos, Solitons and Fractals, 1995, 5, 1143-1167.	5.1	35
83	Bose-Einstein condensation in a cavity. European Physical Journal B, 1995, 97, 319-326.	1.5	44
84	ac-Field-Controlled Anderson Localization in Disordered Semiconductor Superlattices. Physical Review Letters, 1995, 75, 3914-3917.	7.8	79
85	î»-Transition to the Bose-Einstein Condensate. Zeitschrift Fur Naturforschung - Section A Journal of Physical Sciences, 1995, 50, 921-930.	1.5	75
86	Random Lattices in Combined a.c. and d.c. Electric Fields: Anderson <i>vs.</i> Wannier-Stark Localization. Europhysics Letters, 1995, 32, 241-246.	2.0	33
87	Rigorous bound on the plane-shear-flow dissipation rate. Physical Review E, 1995, 51, 360-365.	2.1	17
88	Subharmonic generation in quantum systems. Physics Letters, Section A: General, Atomic and Solid State Physics, 1994, 187, 151-156.	2.1	13
89	Generalized π pulses. Physical Review A, 1994, 49, 1950-1960.	2.5	79
90	ac Stark effects and harmonic generation in periodic potentials. Physical Review B, 1994, 49, 16605-16608.	3.2	42

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91	Adiabatic evolution, quantum phases, and Landau-Zener transitions in strong. Radiation Effects and Defects in Solids, 1994, null, 91-106.	1.2	1
92	Strongly Driven Semiconductor Quantum Wells. Progress of Theoretical Physics Supplement, 1994, 116, 417-423.	0.1	6
93	Quantum wells and superlattices in strong time-dependent fields. Physical Review B, 1993, 47, 6499-6508.	3.2	140
94	Adiabatic control of molecular excitation and tunneling by short laser pulses. The Journal of Physical Chemistry, 1993, 97, 12634-12643.	2.9	22
95	Berry's phase in quantum optics. Physical Review A, 1993, 47, 725-728.	2.5	8
96	Locally disordered lattices in strong ac electric fields. Physical Review B, 1993, 48, 15123-15131.	3.2	41
97	Selective excitation of the HF molecule: Continuum and pulse-shape effects. Physical Review A, 1992, 45, 550-552.	2.5	17
98	Transitions induced by separatrix crossing. Physical Review A, 1992, 45, 4960-4968.	2.5	18
99	Pulse-shape-controlled tunneling in a laser field. Physical Review Letters, 1992, 69, 1596-1599.	7.8	90
100	Classical resonances in quantum mechanics. Physical Review A, 1992, 45, 1978-1986.	2.5	33
101	Collapse of minibands in far-infrared irradiated superlattices. Physical Review Letters, 1992, 69, 351-354.	7.8	398
102	A remark on the Kramers-Henneberger transformation. Physics Letters, Section A: General, Atomic and Solid State Physics, 1992, 165, 341-346.	2.1	6
103	The quantum theory of an ideal superlattice responding to far-infrared laser radiation. European Physical Journal B, 1992, 89, 251-259.	1.5	83
104	A semiclassical theory of quasienergies and Floquet wave functions. Annals of Physics, 1991, 211, 249-291.	2.8	103
105	Highly excited hydrogen atoms in strong microwave fields. Zeitschrift Für Physik D-Atoms Molecules and Clusters, 1991, 18, 239-248.	1.0	23
106	Selective excitation of molecular vibrations by interference of Floquet states. Journal of Physics B: Atomic, Molecular and Optical Physics, 1991, 24, 1343-1357.	1.5	38
107	Adiabatic motion and the structure of quasi-energy surfaces of periodically driven quantum systems. Societa Italiana Di Fisica Nuovo Cimento B-General Physics, Relativity Astronomy and Mathematical Physics and Methods, 1990, 105, 53-63.	0.2	9
108	On the classical dynamics of strongly driven anharmonic oscillators. Physica D: Nonlinear Phenomena, 1990, 46, 317-341.	2.8	17

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109	Transport of quantum states of periodically driven systems. Journal De Physique, 1990, 51, 709-722.	1.8	24
110	Low-frequency ionisation of excited hydrogen atoms: the Floquet picture. Journal of Physics B: Atomic, Molecular and Optical Physics, 1989, 22, 3187-3196.	1.5	24
111	Adiabatic processes in the ionization of highly excited hydrogen atoms. Zeitschrift Für Physik D-Atoms Molecules and Clusters, 1989, 11, 1-14.	1.0	102
112	Quantum phases and Landau-Zener transitions in oscillating fields. Physics Letters, Section A: General, Atomic and Solid State Physics, 1989, 140, 507-512.	2.1	56
113	Strong laser fields interacting with matter I. Zeitschrift FÃ $^1\!\!/\!\!4$ r Physik D-Atoms Molecules and Clusters, 1988, 10, 13-26.	1.0	33
114	The role of avoided crossings in the dynamics of strong laser field ? matter interactions. Zeitschrift FÃ $\frac{1}{4}$ r Physik D-Atoms Molecules and Clusters, 1988, 8, 349-357.	1.0	49
115	On the quantum field theory of photoionisation and electron scattering reactions on atoms. Zeitschrift Fýr Physik D-Atoms Molecules and Clusters, 1987, 7, 9-21.	1.0	4