

Amichay Vardi

List of Publications by Year in descending order

Source: <https://exaly.com/author-pdf/6698501/publications.pdf>

Version: 2024-02-01

68
papers

2,095
citations

257357

24
h-index

233338

45
g-index

70
all docs

70
docs citations

70
times ranked

1109
citing authors

#	ARTICLE	IF	CITATIONS
1	Bose-Einstein Condensates beyond Mean Field Theory: Quantum Backreaction as Decoherence. Physical Review Letters, 2001, 86, 568-571.	2.9	202
2	Anisotropic Solitons in Dipolar Bose-Einstein Condensates. Physical Review Letters, 2008, 100, 090406.	2.9	189
3	Theory of radiative recombination with strong laser pulses and the formation of ultracold molecules via stimulated photo-recombination of cold atoms. Journal of Chemical Physics, 1997, 107, 6166-6174.	1.2	137
4	Surface-molecule proton transfer: A demonstration of the Eley-Rideal mechanism. Physical Review Letters, 1991, 66, 116-119.	2.9	122
5	Quantum effects on the dynamics of a two-mode atom-molecule Bose-Einstein condensate. Physical Review A, 2001, 64, .	1.0	116
6	Source of metastable H(2s) atoms using the Stark chirped rapid-adiabatic-passage technique. Physical Review A, 1999, 60, R4237-R4240.	1.0	110
7	Exact quantum phase model for mesoscopic Josephson junctions. Physical Review A, 2001, 64, .	1.0	81
8	Vortex solitons in dipolar Bose-Einstein condensates. Physical Review A, 2008, 78, .	1.0	72
9	Quantum dynamics in the bosonic Josephson junction. Physical Review A, 2010, 82, .	1.0	72
10	Bosonic Amplification of Noise-Induced Suppression of Phase Diffusion. Physical Review Letters, 2008, 100, 220403.	2.9	70
11	Bose-Enhanced Chemistry: Amplification of Selectivity in the Dissociation of Molecular Bose-Einstein Condensates. Physical Review Letters, 2002, 88, 160402.	2.9	56
12	Incoherent Matter-Wave Solitons and Pairing Instability in an Attractively Interacting Bose-Einstein Condensate. Physical Review Letters, 2005, 95, 180401.	2.9	55
13	Phase-Diffusion Dynamics in Weakly Coupled Bose-Einstein Condensates. Physical Review Letters, 2009, 102, 180403.	2.9	54
14	Nonlinear Phase Dynamics in a Driven Bosonic Josephson Junction. Physical Review Letters, 2010, 104, 240402.	2.9	50
15	Many-body effects on adiabatic passage through Feshbach resonances. Physical Review A, 2006, 73, .	1.0	46
16	Two-photon dissociation/ionization beyond the adiabatic approximation. Journal of Chemical Physics, 1996, 104, 5490-5496.	1.2	35
17	Decoherence and entanglement in a bosonic Josephson junction: Bose-enhanced quantum Zeno control of phase diffusion. Physical Review A, 2009, 80, .	1.0	34
18	Minimal Fokker-Planck Theory for the Thermalization of Mesoscopic Subsystems. Physical Review Letters, 2013, 110, 050401.	2.9	34

#	ARTICLE	IF	CITATIONS
19	Nonlinear Adiabatic Passage from Fermion Atoms to Boson Molecules. <i>Physical Review Letters</i> , 2005, 95, 170403.	2.9	33
20	Quantum dynamics of Bose-Hubbard Hamiltonians beyond the Hartree-Fock-Bogoliubov approximation: The Bogoliubov back-reaction approximation. <i>Physical Review A</i> , 2007, 75, .	1.0	32
21	Complete population transfer to and from a continuum and the radiative association of cold Na atoms to produce translationally cold Na ₂ molecules in specific vib-rotational states. <i>Optics Express</i> , 1999, 4, 91.	1.7	31
22	Directional "Superradiant" Collisions: Bosonic Amplification of Atom Pairs Emitted from an Elongated Bose-Einstein Condensate. <i>Physical Review Letters</i> , 2002, 89, 090403.	2.9	26
23	On the role of intermolecular interactions in establishing chiral stability. <i>Journal of Chemical Physics</i> , 2000, 112, 8743-8746.	1.2	25
24	Hyperthermal surface ionization of mercury from Pt(111). <i>Physical Review Letters</i> , 1990, 65, 2038-2041.	2.9	24
25	Laser catalysis with pulses. <i>Physical Review A</i> , 1998, 58, 1352-1360.	1.0	24
26	Superfluidity and Chaos in low dimensional circuits. <i>Scientific Reports</i> , 2015, 5, 13433.	1.6	24
27	Comment on "Quasicontinuum modeling of photoassociation". <i>Physical Review A</i> , 2002, 65, .	1.0	22
28	Triangular Bose-Hubbard trimer as a minimal model for a superfluid circuit. <i>Physical Review A</i> , 2014, 89, .	1.0	21
29	Conversion Efficiency of Ultracold Fermionic Atoms to Bosonic Molecules via Feshbach Resonance Sweep Experiments. <i>Physical Review Letters</i> , 2004, 93, 120409.	2.9	19
30	Adiabatic Passage through Chaos. <i>Physical Review Letters</i> , 2018, 121, 250405.	2.9	18
31	Confinement Effects on the Stimulated Dissociation of Molecular Bose-Einstein Condensates. <i>Physical Review Letters</i> , 2007, 98, 080403.	2.9	17
32	Optimal Gaussian squeezed states for atom interferometry in the presence of phase diffusion. <i>Physical Review A</i> , 2010, 82, .	1.0	17
33	Holstein model and Peierls instability in one-dimensional boson-fermion lattice gases. <i>Physical Review A</i> , 2005, 72, .	1.0	16
34	Matter-wave squeezing and the generation of SU(1,1) and SU(2) coherent states via Feshbach resonances. <i>Physical Review A</i> , 2008, 77, .	1.0	16
35	Coherence dynamics of kicked Bose-Hubbard dimers: Interferometric signatures of chaos. <i>Physical Review E</i> , 2013, 87, 012910.	0.8	15
36	Dark stationary matter waves via parity-selective filtering in a Tonks-Girardeau gas. <i>Physical Review A</i> , 2006, 74, .	1.0	14

#	ARTICLE	IF	CITATIONS
37	Probabilistic Hysteresis in Integrable and Chaotic Isolated Hamiltonian Systems. <i>Physical Review Letters</i> , 2019, 123, 114101.	2.9	14
38	Surface-molecule proton transfer in the scattering of hyperthermal DABCO from H/Pt(111). <i>Surface Science</i> , 1992, 261, 299-312.	0.8	11
39	Atom-molecule dephasing in an SU(1,1) interferometer based on the stimulated dissociation of a molecular Bose-Einstein condensate. <i>Physical Review A</i> , 2009, 80, .	1.0	9
40	Quantum Zeno control of coherent dissociation. <i>Physical Review A</i> , 2011, 84, .	1.0	9
41	Temporal fluctuations in the bosonic Josephson junction as a probe for phase space tomography. <i>Journal of Physics A: Mathematical and Theoretical</i> , 2013, 46, 165304.	0.7	9
42	Quantum thermalization: anomalous slow relaxation due to percolation-like dynamics. <i>New Journal of Physics</i> , 2015, 17, 023071.	1.2	9
43	Many-body adiabatic passage: Quantum detours around chaos. <i>Physical Review A</i> , 2019, 99, .	1.0	9
44	Collisional shifts in optical-lattice atom clocks. <i>Physical Review A</i> , 2006, 74, .	1.0	8
45	Interaction-induced dynamical phase locking of Bose-Einstein condensates. <i>Physical Review A</i> , 2009, 80, .	1.0	7
46	Dynamics of microcavity exciton polaritons in a Josephson double dimer. <i>Physical Review B</i> , 2013, 88, .	1.1	7
47	Thermalization of Bipartite Bose-Hubbard Models. <i>Journal of Physical Chemistry A</i> , 2016, 120, 3136-3141.	1.1	6
48	Semiclassical theory of strong localization for quantum thermalization. <i>Physical Review E</i> , 2018, 97, 022127.	0.8	6
49	Squeezing in driven bimodal Bose-Einstein condensates: Erratic driving versus noise. <i>Physical Review A</i> , 2012, 85, .	1.0	5
50	Coherence oscillations between weakly coupled Bose-Hubbard dimers. <i>Physical Review A</i> , 2014, 89, .	1.0	5
51	Self-trapping of excitations: Two-dimensional quasiparticle solitons in an extended Bose-Hubbard dimer array. <i>Physical Review A</i> , 2017, 95, .	1.0	5
52	NaXe and KXe positive ion formation in hyperthermal xenon-Pt(111) surface scattering. <i>Journal of Chemical Physics</i> , 1990, 93, 7506-7507.	1.2	4
53	Wave packet dynamics of pulsed laser catalysis in two dimensions. <i>Journal of Chemical Physics</i> , 1999, 111, 7713-7726.	1.2	4
54	Adiabatic passage through a Feshbach resonance in a degenerate quantum gas. <i>Journal of Modern Optics</i> , 2007, 54, 697-706.	0.6	4

#	ARTICLE	IF	CITATIONS
55	Suppression and enhancement of decoherence in an atomic Josephson junction. <i>New Journal of Physics</i> , 2016, 18, 055008.	1.2	4
56	Many-body dynamical localization and thermalization. <i>Physical Review A</i> , 2020, 101, .	1.0	4
57	Matter-field entropy transfer in stimulated photoassociation. <i>Physical Review A</i> , 2000, 62, .	1.0	3
58	Boson-like quantum dynamics of association in ultracold Fermi gases. <i>Optics Communications</i> , 2006, 264, 321-325.	1.0	3
59	Interaction-induced instability and chaos in the photoassociative stimulated Raman adiabatic passage from atomic to molecular Bose-Einstein condensates. <i>Physical Review A</i> , 2020, 101, .	1.0	3
60	Chaos-induced breakdown of Bose-Hubbard modeling. <i>Physical Review A</i> , 2020, 101, .	1.0	3
61	Quantum Signatures in Quench from Chaos to Superradiance. <i>Physical Review Letters</i> , 2022, 128, 130604.	2.9	3
62	Adiabatic molecular dynamics: two-body and many-body aspects. <i>Molecular Physics</i> , 2008, 106, 349-355.	0.8	2
63	Suppression of collision-induced dephasing by periodic, erratic, or noisy driving. <i>European Physical Journal: Special Topics</i> , 2013, 217, 215-220.	1.2	2
64	Prethermalization with negative specific heat. <i>Physical Review E</i> , 2020, 102, 052107.	0.8	2
65	Confinement controlled dissociation of a molecular Bose-Einstein condensate. <i>Journal of Physics B: Atomic, Molecular and Optical Physics</i> , 2007, 40, S299-S313.	0.6	1
66	Collisional shifts in an optical-lattice atomic clock. <i>Laser Physics</i> , 2008, 18, 308-313.	0.6	1
67	Robust sub-shot-noise measurement via Rabi-Josephson oscillations in bimodal Bose-Einstein condensates. <i>Physical Review A</i> , 2011, 83, .	1.0	1
68	Quantum-Zeno Control of Collisional Entanglement in a Bose-Josephson Junction. , 2009, , .		0