

Martin Kiffner

List of Publications by Year in descending order

Source: <https://exaly.com/author-pdf/6377661/publications.pdf>

Version: 2024-02-01

55
papers

1,236
citations

393982

19
h-index

377514

34
g-index

57
all docs

57
docs citations

57
times ranked

1135
citing authors

#	ARTICLE	IF	CITATIONS
1	Variational quantum algorithms for nonlinear problems. <i>Physical Review A</i> , 2020, 101, .	1.0	130
2	Two-mode single-atom laser as a source of entangled light. <i>Physical Review A</i> , 2007, 75, .	1.0	92
3	Coherent Microwave-to-Optical Conversion via Six-Wave Mixing in Rydberg Atoms. <i>Physical Review Letters</i> , 2018, 120, 093201.	2.9	87
4	Vacuum-Induced Processes in Multilevel Atoms. <i>Progress in Optics</i> , 2010, 55, 85-197.	0.4	80
5	Steady-state negative Wigner functions of nonlinear nanomechanical oscillators. <i>New Journal of Physics</i> , 2012, 14, 023042.	1.2	77
6	Resonant Interferometric Lithography beyond the Diffraction Limit. <i>Physical Review Letters</i> , 2008, 100, 073602.	2.9	72
7	Quantum Interference Enforced by Time-Energy Complementarity. <i>Physical Review Letters</i> , 2006, 96, 100403.	2.9	54
8	Manipulating quantum materials with quantum light. <i>Physical Review B</i> , 2019, 99, .	1.1	46
9	Efficient microwave-to-optical conversion using Rydberg atoms. <i>Physical Review A</i> , 2019, 99, .	1.0	43
10	Dissipation-induced Tonks-Girardeau gas of polaritons. <i>Physical Review A</i> , 2010, 81, .	1.0	41
11	Geometry-dependent dynamics of two $\hat{\nu}$ -type atoms via vacuum-induced coherences. <i>Physical Review A</i> , 2006, 73, .	1.0	38
12	Two-way interconversion of millimeter-wave and optical fields in Rydberg gases. <i>New Journal of Physics</i> , 2016, 18, 093030.	1.2	37
13	Dipole-dipole-coupled double-Rydberg molecules. <i>Physical Review A</i> , 2012, 86, .	1.0	32
14	Magnetic Monopoles and Synthetic Spin-Orbit Coupling in Rydberg Macrodimers. <i>Physical Review Letters</i> , 2013, 110, 170402.	2.9	28
15	Coherent control in a decoherence-free subspace of a collective multilevel system. <i>Physical Review A</i> , 2007, 75, .	1.0	26
16	Three-Body Bound States in Dipole-Dipole Interacting Rydberg Atoms. <i>Physical Review Letters</i> , 2013, 111, 233003.	2.9	25
17	A quantum-inspired approach to exploit turbulence structures. <i>Nature Computational Science</i> , 2022, 2, 30-37.	3.8	25
18	Minimum hardware requirements for hybrid quantum-classical DMFT. <i>Quantum Science and Technology</i> , 2020, 5, 034015.	2.6	20

#	ARTICLE	IF	CITATIONS
19	Interference in the resonance fluorescence of two incoherently coupled transitions. <i>Physical Review A</i> , 2006, 73, .	1.0	19
20	Mott polaritons in cavity-coupled quantum materials. <i>New Journal of Physics</i> , 2019, 21, 073066.	1.2	19
21	Collimated UV light generation by two-photon excitation to a Rydberg state in Rb vapor. <i>Optics Letters</i> , 2019, 44, 2931.	1.7	19
22	Lensing effect of electromagnetically induced transparency involving a Rydberg state. <i>Physical Review A</i> , 2015, 92, .	1.0	16
23	Bosonic fractional quantum Hall states on a finite cylinder. <i>Physical Review A</i> , 2019, 99, .	1.0	16
24	Breakdown of the few-level approximation in collective systems. <i>Physical Review A</i> , 2007, 76, .	1.0	15
25	Ultrafast Creation of Overlapping Rydberg Electrons in an Atomic BEC and Mott-Insulator Lattice. <i>Physical Review Letters</i> , 2020, 124, 253201.	2.9	14
26	Single spontaneous photon as a coherent beamsplitter for an atomic matter-wave. <i>Nature Physics</i> , 2011, 7, 379-382.	6.5	13
27	Abelian and non-Abelian gauge fields in dipole-dipole interacting Rydberg atoms. <i>Journal of Physics B: Atomic, Molecular and Optical Physics</i> , 2013, 46, 134008.	0.6	13
28	Terahertz field control of interlayer transport modes in cuprate superconductors. <i>Physical Review B</i> , 2017, 96, .	1.1	13
29	Quantum mechanical calculation of Rydberg-Rydberg autoionization rates. <i>Journal of Physics B: Atomic, Molecular and Optical Physics</i> , 2016, 49, 204004.	0.6	12
30	Directional THz generation in hot Rb vapor excited to a Rydberg state. <i>Optics Letters</i> , 2021, 46, 1017.	1.7	12
31	Master equation approach for interacting slow- and stationary-light polaritons. <i>Physical Review A</i> , 2010, 82, .	1.0	11
32	Dissipation-induced correlations in one-dimensional bosonic systems. <i>New Journal of Physics</i> , 2011, 13, 053027.	1.2	10
33	Dynamical control of pulse propagation in electromagnetically induced transparency. <i>Physical Review A</i> , 2009, 79, .	1.0	9
34	Few-body bound states of dipole-dipole-interacting Rydberg atoms. <i>Physical Review A</i> , 2014, 89, .	1.0	9
35	Probing quantum superposition states with few-cycle laser pulses. <i>Journal of the Optical Society of America B: Optical Physics</i> , 2009, 26, 1912.	0.9	8
36	Pulse splitting in light propagation through N -type atomic media due to an interplay of Kerr nonlinearity and group-velocity dispersion. <i>Physical Review A</i> , 2015, 92, .	1.0	8

#	ARTICLE	IF	CITATIONS
37	Quantum self-supervised learning. Quantum Science and Technology, 2022, 7, 035005.	2.6	8
38	Dissipative quantum-light-field engineering. Physical Review A, 2012, 85, .	1.0	7
39	Characterizing the phase diagram of finite-size dipolar Bose-Hubbard systems. Physical Review A, 2020, 101, .	1.0	7
40	Detection of atomic entanglement and electromagnetically induced transparency in velocity-selective coherent population trapping. Physical Review A, 2005, 71, .	1.0	6
41	Subwavelength optical lattices induced by position-dependent dark states. Physical Review A, 2011, 83, .	1.0	4
42	Topological spin models in Rydberg lattices. Applied Physics B: Lasers and Optics, 2017, 123, 1.	1.1	4
43	Coarse-grained intermolecular interactions on quantum processors. Physical Review A, 2022, 105, .	1.0	3
44	Probing microscopic models for system-bath interactions via parametric driving. Physical Review A, 2018, 98, .	1.0	1
45	Coherent bidirectional microwave-optical conversion using Rydberg atoms. , 2016, , .		1
46	Detection of atomic entanglement and electromagnetically induced transparency in velocity-selective coherent population trapping. , 0, , .		0
47	Breakdown of the few-level approximation in dipole-dipole interacting systems. Proceedings of SPIE, 2007, , .	0.8	0
48	Quantum Control of Interacting Multiatom Systems. AIP Conference Proceedings, 2007, , .	0.3	0
49	Resonant interferometric lithography beyond the diffraction limit. , 2009, , .		0
50	Cavity optomechanics with nonlinear mechanical resonators in the quantum regime. , 2011, , .		0
51	Single spontaneous photon as a coherent beamsplitter for an atomic matter-wave. , 2014, , .		0
52	Topological Spin Models in Rydberg Lattices. , 2018, , 351-369.		0
53	A polynomial Ansatz for norm-conserving pseudopotentials. Journal of Physics Condensed Matter, 2018, 30, 275501.	0.7	0
54	Breakdown of the Few-Level Approximation in Collective Systems. , 2007, , .		0

#	ARTICLE	IF	CITATIONS
55	Resonant Interferometric Lithography beyond the Diffraction Limit. , 2008, , .		0