Michael Kohl

List of Publications by Year
in descending order

83 papers	7,890 citations	71097 41 h-index	71682 76 g-index
84 all docs	84 docs citations	84 times ranked	3843 citing authors

#	Article	IF	Citations
1	Achievements and perspectives of optical fiber Fabryâ€“Perot cavities. Applied Physics B: Lasers and Optics, 2022, 128, 1.	2.2	24
2	Radio-frequency driving of an attractive Fermi gas in a one-dimensional optical lattice. Physical Review A, 2022, 105, .	2.5	0
3	Deterministic spin-photon entanglement from a trapped ion in a fiber Fabryâ€“Perot cavity. Npj Quantum Information, 2021, 7, .	6.7	23
4	Decay and revival of a transient trapped Fermi condensate. Physical Review Research, 2021, 3, .	3.6	5
5	A compact and fast magnetic coil for the manipulation of quantum gases with Feshbach resonances. Review of Scientific Instruments, 2021, 92, 093202.	1.3	2
6	Competing magnetic orders in a bilayer Hubbard model with ultracold atoms. Nature, 2021, 589, 40-43.	27.8	45
7	Simulating a Mott Insulator Using Attractive Interaction. Physical Review Letters, 2020, 124, 010403.	7.8	7
8	Pair correlations in the attractive Hubbard model. Physical Review Research, 2020, 2, .	3.6	7
9	Finite-duration interaction quench in dilute attractively interacting Fermi gases: Emergence of preformed pairs. Physical Review A, 2019, 100, .	2.5	2
10	Ultraviolet Fabry-Perot cavity with stable finesse under ultrahigh vacuum conditions. Review of Scientific Instruments, 2019, 90, 063102.	1.3	6
11	Correlated photon-pair generation in a liquid-filled microcavity. New Journal of Physics, 2019, 21, 123037.	2.9	1
12	Correlated-photon-pair emission from a cw-pumped Fabry-Perot microcavity. Physical Review A, 2018, 97, .	2.5	5
13	Monolayer Graphene as Dissipative Membrane in an Optical Resonator. , 2018, , 617-627.		0
14	Higgs mode in a strongly interacting fermionic superfluid. Nature Physics, 2018, 14, 781-785.	16.7	67
15	Coherent manipulation of spin correlations in the Hubbard model. Physical Review A, 2018, 97, .	2.5	8
16	Cavity-induced backaction in Purcell-enhanced photon emission of a single ion in an ultraviolet fiber cavity. Physical Review A, 2017, 95, .	2.5	26
17	Measuring Entropy and Short-Range Correlations in the Two-Dimensional Hubbard Model. Physical Review X, 2017, 7, .	8.9	18
18	Antiferromagnetic Correlations in Two-Dimensional Fermionic Mott-Insulating and Metallic Phases. Physical Review Letters, 2017, 118, 170401.	7.8	55

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19	Thermodynamics versus Local Density Fluctuations in the Metalâ€“Mott-Insulator Crossover. Physical Review Letters, 2016, 117, 135301.	7.8	19
20	Monolayer graphene as dissipative membrane in an optical resonator. Applied Physics B: Lasers and Optics, 2016, 122, 1.	2.2	6
21	Equation of State of the Two-Dimensional Hubbard Model. Physical Review Letters, 2016, 116, 175301.	7.8	69
22	Second-order response theory of radio-frequency spectroscopy for cold atoms. Physical Review A, 2015, 92, .	2.5	1
23	Cavity-QED with a Trapped Ion in an Optical Fiber Cavity. , 2015, , .		0
24	Direct Photonic Coupling of a Semiconductor Quantum Dot and a Trapped Ion. Physical Review Letters, 2015, 114, 123001.	7.8	58
25	Photon Emission and Absorption of a Single Ion Coupled to an Optical-Fiber Cavity. Physical Review Letters, 2014, 113, 263003.	7.8	17
26	Realisation of a photonic link between a trapped ion and a semiconductor quantum dot. , 2014, , .		0
27	Relaxation Dynamics of a Fermi Gas in an Optical Superlattice. Physical Review Letters, 2014, 113, 170403.	7.8	28
28	Realisation of a photonic link between a trapped ion and a semiconductor quantum dot. , 2014, , .		0
29	Decoherence of a Single-Ion Qubit Immersed in a Spin-Polarized Atomic Bath. Physical Review Letters, 2013, 110, 160402.	7.8	68
30	Single Ion Coupled to an Optical Fiber Cavity. Physical Review Letters, 2013, 110, 043003.	7.8	99
31	Universal spin dynamics in two-dimensional Fermi gases. Nature Physics, 2013, 9, 405-409.	16.7	83
32	Collective modes of a two-dimensional spin-<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:mrow><mml:mn>1</mml:mn><mml:mo>/</mml:mo><mml:mn>2</mml:mn></mml:mrow></mml:math>Fermi gas in a harmonic trap. Physical Review A, 2013, 87, .	2.5	22
33	Two-Dimensional Fermi Liquid with Attractive Interactions. Physical Review Letters, 2012, 109, 130403.	7.8	41
34	Laser spectroscopy and cooling of Yb+ions on a deep-UV transition. Physical Review A, 2012, 85, .	2.5	9
35	Controlling chemical reactions of a single particle. Nature Physics, 2012, 8, 649-652.	16.7	126
36	Attractive and repulsive Fermi polarons in two dimensions. Nature, 2012, 485, 619-622.	27.8	359

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37	Low-Dimensional Atomic Bose Gases. Contemporary Concepts of Condensed Matter Science, 2012, 5, 95-120.	0.5	1
38	Scale Invariance and Viscosity of a Two-Dimensional Fermi Gas. Physical Review Letters, 2012, 108, 070404.	7.8	114
39	Radio-frequency spectra of Feshbach molecules in quasi-two-dimensional geometries. Physical Review A, 2012, 85, .	2.5	22
40	Observation of a pairing pseudogap in a two-dimensional Fermi gas. Nature, 2011, 480, 75-78.	27.8	204
41	Kinetics of a single trapped ion in an ultracold buffer gas. New Journal of Physics, 2011, 13, 053020.	2.9	54
42	Radio-Frequency Spectroscopy of a Strongly Interacting Two-Dimensional Fermi Gas. Physical Review Letters, 2011, 106, 105301.	7.8	207
43	Isotope shift and hyperfine splitting of the<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:mrow><mml:mn>4</mml:mn><mml:mi>s</mml:mi><mml:mo>â†'</mml:mo><mml:mn>5</mml:mn><mml:mi>p in potassium. Physical Review A, 2011, 83, .	2.5	8
44	Hybrid quantum systems of atoms and ions. Journal of Physics: Conference Series, 2011, 264, 012019.	0.4	10
45	A trapped single ion inside a Boseâ€“Einstein condensate. Nature, 2010, 464, 388-391.	27.8	335
46	All-optical pump-and-probe detection of two-time correlations in a Fermi gas. Physical Review A, 2010, 81, .	2.5	4
47	Cold Heteronuclear Atom-Ion Collisions. Physical Review Letters, 2010, 105, 133201.	7.8	102
48	Quantum Transport through a Tonks-Girardeau Gas. Physical Review Letters, 2009, 103, 150601.	7.8	179
49	Cooling fermionic atoms in optical lattices by shaping the confinement. Physical Review A, 2009, 79, .	2.5	89
50	Criticality and Correlations in Cold Atomic Gases. , 2008, , 79-88.		2
51	Scanning tunneling microscopy for ultracold atoms. Physical Review A, 2007, 76, .	2.5	58
52	Interaction-Controlled Transport of an Ultracold Fermi Gas. Physical Review Letters, 2007, 99, 220601.	7.8	102
53	Time interval distributions of atoms in atomic beams. Applied Physics B: Lasers and Optics, 2007, 86, 391-393.	2.2	8
54	Cavity QED with a Boseâ€“Einstein condensate. Nature, 2007, 450, 268-271.	27.8	483

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55	Critical Behavior of a Trapped Interacting Bose Gas. Science, 2007, 315, 1556-1558.	12.6	151
56	Observing the Formation of Long-Range Order during Bose-Einstein Condensation. Physical Review Letters, 2007, 98, 090402.	7.8	75
57	Hybrid apparatus for Bose-Einstein condensation and cavity quantum electrodynamics: Single atom detection in quantum degenerate gases. Review of Scientific Instruments, 2006, 77, 063118.	1.3	44
58	Strongly interacting atoms and molecules in a 3D optical lattice. Journal of Physics B: Atomic, Molecular and Optical Physics, 2006, 39, S47-S56.	1.5	13
59	Bose-Fermi Mixtures in a Three-Dimensional Optical Lattice. Physical Review Letters, 2006, 96, 180402.	7.8	263
60	Molecules of Fermionic Atoms in an Optical Lattice. Physical Review Letters, 2006, 96, 030401.	7.8	231
61	Thermometry of fermionic atoms in an optical lattice. Physical Review A, 2006, 73, .	2.5	41
62	Cavity QED detection of interfering matter waves. Physical Review A, 2006, 73, .	2.5	29
63	FERMIONIC ATOMS WITH TUNABLE INTERACTIONS IN A 3D OPTICAL LATTICE. , 2005, , .		1
64	Superfluid to Mott insulator transition in one, two, and three dimensions. Journal of Low Temperature Physics, 2005, 138, 635-644.	1.4	80
65	Fermionic atoms in an optical lattice. , 2005, , .		0
66	p-Wave Interactions in Low-Dimensional Fermionic Gases. Physical Review Letters, 2005, 95, 230401.	7.8	190
67	Fermionic Atoms in a Three Dimensional Optical Lattice: Observing Fermi Surfaces, Dynamics, and Interactions. Physical Review Letters, 2005, 94, 080403.	7.8	564
68	Observing the profile of an atom laser beam. Physical Review A, 2005, 72, .	2.5	34
69	Correlations and Counting Statistics of an Atom Laser. Physical Review Letters, 2005, 95, 090404.	7.8	265
70	Confinement Induced Molecules in a 1D Fermi Gas. Physical Review Letters, 2005, 94, 210401.	7.8	333
71	Excitations of a Superfluid in a Three-Dimensional Optical Lattice. Physical Review Letters, 2004, 93, 240402.	7.8	111
72	1D Bose gases in an optical lattice. Applied Physics B: Lasers and Optics, 2004, 79, 1009-1012.	2.2	27

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73	Transition from a Strongly Interacting 1D Superfluid to a Mott Insulator. Physical Review Letters, 2004, 92, 130403.	7.8	898
74	Line width of an atom laser. Applied Physics B: Lasers and Optics, 2003, 76, 109-112.	2.2	1
75	Exciting Collective Oscillations in a Trapped 1D Gas. Physical Review Letters, 2003, 91, 250402.	7.8	445
76	Continuous detection of an atom laser beam. Physical Review A, 2002, 65, .	2.5	11
77	Growth of Bose-Einstein Condensates from Thermal Vapor. Physical Review Letters, 2002, 88, 080402.	7.8	78
78	Transverse mode of an atom laser. Physical Review A, 2002, 65, .	2.5	26
79	Measuring the Temporal Coherence of an Atom Laser Beam. Physical Review Letters, 2001, 87, 160404.	7.8	68
80	Optics with an Atom Laser Beam. Physical Review Letters, 2001, 87, 030401.	7.8	70
81	Surface Excitations of a Bose-Einstein Condensate. Physical Review Letters, 2000, 84, 810-813.	7.8	83
82	Evidence for a Critical Velocity in a Bose-Einstein Condensed Gas. Physical Review Letters, 1999, 83, 2502-2505.	7.8	453
83	Observation of higher order NMR larmor lines by SQUID in solids at low magnetic field. Journal of Low Temperature Physics, 1988, 72, 319-343.	1.4	12