Tilman Pfau

List of Publications by Year
in descending order

Source: https://exaly.com/author-pdf/8747247/publications.pdf

Version: 2024-02-01

224	16,917	18482 62	15266 126
papers	citations	h-index	g-index

226	226	226	6813
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Plasmonic analogue of electromagnetically induced transparency at the Drude damping limit. Nature Materials, 2009, 8, 758-762.	27.5	1,651
2	The physics of dipolar bosonic quantum gases. Reports on Progress in Physics, 2009, 72, 126401.	20.1	1,201
3	Bose-Einstein Condensation of Chromium. Physical Review Letters, 2005, 94, 160401.	7.8	993
4	Microwave electrometry with Rydberg atoms in a vapour cell using bright atomic resonances. Nature Physics, 2012, 8, 819-824.	16.7	475
5	Observation of Quantum Droplets in a Strongly Dipolar Bose Gas. Physical Review Letters, 2016, 116, 215301.	7.8	466
6	Observing the Rosensweig instability of a quantum ferrofluid. Nature, 2016, 530, 194-197.	27.8	434
7	Strong dipolar effects in a quantum ferrofluid. Nature, 2007, 448, 672-675.	27.8	431
8	Observation of Dipole-Dipole Interaction in a Degenerate Quantum Gas. Physical Review Letters, 2005, 95, 150406.	7.8	410
9	Self-bound droplets of a dilute magnetic quantum liquid. Nature, 2016, 539, 259-262.	27.8	381
10	Stabilization of a purely dipolar quantum gas against collapse. Nature Physics, 2008, 4, 218-222.	16.7	356
11	Observation of ultralong-range Rydberg molecules. Nature, 2009, 458, 1005-1008.	27.8	341
12	Evidence for Coherent Collective Rydberg Excitation in the Strong Blockade Regime. Physical Review Letters, 2007, 99, 163601.	7.8	299
13	Tuning the Dipolar Interaction in Quantum Gases. Physical Review Letters, 2002, 89, 130401.	7.8	296
14	Bose-Einstein condensation with magnetic dipole-dipole forces. Physical Review A, 2000, 61, .	2.5	294
15	<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:mi>d</mml:mi></mml:math>-Wave Collapse and Explosion of a Dipolar Bose-Einstein Condensate. Physical Review Letters, 2008, 101, 080401.	7.8	289
16	Transient Supersolid Properties in an Array of Dipolar Quantum Droplets. Physical Review X, 2019, 9, .	8.9	235
17	Measurement of the Wigner function of an ensemble of helium atoms. Nature, 1997, 386, 150-153.	27.8	232
18	An experimental and theoretical guide to strongly interacting Rydberg gases. Journal of Physics B: Atomic, Molecular and Optical Physics, 2012, 45, 113001.	1.5	206

#	Article	IF	Citations
19	Phase-coherent amplification of atomic matter waves. Nature, 1999, 402, 641-644.	27.8	185
20	Quantum Critical Behavior in Strongly Interacting Rydberg Gases. Physical Review Letters, 2008, 101, 250601.	7.8	184
21	Spin-3 Chromium Bose-Einstein Condensates. Physical Review Letters, 2006, 96, 190404.	7.8	161
22	Coherent excitation of Rydberg atoms in micrometre-sized atomic vapour cells. Nature Photonics, 2010, 4, 112-116.	31.4	157
23	Collective Many-Body Interaction in Rydberg Dressed Atoms. Physical Review Letters, 2010, 105, 160404.	7.8	153
24	Observation of Feshbach Resonances in an Ultracold Gas ofCr52. Physical Review Letters, 2005, 94, 183201.	7.8	141
25	The low-energy Goldstone mode in a trapped dipolar supersolid. Nature, 2019, 574, 386-389.	27.8	135
26	Amplification of Light and Atoms in a Bose-Einstein Condensate. Physical Review Letters, 2000, 85, 4225-4228.	7.8	133
27	A Homonuclear Molecule with a Permanent Electric Dipole Moment. Science, 2011, 334, 1110-1114.	12.6	129
28	Loss of Spatial Coherence by a Single Spontaneous Emission. Physical Review Letters, 1994, 73, 1223-1226.	7.8	128
29	Laser-like Scheme for Atomic-Matter Waves. Europhysics Letters, 1995, 32, 469-474.	2.0	124
30	Coupling a single electron to a Boseâ€“Einstein condensate. Nature, 2013, 502, 664-667.	27.8	124
31	A room-temperature single-photon source based on strongly interacting Rydberg atoms. Science, 2018, 362, 446-449.	12.6	122
32	New states of matter with fine-tuned interactions: quantum droplets and dipolar supersolids. Reports on Progress in Physics, 2021, 84, 012403.	20.1	122
33	Experimental demonstration of the optical Stern-Gerlach effect. Physical Review Letters, 1992, 68, 1996-1999.	7.8	120
34	Rydberg Excitation of Bose-Einstein Condensates. Physical Review Letters, 2008, 100, 033601.	7.8	120
35	Strongly Correlated Growth of Rydberg Aggregates in a Vapor Cell. Physical Review Letters, 2015, 114, 203002.	7.8	120
36	Rydberg Trimers and Excited Dimers Bound by Internal Quantum Reflection. Physical Review Letters, 2010, 105, 163201.	7.8	119

#	Article	IF	Citations
37	Rydberg dressing: understanding of collective many-body effects and implications for experiments. New Journal of Physics, 2014, 16, 063012.	2.9	116
38	Comparing Contact and Dipolar Interactions in a Bose-Einstein Condensate. Physical Review Letters, 2006, 97, 250402.	7.8	114
39	Artificial Atoms Can Do More Than Atoms: Deterministic Single Photon Subtraction from Arbitrary Light Fields. Physical Review Letters, 2011, 107, 093601.	7.8	114
40	From molecular spectra to a density shift in dense Rydberg gases. Nature Communications, 2014, 5, 4546.	12.8	105
41	Hexagonal nanostructures generated by light masks for neutral atoms. Applied Physics B: Lasers and Optics, 1997, 65, 755-759.	2.2	91
42	Rydberg atoms in hollow-core photonic crystal fibres. Nature Communications, 2014, 5, 4132.	12.8	89
43	Quasi-2D Gas of Laser Cooled Atoms in a Planar Matter Waveguide. Physical Review Letters, 1998, 81, 5298-5301.	7.8	86
44	Striped states in a many-body system of tilted dipoles. Physical Review A, 2017, 96, .	2.5	85
45	Magneto-optical beam splitter for atoms. Physical Review Letters, 1993, 71, 3427-3430.	7.8	84
46	High-order Talbot fringes for atomic matter waves. Optics Letters, 1997, 22, 1430.	3.3	84
47	Imaging and focusing of an atomic beam with a large period standing light wave. Applied Physics B, Photophysics and Laser Chemistry, 1992, 54, 375-379.	1.5	83
48	Alignment of<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:mi>D</mml:mi></mml:math>-State Rydberg Molecules. Physical Review Letters, 2014, 112, 143008.	7.8	83
49	Emergence of Chaotic Scattering in Ultracold Er and Dy. Physical Review X, 2015, 5, .	8.9	81
50	Dilute dipolar quantum droplets beyond the extended Gross-Pitaevskii equation. Physical Review Research, 2019, 1, .	3.6	81
51	Intense source of cold Rb atoms from a pure two-dimensional magneto-optical trap. Physical Review A, 2002, 66, .	2.5	78
52	Dipolar relaxation in an ultra-cold gas of magnetically trapped chromium atoms. Applied Physics B: Lasers and Optics, 2003, 77, 765-772.	2.2	78
53	Quantum correlations and entanglement in far-from-equilibrium spin systems. Physical Review A, 2014, 90, .	2.5	77
54	Echo Experiments in a Strongly Interacting Rydberg Gas. Physical Review Letters, 2008, 100, 013002.	7.8	76

#	Article	IF	Citations
55	Universal scaling in a strongly interacting Rydberg gas. Physical Review A, 2009, 80, .	2.5	75
56	Stability of a dipolar Bose-Einstein condensate in a one-dimensional lattice. Physical Review A, 2011, 84, .	2.5	73
57	Shadows and Mirrors: Reconstructing Quantum States of Atom Motion. Physics Today, 1998, 51, 22-28.	0.3	72
58	Mesoscopic Ensembles of Polar Bosons in Triple-Well Potentials. Physical Review Letters, 2010, 104, 170404.	7.8	69
59	Scissors Mode of Dipolar Quantum Droplets of Dysprosium Atoms. Physical Review Letters, 2018, 120, 160402.	7.8	69
60	Demagnetization cooling of a gas. Nature Physics, 2006, 2, 765-768.	16.7	65
61	Ionic Impurity in a Bose-Einstein Condensate at Submicrokelvin Temperatures. Physical Review Letters, 2018, 120, 193401.	7.8	63
62	Highly Resolved Measurements of Stark-Tuned FÃ¶rster Resonances between Rydberg Atoms. Physical Review Letters, 2012, 108, 113001.	7.8	62
63	Evidence for Strong van der Waals Type Rydberg-Rydberg Interaction in a Thermal Vapor. Physical Review Letters, 2013, 110, 123001.	7.8	62
64	Continuous loading of a magnetic trap. Physical Review A, 2001, 64, .	2.5	60
65	Expansion dynamics of a dipolar Bose-Einstein condensate. Physical Review A, 2006, 74, .	2.5	60
66	Broad universal Feshbach resonances in the chaotic spectrum of dysprosium atoms. Physical Review A, 2015, 92, .	2.5	59
67	Liquid quantum droplets of ultracold magnetic atoms. Journal of Physics B: Atomic, Molecular and Optical Physics, 2016, 49, 214004.	1.5	59
68	One-, two-and three-dimensional nanostructures with atom lithography. Journal of Physics Condensed Matter, 2003, 15, R233-R255.	1.8	57
69	Probing an Electron Scattering Resonance using Rydberg Molecules within a Dense and Ultracold Gas. Physical Review Letters, 2016, 116, 053001.	7.8	57
70	Atoms in the Lowest Motional Band of a Three-Dimensional Optical Lattice. Physical Review Letters, 1997, 78, 1038-1041.	7.8	56
71	Ultracold Chemical Reactions of a Single Rydberg Atom in a Dense Gas. Physical Review X, 2016, 6, .	8.9	56
72	GHz Rabi Flopping to Rydberg States in Hot Atomic Vapor Cells. Physical Review Letters, 2011, 107, 243001.	7.8	55

#	Article	IF	Citations
73	Pattern formation in quantum ferrofluids: From supersolids to superglasses. Physical Review Research, 2021, 3, .	3.6	54
74	Observation of mixed singlet-triplet<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:msub><mml:mi>Rb</mml:mi><mml:mn>2</mml:mn></mml:msub></mml: molecules. Physical Review A, 2016, 93, .	2.5	51
75	Investigation of dephasing rates in an interacting Rydberg gas. New Journal of Physics, 2009, 11, 055014.	2.9	51
76	Four-wave mixing involving Rydberg states in thermal vapor. Physical Review A, 2012, 85, .	2.5	51
77	Nanolithography with metastabile helium. Applied Physics B: Lasers and Optics, 1996, 63, 203-205.	2.2	50
78	Nanometerscale lithography with chromium atoms using light forces. Microelectronic Engineering, 1997, 35, 285-288.	2.4	49
79	Atomic vapor spectroscopy in integrated photonic structures. Applied Physics Letters, 2015, 107, .	3.3	48
80	Spinor condensates with a laser-induced quadratic Zeeman effect. Physical Review A, 2007, 75, .	2.5	47
81	Fabrication method for microscopic vapor cells for alkali atoms. Optics Letters, 2010, 35, 1950.	3.3	47
82	Atomâ€“molecule coherence for ultralong-range Rydberg dimers. Nature Physics, 2010, 6, 970-974.	16.7	46
83	Lifetimes of ultralong-range Rydberg molecules in vibrational ground and excited states. Journal of Physics B: Atomic, Molecular and Optical Physics, 2011, 44, 184004.	1.5	46
84	Quantum technology: from research to application. Applied Physics B: Lasers and Optics, 2016, 122, 1.	2.2	42
85	Observation of Rydberg Blockade Induced by a Single Ion. Physical Review Letters, 2018, 121, 193401.	7.8	42
86	Proposal for a Magneto-optical Beam Splitter for Atoms. Europhysics Letters, 1993, 21, 439-444.	2.0	40
87	Room-temperature Rydberg single-photon source. Physical Review A, 2013, 87, .	2.5	40
88	Fate of the Amplitude Mode in a Trapped Dipolar Supersolid. Physical Review Letters, 2019, 123, 193002.	7.8	40
89	Determination of thes-Wave Scattering Length of Chromium. Physical Review Letters, 2003, 91, 193201.	7.8	39
90	Coherent collapses of dipolar Boseâ€“Einstein condensates for different trap geometries. New Journal of Physics, 2009, 11, 055032.	2.9	39

#	Article	IF	Citations
91	Rydberg Molecules for Ion-Atom Scattering in the Ultracold Regime. Physical Review Letters, 2018, 120, 153401.	7.8	39
92	Electrical Readout for Coherent Phenomena Involving Rydberg Atoms in Thermal Vapor Cells. Physical Review Letters, 2013, 110, 123002.	7.8	38
93	Onset of a modulational instability in trapped dipolar Bose-Einstein condensates. Physical Review A, 2018, 97, .	2.5	38
94	Roton Excitations in an Oblate Dipolar Quantum Gas. Physical Review Letters, 2021, 126, 193002.	7.8	38
95	A magneto-optical trap for chromium with population repumping via intercombination lines. Europhysics Letters, 1999, 45, 156-161.	2.0	37
96	Production of a chromium Boseâ€“Einstein condensate. Applied Physics B: Lasers and Optics, 2006, 82, 211-216.	2.2	37
97	Narrow-line magneto-optical trap for dysprosium atoms. Optics Letters, 2014, 39, 3138.	3.3	36
98	A lattice of magneto-optical and magnetic traps for cold atoms. European Physical Journal D, 2003, 22, 347-354.	1.3	35
99	Ballistic expansion of a dipolar condensate. Journal of Optics B: Quantum and Semiclassical Optics, 2003, 5, S208-S211.	1.4	35
100	Precision Spectroscopy of Negative-Ion Resonances in Ultralong-Range Rydberg Molecules. Physical Review Letters, 2019, 123, 073003.	7.8	33
101	Continuous Loading of a Conservative Potential Trap from an Atomic Beam. Physical Review Letters, 2011, 106, 163002.	7.8	32
102	Coupling Thermal Atomic Vapor to Slot Waveguides. Physical Review X, 2018, 8, .	8.9	32
103	Density Fluctuations across the Superfluid-Supersolid Phase Transition in a Dipolar Quantum Gas. Physical Review X, 2021, 11, .	8.9	32
104	Anisotropic Superfluid Behavior of a Dipolar Bose-Einstein Condensate. Physical Review Letters, 2018, 121, 030401.	7.8	31
105	Supersolidity in Two-Dimensional Trapped Dipolar Droplet Arrays. Physical Review Letters, 2021, 127, 155301.	7.8	30
106	Dipolar interaction in ultra-cold atomic gases. AIP Conference Proceedings, 2008, , .	0.4	29
107	Stable Periodic Density Waves in Dipolar Bose-Einstein Condensates Trapped in Optical Lattices. Physical Review Letters, 2012, 108, 140402.	7.8	29
108	Coupling thermal atomic vapor to an integrated ring resonator. New Journal of Physics, 2016, 18, 103031.	2.9	29

#	Article	IF	Citations
109	Photoassociation of Trilobite Rydberg Molecules via Resonant Spin-Orbit Coupling. Physical Review Letters, 2017, 118, 223001.	7.8	29
110	Mean-field description of dipolar bosons in triple-well potentials. Journal of Physics B: Atomic, Molecular and Optical Physics, 2012, 45, 225302.	1.5	28
111	Imaging single Rydberg electrons in a Boseâ€“Einstein condensate. New Journal of Physics, 2015, 17, 053046.	2.9	28
112	A new state of matter of quantum droplets. Frontiers of Physics, 2021, 16, 1.	5.0	28
113	Error budgeting for a controlled-phase gate with strontium-88 Rydberg atoms. Physical Review Research, 2022, 4, .	3.6	28
114	Transport of a Single Cold Ion Immersed in a Bose-Einstein Condensate. Physical Review Letters, 2021, 126, 033401.	7.8	27
115	Observation of correlated atom-photon pairs on the single-particle level. Physical Review A, 1997, 55, R2539-R2542.	2.5	26
116	Charged Wire Interferometer for Atoms. Physical Review Letters, 1998, 81, 5792-5795.	7.8	25
117	Structured doping with light forces. Applied Physics Letters, 2001, 78, 1781-1783.	3.3	25
118	Critical Temperature of Weakly Interacting Dipolar Condensates. Physical Review Letters, 2007, 98, 080407.	7.8	25
119	Atomic Pair-State Interferometer: Controlling and Measuring an Interaction-Induced Phase Shift in Rydberg-Atom Pairs. Physical Review X, 2012, 2, .	8.9	24
120	Triple stack glass-to-glass anodic bonding for optogalvanic spectroscopy cells with electrical feedthroughs. Applied Physics Letters, 2014, 105, .	3.3	24
121	Nanolithography with neutral chromium and helium atoms. Journal of Vacuum Science & Technology an Official Journal of the American Vacuum Society B, Microelectronics Processing and Phenomena, 1997, 15, 2905.	1.6	23
122	Polarization gradient light masks in atom lithography. Europhysics Letters, 1999, 46, 148-153.	2.0	23
123	Nano-lithography with atoms. Surface Science, 1999, 433-435, 40-47.	1.9	23
124	Continuous loading of cold atoms into a IoffeÂPritchard magnetic trap. Journal of Optics B: Quantum and Semiclassical Optics, 2003, 5, S170-S177.	1.4	23
125	Hybridization of Rydberg Electron Orbitals by Molecule Formation. Physical Review Letters, 2015, 115, 023001.	7.8	23
126	Controlling Rydberg atom excitations in dense background gases. Journal of Physics B: Atomic, Molecular and Optical Physics, 2016, 49, 182001.	1.5	23

#	Article	IF	Citations
127	Rydberg polaritons in a thermal vapor. Physical Review A, 2016, 93, .	2.5	23
128	Topological Quantum Critical Points in the Extended Bose-Hubbard Model. Physical Review Letters, 2022, 128, 043402.	7.8	23
129	Fabrication and characterization of an electrically contacted vapor cell. Optics Letters, 2012, 37, 2271.	3.3	21
130	Pulsed Ion Microscope to Probe Quantum Gases. Physical Review X, 2021, 11, .	8.9	21
131	Writing a superlattice with light forces. Applied Physics B: Lasers and Optics, 2000, 70, 671-674.	2.2	20
132	Interaction of atoms with a magneto-optical potential. Physical Review A, 1993, 48, 2108-2116.	2.5	19
133	Continuous optical loading of a Bose-Einstein condensate. Physical Review A, 2001, 63, .	2.5	19
134	Integrated atom-optical circuit with continuous-wave operation. Journal of the Optical Society of America B: Optical Physics, 2003, 20, 648.	2.1	19
135	Doppler cooling of an optically dense cloud of magnetically trapped atoms. Journal of the Optical Society of America B: Optical Physics, 2003, 20, 960.	2.1	19
136	A fermionic impurity in a dipolar quantum droplet. Physica Scripta, 2018, 93, 104004.	2.5	19
137	Inelastic collision dynamics of a single cold ion immersed in a Bose-Einstein condensate. Physical Review A, 2020, 102, .	2.5	19
138	Interplay between thermal Rydberg gases and plasmas. Physical Review A, 2019, 99, .	2.5	18
139	Atom lithography using light forces. Microelectronic Engineering, 1996, 30, 383-386.	2.4	17
140	Partial reconstruction of the motional Wigner function of an ensemble of helium atoms. Journal of Modern Optics, 1997, 44, 2551-2564.	1.3	17
141	Sub-100 nm structures by neutral atom lithography. Microelectronic Engineering, 1999, 46, 105-108.	2.4	17
142	Raman cooling of spin-polarized cesium atoms in a crossed dipole trap. Europhysics Letters, 1999, 46, 141-147.	2.0	17
143	Depolarisation cooling of an atomic cloud. Europhysics Letters, 2005, 71, 918-924.	2.0	17
144	High resolution Rydberg spectroscopy of ultracold rubidium atoms. Fortschritte Der Physik, 2006, 54, 765-775.	4.4	16

#	Article	IF	Citations
145	Quantum liquids get thin. Science, 2018, 359, 274-275.	12.6	16
146	Observation of a molecular bond between ions and Rydberg atoms. Nature, 2022, 605, 453-456.	27.8	16
147	Lithography using nano-lens arrays made of light. Journal of Modern Optics, 1997, 44, 1883-1898.	1.3	15
148	Probing the light-induced dipole-dipole interaction in momentum space. Europhysics Letters, 2005, 71, 214-220.	2.0	15
149	Collective oscillations of dipolar Bose-Einstein condensates and accurate comparison between contact and dipolar interactions. Physical Review A, 2007, 75, .	2.5	15
150	Trapping atoms on a transparent permanent-magnet atom chip. Physical Review A, 2006, 73, .	2.5	14
151	Hot atoms rotate light rapidly. Nature Photonics, 2009, 3, 197-199.	31.4	14
152	Focus on Atom Optics and its Applications. New Journal of Physics, 2010, 12, 065014.	2.9	14
153	Motion-induced signal revival in pulsed Rydberg four-wave mixing beyond the frozen-gas limit. Physical Review A, 2014, 90, .	2.5	14
154	Rapid communication Pattern generation with cesium atomic beams at nanometer scales. Applied Physics B: Lasers and Optics, 1996, 63, 649-652.	2.2	14
155	Loading chromium atoms in a magnetic guide. Journal of Physics B: Atomic, Molecular and Optical Physics, 2007, 40, F77-F84.	1.5	13
156	Loading atoms into a surface trap: simulations of an experimental scheme. Optics Communications, 1997, 143, 125-132.	2.1	12
157	A proposal for continuous loading of an optical dipole trap with magnetically guided ultra-cold atoms. Journal of Physics B: Atomic, Molecular and Optical Physics, 2009, 42, 245302.	1.5	12
158	Atomic Faraday beam splitter for light generated from pump-degenerate four-wave mixing in a hollow-core photonic crystal fiber. Physical Review A, 2021, 103, .	2.5	12
159	Time-resolved detection of atoms diffracted from a standing light wave. Applied Physics B: Lasers and Optics, 1995, 60, 229-232.	2.2	11
160	Revivals and Oscillations of the Momentum of Light in a Planar Multimode Waveguide. Physical Review Letters, 2001, 87, 123901.	7.8	11
161	Deconfinement-induced collapse of a coherent array of dipolar Bose-Einstein condensates. Physical Review A, 2012, 86, .	2.5	11
162	Proof of concept for an optogalvanic gas sensor for NO based on Rydberg excitations. Applied Physics Letters, 2018, 113, .	3.3	11

#	Article	IF	Citations
163	Cavity QED based on room temperature atoms interacting with a photonic crystal cavity: a feasibility study. Applied Physics B: Lasers and Optics, 2020, 126, 1.	2.2	11
164	High- and low-frequency phonon modes in dipolar quantum gases trapped in deep lattices. Physical Review A, 2013, 87, .	2.5	10
165	Correlations of a quasi-two-dimensional dipolar ultracold gas at finite temperatures. Physical Review A, 2013, 87, .	2.5	10
166	High efficiency demagnetization cooling by suppression of light-assisted collisions. Optics Express, 2015, 23, 5596.	3.4	10
167	A two species trap for chromium and rubidium atoms. Journal of Modern Optics, 2004, 51, 1807-1816.	1.3	9
168	Two-frequency acousto-optic modulator driver to improve the beam pointing stability during intensity ramps. Review of Scientific Instruments, 2007, 78, 043101.	1.3	9
169	Ultracold chromium atoms: from Feshbach resonances to a dipolar Boseâ€“Einstein condensate. Journal of Modern Optics, 2007, 54, 647-660.	1.3	9
170	A high flux of ultra-cold chromium atoms in a magnetic guide. Journal of Physics B: Atomic, Molecular and Optical Physics, 2009, 42, 145306.	1.5	9
171	Laser cooling of a magnetically guided ultracold atom beam. New Journal of Physics, 2010, 12, 065018.	2.9	9
172	Driving Dipolar Fermions into the Quantum Hall Regime by Spin-Flip Induced Insertion of Angular Momentum. Physical Review Letters, 2013, 110, 145303.	7.8	9
173	Efficient demagnetization cooling of atoms and its limits. Physical Review A, 2014, 89, .	2.5	9
174	Coherent excitation of a Heâ^— beam observed in atomic momentum distributions. Optics Communications, 1996, 123, 505-511.	2.1	8
175	Atomic lithography. Microelectronic Engineering, 1998, 41-42, 587-590.	2.4	8
176	Atom nanolithography with multilayer light masks: Particle optics analysis. Physical Review A, 2005, 72, .	2.5	8
177	Pattern generation with cesium atomic beams at nanometer scales. Applied Physics B: Lasers and Optics, 1996, 63, 649-652.	2.2	7
178	Double-slit experiments with correlated atom - photon states. Quantum and Semiclassical Optics: Journal of the European Optical Society Part B, 1996, 8, 665-671.	0.9	7
179	Narrow bandwidth electromagnetically induced transparency in optically trapped atoms. Journal of Physics B: Atomic, Molecular and Optical Physics, 2007, 40, 1907-1915.	1.5	7
180	Sisyphus cooling in a continuously loaded trap. New Journal of Physics, 2013, 15, 093012.	2.9	7

#	Article	IF	Citations
181	Spectroscopy of a narrow-line optical pumping transition in atomic dysprosium. Optics Letters, 2013, 38, 637.	3.3	7
182	A Heisenberg Microscope for Atoms. Annals of the New York Academy of Sciences, 1995, 755, 162-172.	3.8	6
183	Highly customized 1010â€…nm, ns-pulsed Yb-doped fiber amplifier as a key tool for on-demand single-photon generation. Optics Express, 2020, 28, 17362.	3.4	6
184	Detection of cold metastable atoms at a surface. Review of Scientific Instruments, 2003, 74, 2685-2689.	1.3	5
185	Ground state of a two-component dipolar Fermi gas in a harmonic potential. Physical Review A, 2013, 88, .	2.5	5
186	Limit cycle phase and Goldstone mode in driven dissipative systems. Physical Review A, 2021, 103, .	2.5	5
187	Integrating two-photon nonlinear spectroscopy of rubidium atoms with silicon photonics. Optics Express, 2020, 28, 19593.	3.4	5
188	Purcell-enhanced dipolar interactions in nanostructures. Physical Review Research, 2022, 4, .	3.6	5
189	Neue Entwicklungen in der Atomoptik. Physik Journal, 1994, 50, 45-50.	0.1	4
190	Writing nanostructures with a metastable helium beam. Microelectronic Engineering, 1997, 35, 427-430.	2.4	4
191	Low retaining force optical viewport seal. Review of Scientific Instruments, 2007, 78, 046107.	1.3	4
192	Magnetostriction in a degenerate quantum gas. Journal of Magnetism and Magnetic Materials, 2007, 316, 429-432.	2.3	4
193	An optogalvanic gas sensor based on Rydberg excitations. Journal of Physics B: Atomic, Molecular and Optical Physics, 2020, 53, 094001.	1.5	4
194	Transient Density-Induced Dipolar Interactions in a Thin Vapor Cell. Physical Review Letters, 2022, 128, 173401.	7.8	4
195	A matter-wave interferometer based on the dc-Stark effect. Applied Physics B: Lasers and Optics, 1999, 69, 269-275.	2.2	3
196	ATOM OPTICS: Continuous Progress on Atom Lasers. Science, 2002, 296, 2155-2156.	12.6	3
197	Photoassociation of spin-polarized chromium. Physical Review A, 2016, 93, .	2.5	3
198	Towards a laser-like source of atoms. Progress in Crystal Growth and Characterization of Materials, 1996, 33, 385-393.	4.0	2

#	Article	IF	Citations
199	<title>Nanometer-scale lithography with chromium and helium atoms</title>. , 1997, 2995, 80.		2
200	Atomlithographie. Physik Journal, 1997, 53, 523-528.	0.1	2
201	Plasmonic EIT at the Drude damping limit. , 2009, , .		2
202	Pulsed Rydberg four-wave mixing with motion-induced dephasing in a thermal vapor. Applied Physics B: Lasers and Optics, 2016, 122, 18.	2.2	2
203	Ultrakalte Atome an OberflÃchen: Dicht Ã¼ber einer OberflÃche lassen sich Atome als zweidimensionales Gas speichern. Physik Journal, 1999, 55, 39-42.	0.1	1
204	Dipolar Gases â€" Experiment. Cold Atoms, 2014, , 311-325.	0.3	1
205	Condensate losses and oscillations induced by Rydberg atoms. Journal of Physics B: Atomic, Molecular and Optical Physics, 2017, 50, 055003.	1.5	1
206	A transimpedance amplifier based on an LTPS process operated in alkali vapor for the measurement of an ionization current. , 2018, , .		1
207	Proposal for a Magneto-Optical Beam Splitter for Atoms. Europhysics Letters, 1993, 21, 795-795.	2.0	0
208	Optical elements for atoms: A beamsplitter and a mirror. , 1993, , 3-20.		0
209	Laser-Like Source of Atoms Based on Optical Pumping. , 1996, , .		0
210	Atom Lithography In Two-dimensional polarization gradient light fields. , 0, , .		0
211	Quantenoptik: Ein VerstÃrker fÃ¼r Materieâ€•und Lichtwellen: Ein beleuchtetes Boseâ€Einsteinâ€Kondensat vermag Lichtpulse abzubremsen sowie Lichtâ€•und Materiewellen zu verstÃrken. Physik Journal, 2001, 57, 55-59.	0.1	0
212	Observing and tuning the dipolar interaction in a Bose-Einstein condensate. , 2003, , .		0
213	Collisional properties of ultracold Chromium: Towards a purely dipolar quantum gas. , 2007, , .		0
214	MolekÃ¼le aus Rydberg-Atomen. Physik in Unserer Zeit, 2009, 40, 173-174.	0.0	0
215	Coherent Rydberg excitation in microscopic thermal vapor cells. , 2010, , .		0
216	Publisher's Note: Ground state of a two-component dipolar Fermi gas in a harmonic potential [Phys. Rev. A88, 043604 (2013)]. Physical Review A, 2014, 89, .	2.5	0

#	Article	IF	Citations
217	Signal revivals in pulsed Rydberg four-wave mixing in thermal ensembles. , 2016, , .		0
218	Commissioning of a Highly Customized 1010 nm, ns-Pulsed, Yb-Doped Fiber Amplifier for On-Demand Single-Photon Generation. , 2021, , .		0
219	Coherent control of long range Rydberg molecules. , 2010, , .		0
220	Rydberg atoms in kagomÃ© photonic crystal fiber. , 2014, , .		0
221	Experiments with Correlated Atom-Photon States. , 1996, , 123-132.		0
222	A Rydberg impurity in a dense background gas (Conference Presentation). , 2016, , .		0
223	Towards an Optogalvanic Flux Sensor for Nitric Oxide Based on Rydberg Excitation. , 2021, , .		0
224	Partial reconstruction of the motional Wigner function of an ensemble of helium atoms. Journal of Modern Optics, 1997, 44, 2551-2564.	1.3	0