Tilman Pfau

List of Publications by Year in Descending Order

206 papers	13,727 citations	57 h-index	114 g-index
225 ext. papers	15,495 ext. citations	7.5 avg, IF	6.4 L-index

#	Paper	IF	Citations
206	Topological Quantum Critical Points in the Extended Bose-Hubbard Model.. *Physical Review Letters*, **2022**, 128, 043402	7.4	0
205	Transient Density-Induced Dipolar Interactions in a Thin Vapor Cell.. *Physical Review Letters*, **2022**, 128, 173401	7.4	
204	Observation of a molecular bond between ions and Rydberg atoms.. *Nature*, **2022**, 605, 453-456	50.4	0
203	Supersolidity in Two-Dimensional Trapped Dipolar Droplet Arrays. *Physical Review Letters*, **2021**, 127, 155301	7.4	4
202	A new state of matter of quantum droplets. *Frontiers of Physics*, **2021**, 16, 1	3.7	5
201	Roton Excitations in an Oblate Dipolar Quantum Gas. *Physical Review Letters*, **2021**, 126, 193002	7.4	9
200	New states of matter with fine-tuned interactions: quantum droplets and dipolar supersolids. *Reports on Progress in Physics*, **2021**, 84, 012403	14.4	32
199	Transport of a Single Cold Ion Immersed in a Bose-Einstein Condensate. *Physical Review Letters*, **2021**, 126, 033401	7.4	12
198	Density Fluctuations across the Superfluid-Supersolid Phase Transition in a Dipolar Quantum Gas. *Physical Review X*, **2021**, 11,	9.1	8
197	Pulsed Ion Microscope to Probe Quantum Gases. *Physical Review X*, **2021**, 11,	9.1	5
196	Pattern formation in quantum ferrofluids: From supersolids to superglasses. *Physical Review Research*, **2021**, 3,	3.9	9
195	An optogalvanic gas sensor based on Rydberg excitations. *Journal of Physics B: Atomic, Molecular and Optical Physics*, **2020**, 53, 094001	1.3	1
194	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	1.9	9
193	Integrating two-photon nonlinear spectroscopy of rubidium atoms with silicon photonics. *Optics Express*, **2020**, 28, 19593-19607	3.3	3
192	Highly customized 1010 nm, ns-pulsed Yb-doped fiber amplifier as a key tool for on-demand single-photon generation. *Optics Express*, **2020**, 28, 17362-17373	3.3	3
191	Inelastic collision dynamics of a single cold ion immersed in a Bose-Einstein condensate. *Physical Review A*, **2020**, 102,	2.6	9
190	Interplay between thermal Rydberg gases and plasmas. *Physical Review A*, **2019**, 99,	2.6	8

189	Transient Supersolid Properties in an Array of Dipolar Quantum Droplets. *Physical Review X*, **2019**, 9,	9.1	120
188	Precision Spectroscopy of Negative-Ion Resonances in Ultralong-Range Rydberg Molecules. *Physical Review Letters*, **2019**, 123, 073003	7.4	18
187	The low-energy Goldstone mode in a trapped dipolar supersolid. *Nature*, **2019**, 574, 386-389	50.4	63
186	Fate of the Amplitude Mode in a Trapped Dipolar Supersolid. *Physical Review Letters*, **2019**, 123, 193002	7.4	23
185	Dilute dipolar quantum droplets beyond the extended Gross-Pitaevskii equation. *Physical Review Research*, **2019**, 1,	3.9	37
184	Scissors Mode of Dipolar Quantum Droplets of Dysprosium Atoms. *Physical Review Letters*, **2018**, 120, 160402	7.4	38
183	Rydberg Molecules for Ion-Atom Scattering in the Ultracold Regime. *Physical Review Letters*, **2018**, 120, 153401	7.4	29
182	Quantum liquids get thin. *Science*, **2018**, 359, 274-275	33.3	11
181	Onset of a modulational instability in trapped dipolar Bose-Einstein condensates. *Physical Review A*, **2018**, 97,	2.6	26
180	Coupling Thermal Atomic Vapor to Slot Waveguides. *Physical Review X*, **2018**, 8,	9.1	18
179	Proof of concept for an optogalvanic gas sensor for NO based on Rydberg excitations. *Applied Physics Letters*, **2018**, 113, 011113	3.4	7
178	Anisotropic Superfluid Behavior of a Dipolar Bose-Einstein Condensate. *Physical Review Letters*, **2018**, 121, 030401	7.4	16
177	Ionic Impurity in a Bose-Einstein Condensate at Submicrokelvin Temperatures. *Physical Review Letters*, **2018**, 120, 193401	7.4	47
176	A transimpedance amplifier based on an LTPS process operated in alkali vapor for the measurement of an ionization current **2018**,		1
175	Observation of Rydberg Blockade Induced by a Single Ion. *Physical Review Letters*, **2018**, 121, 193401	7.4	33
174	A room-temperature single-photon source based on strongly interacting Rydberg atoms. *Science*, **2018**, 362, 446-449	33.3	67
173	A fermionic impurity in a dipolar quantum droplet. *Physica Scripta*, **2018**, 93, 104004	2.6	12
172	Condensate losses and oscillations induced by Rydberg atoms. *Journal of Physics B: Atomic, Molecular and Optical Physics*, **2017**, 50, 055003	1.3	1

171	Photoassociation of Trilobite Rydberg Molecules via Resonant Spin-Orbit Coupling. *Physical Review Letters*, **2017**, 118, 223001	7.4	24
170	Striped states in a many-body system of tilted dipoles. *Physical Review A*, **2017**, 96,	2.6	59
169	Observation of mixed singlet-triplet Rb2 Rydberg molecules. *Physical Review A*, **2016**, 93,	2.6	45
168	Rydberg polaritons in a thermal vapor. *Physical Review A*, **2016**, 93,	2.6	16
167	Probing an Electron Scattering Resonance using Rydberg Molecules within a Dense and Ultracold Gas. *Physical Review Letters*, **2016**, 116, 053001	7.4	51
166	Photoassociation of spin-polarized chromium. *Physical Review A*, **2016**, 93,	2.6	3
165	Observation of Quantum Droplets in a Strongly Dipolar Bose Gas. *Physical Review Letters*, **2016**, 116, 215301	7.4	322
164	Self-bound droplets of a dilute magnetic quantum liquid. *Nature*, **2016**, 539, 259-262	50.4	238
163	Liquid quantum droplets of ultracold magnetic atoms. *Journal of Physics B: Atomic, Molecular and Optical Physics*, **2016**, 49, 214004	1.3	39
162	Pulsed Rydberg four-wave mixing with motion-induced dephasing in a thermal vapor. *Applied Physics B: Lasers and Optics*, **2016**, 122, 18	1.9	1
161	Observing the Rosensweig instability of a quantum ferrofluid. *Nature*, **2016**, 530, 194-7	50.4	307
160	Coupling thermal atomic vapor to an integrated ring resonator. *New Journal of Physics*, **2016**, 18, 103031	2.9	20
159	Quantum technology: from research to application. *Applied Physics B: Lasers and Optics*, **2016**, 122, 1	1.9	21
158	Controlling Rydberg atom excitations in dense background gases. *Journal of Physics B: Atomic, Molecular and Optical Physics*, **2016**, 49, 182001	1.3	17
157	Ultracold Chemical Reactions of a Single Rydberg Atom in a Dense Gas. *Physical Review X*, **2016**, 6,	9.1	42
156	Imaging single Rydberg electrons in a Bose-Einstein condensate. *New Journal of Physics*, **2015**, 17, 053046	2.9	25
155	Strongly Correlated Growth of Rydberg Aggregates in a Vapor Cell. *Physical Review Letters*, **2015**, 114, 203002	7.4	101
154	High efficiency demagnetization cooling by suppression of light-assisted collisions. *Optics Express*, **2015**, 23, 5596-606	3.3	9

153	Broad universal Feshbach resonances in the chaotic spectrum of dysprosium atoms. *Physical Review A*, **2015**, 92,	2.6	49
152	Hybridization of Rydberg Electron Orbitals by Molecule Formation. *Physical Review Letters*, **2015**, 115, 023001	7.4	21
151	Atomic vapor spectroscopy in integrated photonic structures. *Applied Physics Letters*, **2015**, 107, 041101	3.4	42
150	Emergence of Chaotic Scattering in Ultracold Er and Dy. *Physical Review X*, **2015**, 5,	9.1	64
149	Quantum correlations and entanglement in far-from-equilibrium spin systems. *Physical Review A*, **2014**, 90,	2.6	61
148	Dipolar Gases Experiment. *Cold Atoms*, **2014**, 311-325		0
147	Rydberg dressing: understanding of collective many-body effects and implications for experiments. *New Journal of Physics*, **2014**, 16, 063012	2.9	95
146	Rydberg atoms in hollow-core photonic crystal fibres. *Nature Communications*, **2014**, 5, 4132	17.4	69
145	From molecular spectra to a density shift in dense Rydberg gases. *Nature Communications*, **2014**, 5, 4546	17.4	94
144	Narrow-line magneto-optical trap for dysprosium atoms. *Optics Letters*, **2014**, 39, 3138-41	3	26
143	Efficient demagnetization cooling of atoms and its limits. *Physical Review A*, **2014**, 89,	2.6	6
142	Motion-induced signal revival in pulsed Rydberg four-wave mixing beyond the frozen-gas limit. *Physical Review A*, **2014**, 90,	2.6	12
141	Triple stack glass-to-glass anodic bonding for optogalvanic spectroscopy cells with electrical feedthroughs. *Applied Physics Letters*, **2014**, 105, 041107	3.4	19
140	Alignment of D-state Rydberg molecules. *Physical Review Letters*, **2014**, 112, 143008	7.4	75
139	Coupling a single electron to a Bose-Einstein condensate. *Nature*, **2013**, 502, 664-7	50.4	112
138	High- and low-frequency phonon modes in dipolar quantum gases trapped in deep lattices. *Physical Review A*, **2013**, 87,	2.6	8
137	Correlations of a quasi-two-dimensional dipolar ultracold gas at finite temperatures. *Physical Review A*, **2013**, 87,	2.6	9
136	Sisyphus cooling in a continuously loaded trap. *New Journal of Physics*, **2013**, 15, 093012	2.9	5

135	Spectroscopy of a narrow-line optical pumping transition in atomic dysprosium. *Optics Letters*, **2013**, 38, 637-9	3	6
134	Ground state of a two-component dipolar Fermi gas in a harmonic potential. *Physical Review A*, **2013**, 88,	2.6	5
133	Room-temperature Rydberg single-photon source. *Physical Review A*, **2013**, 87,	2.6	33
132	Driving dipolar fermions into the quantum Hall regime by spin-flip induced insertion of angular momentum. *Physical Review Letters*, **2013**, 110, 145303	7.4	8
131	Electrical readout for coherent phenomena involving Rydberg atoms in thermal vapor cells. *Physical Review Letters*, **2013**, 110, 123002	7.4	32
130	Evidence for strong van der Waals type Rydberg-Rydberg interaction in a thermal vapor. *Physical Review Letters*, **2013**, 110, 123001	7.4	50
129	Microwave electrometry with Rydberg atoms in a vapour cell using bright atomic resonances. *Nature Physics*, **2012**, 8, 819-824	16.2	268
128	An experimental and theoretical guide to strongly interacting Rydberg gases. *Journal of Physics B: Atomic, Molecular and Optical Physics*, **2012**, 45, 113001	1.3	168
127	Fabrication and characterization of an electrically contacted vapor cell. *Optics Letters*, **2012**, 37, 2271-3	3	16
126	Highly resolved measurements of Stark-tuned Förster resonances between Rydberg atoms. *Physical Review Letters*, **2012**, 108, 113001	7.4	54
125	Atomic Pair-State Interferometer: Controlling and Measuring an Interaction-Induced Phase Shift in Rydberg-Atom Pairs. *Physical Review X*, **2012**, 2,	9.1	22
124	Deconfinement-induced collapse of a coherent array of dipolar Bose-Einstein condensates. *Physical Review A*, **2012**, 86,	2.6	10
123	Four-wave mixing involving Rydberg states in thermal vapor. *Physical Review A*, **2012**, 85,	2.6	41
122	Stable periodic density waves in dipolar Bose-Einstein condensates trapped in optical lattices. *Physical Review Letters*, **2012**, 108, 140402	7.4	28
121	Mean-field description of dipolar bosons in triple-well potentials. *Journal of Physics B: Atomic, Molecular and Optical Physics*, **2012**, 45, 225302	1.3	27
120	Stability of a dipolar Bose-Einstein condensate in a one-dimensional lattice. *Physical Review A*, **2011**, 84,	2.6	67
119	GHz Rabi flopping to Rydberg states in hot atomic vapor cells. *Physical Review Letters*, **2011**, 107, 243001	7.4	45
118	A homonuclear molecule with a permanent electric dipole moment. *Science*, **2011**, 334, 1110-4	33.3	112

117	Artificial atoms can do more than atoms: deterministic single photon subtraction from arbitrary light fields. *Physical Review Letters*, **2011**, 107, 093601	7.4	101
116	Continuous loading of a conservative potential trap from an atomic beam. *Physical Review Letters*, **2011**, 106, 163002	7.4	28
115	Lifetimes of ultralong-range Rydberg molecules in vibrational ground and excited states. *Journal of Physics B: Atomic, Molecular and Optical Physics*, **2011**, 44, 184004	1.3	42
114	Coherent excitation of Rydberg atoms in micrometre-sized atomic vapour cells. *Nature Photonics*, **2010**, 4, 112-116	33.9	127
113	Atom□olecule coherence for ultralong-range Rydberg dimers. *Nature Physics*, **2010**, 6, 970-974	16.2	42
112	Mesoscopic ensembles of polar bosons in triple-well potentials. *Physical Review Letters*, **2010**, 104, 170404	7.4	62
111	Rydberg trimers and excited dimers bound by internal quantum reflection. *Physical Review Letters*, **2010**, 105, 163201	7.4	108
110	Focus on Atom Optics and its Applications. *New Journal of Physics*, **2010**, 12, 065014	2.9	10
109	Fabrication method for microscopic vapor cells for alkali atoms. *Optics Letters*, **2010**, 35, 1950-2	3	39
108	Collective many-body interaction in Rydberg dressed atoms. *Physical Review Letters*, **2010**, 105, 160404	7.4	128
107	Laser cooling of a magnetically guided ultracold atom beam. *New Journal of Physics*, **2010**, 12, 065018	2.9	8
106	Universal scaling in a strongly interacting Rydberg gas. *Physical Review A*, **2009**, 80,	2.6	71
105	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	1.3	11
104	Investigation of dephasing rates in an interacting Rydberg gas. *New Journal of Physics*, **2009**, 11, 055014	2.9	43
103	Coherent collapses of dipolar Bose□Einstein condensates for different trap geometries. *New Journal of Physics*, **2009**, 11, 055032	2.9	32
102	Molekü□e aus Rydberg-Atomen. *Physik in Unserer Zeit*, **2009**, 40, 173-174	0.1	
101	Observation of ultralong-range Rydberg molecules. *Nature*, **2009**, 458, 1005-8	50.4	295
100	Plasmonic analogue of electromagnetically induced transparency at the Drude damping limit. *Nature Materials*, **2009**, 8, 758-62	27	1405

99	The physics of dipolar bosonic quantum gases. *Reports on Progress in Physics*, **2009**, 72, 126401	14.4	1030
98	A high flux of ultra-cold chromium atoms in a magnetic guide. *Journal of Physics B: Atomic, Molecular and Optical Physics*, **2009**, 42, 145306	1.3	7
97	Plasmonic EIT at the Drude damping limit **2009**,		2
96	Stabilization of a purely dipolar quantum gas against collapse. *Nature Physics*, **2008**, 4, 218-222	16.2	319
95	Quantum critical behavior in strongly interacting Rydberg gases. *Physical Review Letters*, **2008**, 101, 250601	7.4	169
94	Dipolar interaction in ultra-cold atomic gases. *AIP Conference Proceedings*, **2008**,	0	24
93	d-wave collapse and explosion of a dipolar bose-einstein condensate. *Physical Review Letters*, **2008**, 101, 080401	7.4	257
92	Echo experiments in a strongly interacting Rydberg gas. *Physical Review Letters*, **2008**, 100, 013002	7.4	71
91	Rydberg excitation of Bose-Einstein condensates. *Physical Review Letters*, **2008**, 100, 033601	7.4	104
90	Evidence for coherent collective Rydberg excitation in the strong blockade regime. *Physical Review Letters*, **2007**, 99, 163601	7.4	271
89	Magnetische K□lung f□ Gase. *Physik in Unserer Zeit*, **2007**, 38, 62-63	0.1	
88	Strong dipolar effects in a quantum ferrofluid. *Nature*, **2007**, 448, 672-5	50.4	398
87	Magnetostriction in a degenerate quantum gas. *Journal of Magnetism and Magnetic Materials*, **2007**, 316, 429-432	2.8	2
86	Low retaining force optical viewport seal. *Review of Scientific Instruments*, **2007**, 78, 046107	1.7	3
85	Narrow bandwidth electromagnetically induced transparency in optically trapped atoms. *Journal of Physics B: Atomic, Molecular and Optical Physics*, **2007**, 40, 1907-1915	1.3	7
84	Two-frequency acousto-optic modulator driver to improve the beam pointing stability during intensity ramps. *Review of Scientific Instruments*, **2007**, 78, 043101	1.7	9
83	Critical temperature of weakly interacting dipolar condensates. *Physical Review Letters*, **2007**, 98, 080407	7.4	23
82	Collective oscillations of dipolar Bose-Einstein condensates and accurate comparison between contact and dipolar interactions. *Physical Review A*, **2007**, 75,	2.6	14

81	Spinor condensates with a laser-induced quadratic Zeeman effect. *Physical Review A*, **2007**, 75,	2.6	38
80	Ultracold chromium atoms: from Feshbach resonances to a dipolar Bose–Einstein condensate. *Journal of Modern Optics*, **2007**, 54, 647-660	1.1	8
79	Loading chromium atoms in a magnetic guide. *Journal of Physics B: Atomic, Molecular and Optical Physics*, **2007**, 40, F77-F84	1.3	13
78	Comparing contact and dipolar interactions in a Bose-Einstein condensate. *Physical Review Letters*, **2006**, 97, 250402	7.4	103
77	Trapping atoms on a transparent permanent-magnet atom chip. *Physical Review A*, **2006**, 73,	2.6	13
76	Expansion dynamics of a dipolar Bose-Einstein condensate. *Physical Review A*, **2006**, 74,	2.6	51
75	Spin-3 chromium Bose-Einstein condensates. *Physical Review Letters*, **2006**, 96, 190404	7.4	150
74	High resolution Rydberg spectroscopy of ultracold rubidium atoms. *Fortschritte Der Physik*, **2006**, 54, 765-775	5.7	13
73	Demagnetization cooling of a gas. *Nature Physics*, **2006**, 2, 765-768	16.2	58
72	Production of a chromium Bose–Einstein condensate. *Applied Physics B: Lasers and Optics*, **2006**, 82, 211-216	1.9	36
71	Observation of Feshbach resonances in an ultracold gas of 52Cr. *Physical Review Letters*, **2005**, 94, 183201	7.4	136
70	Observation of dipole-dipole interaction in a degenerate quantum gas. *Physical Review Letters*, **2005**, 95, 150406	7.4	370
69	Depolarisation cooling of an atomic cloud. *Europhysics Letters*, **2005**, 71, 918-924	1.6	13
68	Atom nanolithography with multilayer light masks: Particle optics analysis. *Physical Review A*, **2005**, 72,	2.6	8
67	Bose-Einstein condensation of chromium. *Physical Review Letters*, **2005**, 94, 160401	7.4	887
66	Probing the light-induced dipole-dipole interaction in momentum space. *Europhysics Letters*, **2005**, 71, 214-220	1.6	12
65	A two species trap for chromium and rubidium atoms. *Journal of Modern Optics*, **2004**, 51, 1807-1816	1.1	9
64	Continuous loading of cold atoms into a Ioffe–Pritchard magnetic trap. *Journal of Optics B: Quantum and Semiclassical Optics*, **2003**, 5, S170-S177		21

63	A lattice of magneto-optical and magnetic traps for cold atoms. *European Physical Journal D*, **2003**, 22, 347-354	1.3	32
62	Dipolar relaxation in an ultra-cold gas of magnetically trapped chromium atoms. *Applied Physics B: Lasers and Optics*, **2003**, 77, 765-772	1.9	73
61	One-, two-and three-dimensional nanostructures with atom lithography. *Journal of Physics Condensed Matter*, **2003**, 15, R233-R255	1.8	52
60	Integrated atom-optical circuit with continuous-wave operation. *Journal of the Optical Society of America B: Optical Physics*, **2003**, 20, 648	1.7	17
59	Doppler cooling of an optically dense cloud of magnetically trapped atoms. *Journal of the Optical Society of America B: Optical Physics*, **2003**, 20, 960	1.7	19
58	Ballistic expansion of a dipolar condensate. *Journal of Optics B: Quantum and Semiclassical Optics*, **2003**, 5, S208-S211		33
57	Detection of cold metastable atoms at a surface. *Review of Scientific Instruments*, **2003**, 74, 2685-2689	1.7	5
56	Determination of the s-wave scattering length of chromium. *Physical Review Letters*, **2003**, 91, 193201	7.4	35
55	Intense source of cold Rb atoms from a pure two-dimensional magneto-optical trap. *Physical Review A*, **2002**, 66,	2.6	62
54	Tuning the dipolar interaction in quantum gases. *Physical Review Letters*, **2002**, 89, 130401	7.4	250
53	Atom optics. Continuous progress on atom lasers. *Science*, **2002**, 296, 2155-6	33.3	3
52	Revivals and oscillations of the momentum of light in a planar multimode waveguide. *Physical Review Letters*, **2001**, 87, 123901	7.4	8
51	Continuous loading of a magnetic trap. *Physical Review A*, **2001**, 64,	2.6	54
50	Continuous optical loading of a Bose-Einstein condensate. *Physical Review A*, **2001**, 63,	2.6	16
49	Structured doping with light forces. *Applied Physics Letters*, **2001**, 78, 1781-1783	3.4	23
48	Quantenoptik: Ein Verst□ker f□ Materie- und Lichtwellen: Ein beleuchtetes Bose-Einstein-Kondensat vermag Lichtpulse abzubremsen sowie Licht- und Materiewellen zu verst□ken. *Physik Journal*, **2001**, 57, 55-59		
47	Writing a superlattice with light forces. *Applied Physics B: Lasers and Optics*, **2000**, 70, 671-674	1.9	19
46	Bose-Einstein condensation with magnetic dipole-dipole forces. *Physical Review A*, **2000**, 61,	2.6	277

45	Amplification of light and atoms in a bose-einstein condensate. *Physical Review Letters*, **2000**, 85, 4225-8	7.4	116
44	A magneto-optical trap for chromium with population repumping via intercombination lines. *Europhysics Letters*, **1999**, 45, 156-161	1.6	33
43	Ultrakalte Atome an Oberflächen: Dicht über einer Oberfläche lassen sich Atome als zweidimensionales Gas speichern. *Physik Journal*, **1999**, 55, 39-42		1
42	Sub-100 nm structures by neutral atom lithography. *Microelectronic Engineering*, **1999**, 46, 105-108	2.5	15
41	Phase-coherent amplification of atomic matter waves. *Nature*, **1999**, 402, 641-644	50.4	165
40	A matter-wave interferometer based on the dc-Stark effect. *Applied Physics B: Lasers and Optics*, **1999**, 69, 269-275	1.9	2
39	Raman cooling of spin-polarized cesium atoms in a crossed dipole trap. *Europhysics Letters*, **1999**, 46, 141-147	1.6	17
38	Polarization gradient light masks in atom lithography. *Europhysics Letters*, **1999**, 46, 148-153	1.6	20
37	Nano-lithography with atoms. *Surface Science*, **1999**, 433-435, 40-47	1.8	23
36	Atomic lithography. *Microelectronic Engineering*, **1998**, 41-42, 587-590	2.5	8
35	Quasi-2D Gas of Laser Cooled Atoms in a Planar Matter Waveguide. *Physical Review Letters*, **1998**, 81, 5298-5301	7.4	78
34	Charged Wire Interferometer for Atoms. *Physical Review Letters*, **1998**, 81, 5792-5795	7.4	21
33	Shadows and Mirrors: Reconstructing Quantum States of Atom Motion. *Physics Today*, **1998**, 51, 22-28	0.9	63
32	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		18
31	Atoms in the Lowest Motional Band of a Three-Dimensional Optical Lattice. *Physical Review Letters*, **1997**, 78, 1038-1041	7.4	52
30	Observation of correlated atom-photon pairs on the single-particle level. *Physical Review A*, **1997**, 55, R2539-R2542	2.6	25
29	Nanometer-scale lithography with chromium and helium atoms **1997**, 2995, 80		2
28	Lithography using nano-lens arrays made of light. *Journal of Modern Optics*, **1997**, 44, 1883-1898	1.1	13

27	Atomlithographie. *Physik Journal*, **1997**, 53, 523-528		2
26	Partial reconstruction of the motional Wigner function of an ensemble of helium atoms. *Journal of Modern Optics*, **1997**, 44, 2551-2564	1.1	14
25	High-order Talbot fringes for atomic matter waves. *Optics Letters*, **1997**, 22, 1430-2	3	71
24	Measurement of the Wigner function of an ensemble of helium atoms. *Nature*, **1997**, 386, 150-153	50.4	197
23	Hexagonal nanostructures generated by light masks for neutral atoms. *Applied Physics B: Lasers and Optics*, **1997**, 65, 755-759	1.9	77
22	Nanometerscale lithography with chromium atoms using light forces. *Microelectronic Engineering*, **1997**, 35, 285-288	2.5	44
21	Writing nanostructures with a metastable helium beam. *Microelectronic Engineering*, **1997**, 35, 427-430	2.5	4
20	Loading atoms into a surface trap: simulations of an experimental scheme. *Optics Communications*, **1997**, 143, 125-132	2	11
19	Double-slit experiments with correlated atom - photon states. *Quantum and Semiclassical Optics: Journal of the European Optical Society Part B*, **1996**, 8, 665-671		7
18	Pattern generation with cesium atomic beams at nanometer scales. *Applied Physics B: Lasers and Optics*, **1996**, 63, 649-652	1.9	3
17	Nanolithography with metastabile helium. *Applied Physics B: Lasers and Optics*, **1996**, 63, 203-205	1.9	42
16	Towards a laser-like source of atoms. *Progress in Crystal Growth and Characterization of Materials*, **1996**, 33, 385-393	3.5	2
15	Atom lithography using light forces. *Microelectronic Engineering*, **1996**, 30, 383-386	2.5	16
14	Coherent excitation of a He* beam observed in atomic momentum distributions. *Optics Communications*, **1996**, 123, 505-511	2	8
13	Rapid communication Pattern generation with cesium atomic beams at nanometer scales. *Applied Physics B: Lasers and Optics*, **1996**, 63, 649-652	1.9	12
12	Experiments with Correlated Atom-Photon States **1996**, 123-132		
11	Time-resolved detection of atoms diffracted from a standing light wave. *Applied Physics B: Lasers and Optics*, **1995**, 60, 229-232	1.9	8
10	A Heisenberg Microscope for Atoms. *Annals of the New York Academy of Sciences*, **1995**, 755, 162-172	6.5	5

9	Laser-like Scheme for Atomic-Matter Waves. *Europhysics Letters*, **1995**, 32, 469-474	1.6	115
8	Loss of spatial coherence by a single spontaneous emission. *Physical Review Letters*, **1994**, 73, 1223-1226	7.4	115
7	Neue Entwicklungen in der Atomoptik. *Physik Journal*, **1994**, 50, 45-50		4
6	Proposal for a Magneto-optical Beam Splitter for Atoms. *Europhysics Letters*, **1993**, 21, 439-444	1.6	40
5	Interaction of atoms with a magneto-optical potential. *Physical Review A*, **1993**, 48, 2108-2116	2.6	19
4	Magneto-optical beam splitter for atoms. *Physical Review Letters*, **1993**, 71, 3427-3430	7.4	80
3	Optical elements for atoms: A beamsplitter and a mirror **1993**, 3-20		
2	Experimental demonstration of the optical Stern-Gerlach effect. *Physical Review Letters*, **1992**, 68, 1996-1999	7.4	104
1	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		77