Jrg Schmiedmayer

List of Publications by Year in Descending Order

257 papers	15,195 citations	65 h-index	117 g-index
295 ext. papers	17,096 ext. citations	7.2 avg, IF	6.46 L-index

#	Paper	IF	Citations
257	Josephson oscillations in split one-dimensional Bose gases. *SciPost Physics*, **2021**, 10,	6.1	3
256	Relaxation in an extended bosonic Josephson junction. *Physical Review Research*, **2021**, 3,	3.9	1
255	Quantum Field Thermal Machines. *PRX Quantum*, **2021**, 2,	6.1	5
254	Decay and recurrence of non-Gaussian correlations in a quantum many-body system. *Nature Physics*, **2021**, 17, 559-563	16.2	7
253	Two-Particle Interference with Double Twin-Atom Beams. *Physical Review Letters*, **2021**, 126, 083603	7.4	4
252	Extension of the Generalized Hydrodynamics to the Dimensional Crossover Regime. *Physical Review Letters*, **2021**, 126, 090602	7.4	11
251	Quantum read-out for cold atomic quantum simulators. *Communications Physics*, **2020**, 3,	5.4	5
250	Extracting the Field Theory Description of a Quantum Many-Body System from Experimental Data. *Physical Review X*, **2020**, 10,	9.1	14
249	Introducing iFluid: a numerical framework for solving hydrodynamical equations in integrable models. *SciPost Physics*, **2020**, 8,	6.1	20
248	Relaxation of bosons in one dimension and the onset of dimensional crossover. *SciPost Physics*, **2020**, 9,	6.1	6
247	Euler-scale dynamical correlations in integrable systems with fluid motion. *SciPost Physics Core*, **2020**, 3,	3.9	10
246	Scalable spin–photon entanglement by time-to-polarization conversion. *Npj Quantum Information*, **2020**, 6,	8.6	8
245	Unruh and analogue Unruh temperatures for circular motion in 3+1 and 2+1 dimensions. *Physical Review D*, **2020**, 102,	4.9	6
244	Ergodic-Localized Junctions in a Periodically Driven Spin Chain. *Physical Review Letters*, **2020**, 125, 170503	7.4	10
243	Detecting One-Dimensional Dipolar Bosonic Crystal Orders via Full Distribution Functions. *Physical Review Letters*, **2020**, 125, 093602	7.4	2
242	Interferometric Unruh Detectors for Bose-Einstein Condensates. *Physical Review Letters*, **2020**, 125, 213603	7.4	10
241	From the moving piston to the dynamical Casimir effect: Explorations with shaken condensates. *Physical Review A*, **2019**, 99,	2.6	7

240	Designing arbitrary one-dimensional potentials on an atom chip. *Optics Express*, **2019**, 27, 33474-33487	3.3	19
239	Observation of atom-number fluctuations in optical lattices via quantum collapse and revival dynamics. *Physical Review A*, **2019**, 99,	2.6	3
238	Recurrences in an isolated quantum many-body system. *Science*, **2018**, 360, 307-310	33.3	48
237	Thermalization dynamics of two correlated bosonic quantum wires after a split. *Physical Review A*, **2018**, 97,	2.6	5
236	Solid-state electron spin lifetime limited by phononic vacuum modes. *Nature Materials*, **2018**, 17, 313-317	27	36
235	Relaxation to a Phase-Locked Equilibrium State in a One-Dimensional Bosonic Josephson Junction. *Physical Review Letters*, **2018**, 120, 173601	7.4	36
234	Current-induced magnetization hysteresis defines atom trapping in a superconducting atomchip. *SciPost Physics*, **2018**, 4,	6.1	3
233	Projective phase measurements in one-dimensional Bose gases **2018**, 5,		14
232	One-Dimensional Atomic Superfluids as a Model System for Quantum Thermodynamics. *Fundamental Theories of Physics*, **2018**, 823-851	0.8	3
231	Shortcut loading a Bose–Einstein condensate into an optical lattice. *New Journal of Physics*, **2018**, 20, 055005	2.9	15
230	Double light-cone dynamics establish thermal states in integrable 1D Bose gases. *New Journal of Physics*, **2018**, 20, 023034	2.9	11
229	Universal dynamics in an isolated one-dimensional Bose gas far from equilibrium. *Nature*, **2018**, 563, 225-229	38.4	84
228	Analytical pendulum model for a bosonic Josephson junction. *Physical Review A*, **2018**, 98,	2.6	12
227	Ab initio calculation of the spin lattice relaxation time T1 for nitrogen-vacancy centers in diamond. *Physical Review B*, **2018**, 98,	3.3	7
226	Uncover Topology by Quantum Quench Dynamics. *Physical Review Letters*, **2018**, 121, 250403	7.4	70
225	Relaxation, chaos, and thermalization in a three-mode model of a Bose–Einstein condensate. *New Journal of Physics*, **2018**, 20, 113039	2.9	18
224	Characterizing twin-particle entanglement in double-well potentials. *Physical Review A*, **2018**, 98,	2.6	11
223	Superradiant emission from colour centres in diamond. *Nature Physics*, **2018**, 14, 1168-1172	16.2	55

222	Ramsey interferometry with trapped motional quantum states. *Communications Physics*, **2018**, 1,	5.4	12
221	Experimental characterization of a quantum many-body system via higher-order correlations. *Nature*, **2017**, 545, 323-326	50.4	97
220	High-fidelity spin measurement on the nitrogen-vacancy center. *New Journal of Physics*, **2017**, 19, 103002	2.9	8
219	Quantum heat waves in a one-dimensional condensate. *Physical Review B*, **2017**, 95,	3.3	5
218	Ultralong relaxation times in bistable hybrid quantum systems. *Science Advances*, **2017**, 3, e1701626	14.3	25
217	Coherent Coupling of Remote Spin Ensembles via a Cavity Bus. *Physical Review Letters*, **2017**, 118, 140502	7.4	31
216	Spectral hole burning and its application in microwave photonics. *Nature Photonics*, **2017**, 11, 36-39	33.9	30
215	A universal quantum module for quantum communication, computation, and metrology **2017**,		1
214	Photonic Quantum Networks formed from NV(-) centers. *Scientific Reports*, **2016**, 6, 26284	4.9	33
213	Degenerate Bose gases with uniform loss. *Physical Review A*, **2016**, 93,	2.6	20
212	Matter-wave recombiners for trapped Bose-Einstein condensates. *Physical Review A*, **2016**, 93,	2.6	9
211	Cooling of a One-Dimensional Bose Gas. *Physical Review Letters*, **2016**, 116, 030402	7.4	38
210	Prethermalization and universal dynamics in near-integrable quantum systems. *Journal of Statistical Mechanics: Theory and Experiment*, **2016**, 2016, 064009	1.9	127
209	Optimal control of complex atomic quantum systems. *Scientific Reports*, **2016**, 6, 34187	4.9	67
208	Large-scale quantum technology based on luminescent centers in crystals **2016**,		1
207	Macroscopic Quantum Resonators (MAQRO): 2015 update. *EPJ Quantum Technology*, **2016**, 3,	6.9	57
206	Towards experimental quantum-field tomography with ultracold atoms. *Nature Communications*, **2015**, 6, 7663	17.4	18
205	Non-equilibrium scale invariance and shortcuts to adiabaticity in a one-dimensional Bose gas. *Scientific Reports*, **2015**, 5, 9820	4.9	38

204	Quantum technologies with hybrid systems. *Proceedings of the National Academy of Sciences of the United States of America*, **2015**, 112, 3866-73	11.5	392
203	Experimental observation of a generalized Gibbs ensemble. *Science*, **2015**, 348, 207-11	33.3	340
202	ASTROPHYSICS. Probing the dark side. *Science*, **2015**, 349, 786-7	33.3	7
201	Parametric-squeezing amplification of Bose-Einstein condensates. *Physical Review A*, **2015**, 92,	2.6	5
200	Smooth Optimal Quantum Control for Robust Solid-State Spin Magnetometry. *Physical Review Letters*, **2015**, 115, 190801	7.4	41
199	Ultracold Atoms Out of Equilibrium. *Annual Review of Condensed Matter Physics*, **2015**, 6, 201-217	19.7	151
198	Interferometry with non-classical motional states of a Bose-Einstein condensate. *Nature Communications*, **2014**, 5, 4009	17.4	64
197	Protecting a spin ensemble against decoherence in the strong-coupling regime of cavity QED. *Nature Physics*, **2014**, 10, 720-724	16.2	88
196	Magnetic conveyor belt transport of ultracold atoms to a superconducting atomchip. *Applied Physics B: Lasers and Optics*, **2014**, 116, 1017-1021	1.9	18
195	Implementation of the Dicke lattice model in hybrid quantum system arrays. *Physical Review Letters* , **2014**, 113, 023603	7.4	68
194	Local relaxation and light-cone-like propagation of correlations in a trapped one-dimensional Bose gas. *New Journal of Physics*, **2014**, 16, 053034	2.9	48
193	Studying non-equilibrium many-body dynamics using one-dimensional Bose gases **2014**,		4
192	Arrays of open, independently tunable microcavities. *Optics Express*, **2014**, 22, 22111-20	3.3	21
191	Chiral prethermalization in supersonically split condensates. *Physical Review Letters*, **2014**, 113, 190401	7.4	17
190	Photonic Architecture for Scalable Quantum Information Processing in Diamond. *Physical Review X*, **2014**, 4,	9.1	85
189	Focus on Bose condensation phenomena in atomic and solid state physics. *New Journal of Physics*, **2013**, 15, 035010	2.9	
188	Prethermalization in one-dimensional Bose gases: Description by a stochastic Ornstein-Uhlenbeck process. *European Physical Journal: Special Topics*, **2013**, 217, 43-53	2.3	32
187	Physics. Cold atom cosmology. *Science*, **2013**, 341, 1188-9	33.3	13

186	Local emergence of thermal correlations in an isolated quantum many-body system. *Nature Physics*, **2013**, 9, 640-643	16.2	281
185	Multimode dynamics and emergence of a characteristic length scale in a one-dimensional quantum system. *Physical Review Letters*, **2013**, 110, 090405	7.4	45
184	Integrated Mach-Zehnder interferometer for Bose-Einstein condensates. *Nature Communications*, **2013**, 4, 2077	17.4	163
183	Prethermalization revealed by the relaxation dynamics of full distribution functions. *New Journal of Physics*, **2013**, 15, 075011	2.9	57
182	Vibrational state inversion of a Bose-Einstein condensate: optimal control and state tomography. *Journal of Physics B: Atomic, Molecular and Optical Physics*, **2013**, 46, 104012	1.3	49
181	Optimizing inhomogeneous spin ensembles for quantum memory. *Physical Review A*, **2012**, 86,	2.6	17
180	Dynamics of parametric matter-wave amplification. *Physical Review A*, **2012**, 86,	2.6	12
179	Relaxation and prethermalization in an isolated quantum system. *Science*, **2012**, 337, 1318-22	33.3	649
178	Hanbury Brown and Twiss correlations across the Bose-Einstein condensation threshold. *Nature Physics*, **2012**, 8, 195-198	16.2	59
177	Strong magnetic coupling of an inhomogeneous nitrogen-vacancy ensemble to a cavity. *Physical Review A*, **2012**, 85,	2.6	57
176	Two-body anticorrelation in a harmonically trapped ideal Bose gas. *Physical Review A*, **2012**, 86,	2.6	4
175	Mach-Zehnder interferometry with interacting trapped Bose-Einstein condensates. *Physical Review A*, **2011**, 84,	2.6	23
174	Two-point phase correlations of a one-dimensional bosonic Josephson junction. *Physical Review Letters*, **2011**, 106, 020407	7.4	65
173	Absorption imaging of ultracold atoms on atom chips. *Optics Express*, **2011**, 19, 8471-85	3.3	31
172	Stochastic Optimization of Bose-Einstein Condensation Using a Genetic Algorithm **2011**,		5
171	Single spontaneous photon as a coherent beamsplitter for an atomic matter-wave. *Nature Physics*, **2011**, 7, 379-382	16.2	8
170	Twin-atom beams. *Nature Physics*, **2011**, 7, 608-611	16.2	138
169	Controlling quantum information processing in hybrid systems on chips. *Quantum Information Processing*, **2011**, 10, 1037-1060	1.6	21

168	Electron beam driven alkali metal atom source for loading a magneto-optical trap in a cryogenic environment. *Applied Physics B: Lasers and Optics*, **2011**, 102, 819-823	1.9	3
167	Cavity QED with magnetically coupled collective spin states. *Physical Review Letters*, **2011**, 107, 060502	7.4	226
166	The Shapiro effect in atomchip-based bosonic Josephson junctions. *New Journal of Physics*, **2011**, 13, 065026	2.9	25
165	Dephasing in coherently split quasicondensates. *Physical Review A*, **2011**, 83,	2.6	19
164	The dynamics and prethermalization of one-dimensional quantum systems probed through the full distributions of quantum noise. *New Journal of Physics*, **2011**, 13, 073018	2.9	102
163	Enhancing photon collection from quantum emitters in diamond. *Progress in Informatics*, **2011**, 33		1
162	Ramsey interference in one-dimensional systems: the full distribution function of fringe contrast as a probe of many-body dynamics. *Physical Review Letters*, **2010**, 104, 255302	7.4	49
161	Cavity QED with an ultracold ensemble on a chip: Prospects for strong magnetic coupling at finite temperatures. *Physical Review A*, **2010**, 82,	2.6	52
160	rf-field-induced Feshbach resonances. *Physical Review A*, **2010**, 81,	2.6	32
159	Two-point density correlations of quasicondensates in free expansion. *Physical Review A*, **2010**, 81,	2.6	72
158	Weakly interacting Bose gas in the one-dimensional limit. *Physical Review Letters*, **2010**, 105, 265302	7.4	50
157	Fluctuations and stochastic processes in one-dimensional many-body quantum systems. *Physical Review Letters*, **2010**, 105, 015301	7.4	35
156	A single-atom detector integrated on an atom chip: fabrication, characterization and application. *New Journal of Physics*, **2010**, 12, 095005	2.9	22
155	Thermalization in a quasi-one-dimensional ultracold bosonic gas. *New Journal of Physics*, **2010**, 12, 055023	2.9	41
154	Atom interferometry with trapped Bose–Einstein condensates: impact of atom–atom interactions. *New Journal of Physics*, **2010**, 12, 065036	2.9	47
153	Ramsey's method of separated oscillating fields and its application to gravitationally induced quantum phase shifts. *Physical Review D*, **2010**, 81,	4.9	60
152	Shaking the condensates: Optimal number squeezing in the dynamic splitting of a Bose–Einstein condensate. *Physica E: Low-Dimensional Systems and Nanostructures*, **2010**, 42, 432-435	3	1
151	Integrated atom detector: Single atoms and photon statistics. *Physical Review A*, **2009**, 79,	2.6	14

150	Optimal control of number squeezing in trapped Bose-Einstein condensates. *Physical Review A*, **2009**, 80,	2.6	54
149	Restoring integrability in one-dimensional quantum gases by two-particle correlations. *Physical Review A*, **2009**, 79,	2.6	8
148	Strong magnetic coupling of an ultracold gas to a superconducting waveguide cavity. *Physical Review Letters*, **2009**, 103, 043603	7.4	180
147	Density ripples in expanding low-dimensional gases as a probe of correlations. *Physical Review A*, **2009**, 80,	2.6	75
146	Optimizing number squeezing when splitting a mesoscopic condensate. *Physical Review A*, **2009**, 79,	2.6	76
145	Single-particle-sensitive imaging of freely propagating ultracold atoms. *New Journal of Physics*, **2009**, 11, 103039	2.9	77
144	Optimizing atom interferometry on atom chips. *Fortschritte Der Physik*, **2009**, 57, 1121-1132	5.7	6
143	A millisecond quantum memory for scalable quantum networks. *Nature Physics*, **2009**, 5, 95-99	16.2	180
142	Reversible state transfer between superconducting qubits and atomic ensembles. *Physical Review A*, **2009**, 79,	2.6	114
141	Optics and interferometry with atoms and molecules. *Reviews of Modern Physics*, **2009**, 81, 1051-1129	40.5	895
140	Simple integrated single-atom detector. *Optics Letters*, **2009**, 34, 259-61	3	22
139	Optical lattice on an atom chip. *Optics Letters*, **2009**, 34, 3463-5	3	16
138	Dephasing in two decoupled one-dimensional Bose-Einstein condensates and the subexponential decay of the interwell coherence. *European Physical Journal B*, **2009**, 68, 335-339	1.2	13
137	Experimental demonstration of a BDCZ quantum repeater node. *Nature*, **2008**, 454, 1098-101	50.4	303
136	Memory-built-in quantum teleportation with photonic and atomic qubits. *Nature Physics*, **2008**, 4, 103-107	16.2	142
135	Probing quantum and thermal noise in an interacting many-body system. *Nature Physics*, **2008**, 4, 489-495	16.2	187
134	Long-range order in electronic transport through disordered metal films. *Science*, **2008**, 319, 1226-9	33.3	57
133	Creation of macroscopic quantum superposition states by a measurement. *Europhysics Letters*, **2008**, 83, 60004	1.6	10

132	Stochastic optimization of a cold atom experiment using a genetic algorithm. *Applied Physics Letters*, **2008**, 93, 264101	3.4	22
131	Multistage entanglement swapping. *Physical Review Letters*, **2008**, 101, 080403	7.4	68
130	Multilayer atom chips for versatile atom micromanipulation. *Applied Physics Letters*, **2008**, 92, 254102	3.4	37
129	Model for organized current patterns in disordered conductors. *Physical Review B*, **2008**, 77,	3.3	11
128	Breakdown of integrability in a quasi-1D ultracold bosonic gas. *Physical Review Letters*, **2008**, 100, 210403	7.4	75
127	Quantum memory with optically trapped atoms. *Physical Review Letters*, **2008**, 101, 120501	7.4	22
126	Non-equilibrium coherence dynamics in one-dimensional Bose gases. *Nature*, **2007**, 449, 324-7	50.4	562
125	Potential roughness near lithographically fabricated atom chips. *Physical Review A*, **2007**, 76,	2.6	42
124	Optimal quantum control of Bose-Einstein condensates in magnetic microtraps. *Physical Review A*, **2007**, 75,	2.6	81
123	Fault-tolerant quantum repeater with atomic ensembles and linear optics. *Physical Review A*, **2007**, 76,	2.6	94
122	Demonstration of a stable atom-photon entanglement source for quantum repeaters. *Physical Review Letters*, **2007**, 99, 180505	7.4	91
121	Synchronized independent narrow-band single photons and efficient generation of photonic entanglement. *Physical Review Letters*, **2007**, 98, 180503	7.4	49
120	Designing potentials by sculpturing wires. *Physical Review A*, **2007**, 75,	2.6	10
119	Collisional decoherence during writing and reading quantum states. *Physical Review A*, **2007**, 75,	2.6	38
118	High-fidelity entanglement via molecular dissociation in integrated atom optics. *Physical Review A*, **2007**, 75,	2.6	14
117	Ultracold atoms in radio-frequency dressed potentials beyond the rotating-wave approximation. *Physical Review A*, **2007**, 76,	2.6	55
116	Robust creation of entanglement between remote memory qubits. *Physical Review Letters*, **2007**, 98, 240502	7.4	151
115	Deterministic and storable single-photon source based on a quantum memory. *Physical Review Letters*, **2006**, 97, 173004	7.4	107

114	Theoretical analysis of a realistic atom-chip quantum gate. *Physical Review A*, **2006**, 74,	2.6	42
113	Quasicondensate growth on an atom chip. *Physical Review A*, **2006**, 73,	2.6	47
112	Deterministic and efficient quantum cryptography based on Bell's theorem. *Physical Review A*, **2006**, 73,	2.6	11
111	Sensing electric and magnetic fields with Bose-Einstein condensates. *Applied Physics Letters*, **2006**, 88, 264103	3.4	71
110	Manipulation of ultracold atoms in dressed adiabatic radio-frequency potentials. *Physical Review A*, **2006**, 74,	2.6	50
109	Adiabatic radio-frequency potentials for the coherent manipulation of matter waves. *Physical Review A*, **2006**, 73,	2.6	109
108	Detecting magnetically guided atoms with an optical cavity. *Optics Letters*, **2006**, 31, 268-70	3	31
107	Detecting neutral atoms on an atom chip. *Fortschritte Der Physik*, **2006**, 54, 746-764	5.7	8
106	Bose-Einstein-Kondensat als Magnetfeldsensor. *Physik in Unserer Zeit*, **2006**, 37, 258-258	0.1	
105	Experimental quantum teleportation of a two-qubit composite system. *Nature Physics*, **2006**, 2, 678-682	16.2	136
104	Radiofrequency-dressed-state potentials for neutral atoms. *Nature Physics*, **2006**, 2, 710-716	16.2	141
103	A Double Well Interferometer on an Atom Chip. *Quantum Information Processing*, **2006**, 5, 537-558	1.6	12
102	Random on-site interactions versus random potential in ultra cold atoms in optical lattices. *Applied Physics B: Lasers and Optics*, **2006**, 82, 217-224	1.9	6
101	Quantum scattering in quasi-one-dimensional cylindrical confinement. *Physical Review A*, **2005**, 72,	2.6	30
100	Fabrication of alignment structures for a fiber resonator by use of deep-ultraviolet lithography. *Applied Optics*, **2005**, 44, 6857-60	1.7	12
99	Quantum Information Processing with Neutral Atoms on Atom Chips **2005**, 298-311		
98	Cold atoms close to surfaces: measuring magnetic field roughness and disorder potentials. *Journal of Physics: Conference Series*, **2005**, 19, 56-65	0.3	12
97	Cold atoms near surfaces: designing potentials by sculpturing wires. *Journal of Physics: Conference Series*, **2005**, 19, 30-33	0.3	9

96	A simple quantum gate with atom chips. *European Physical Journal D*, **2005**, 35, 165-171	1.3	19
95	Relevance of sub-surface chip layers for the lifetime of magnetically trapped atoms. *European Physical Journal D*, **2005**, 35, 97-104	1.3	19
94	Matter-wave interferometry in a double well on an atom chip. *Nature Physics*, **2005**, 1, 57-62	16.2	579
93	Bose-Einstein condensates: microscopic magnetic-field imaging. *Nature*, **2005**, 435, 440	50.4	111
92	Rydberg atoms in a magnetic quadrupole field. *Journal of Physics B: Atomic, Molecular and Optical Physics*, **2005**, 38, S151-S170	1.3	4
91	Two-wire guides and traps with vertical bias fields on atom chips. *Physical Review A*, **2005**, 72,	2.6	8
90	Ultracold atoms in optical lattices with random on-site interactions. *Physical Review Letters*, **2005**, 95, 170401	7.4	75
89	Rydberg atoms in magnetic quadrupole traps. *Europhysics Letters*, **2004**, 65, 478-484	1.6	14
88	Electronic structure of atoms in magnetic quadrupole traps. *Physical Review A*, **2004**, 69,	2.6	11
87	Rydberg atoms in a magnetic guide. *Physical Review A*, **2004**, 70,	2.6	15
86	Atom chips: Fabrication and thermal properties. *Applied Physics Letters*, **2004**, 85, 2980-2982	3.4	78
85	Failure of geometric electromagnetism in the adiabatic vector Kepler problem. *Physical Review A*, **2004**, 69,	2.6	4
84	Microtraps and Atom Chips: Toolboxes for Cold Atom Physics. *General Relativity and Gravitation*, **2004**, 36, 2317-2329	2.3	7
83	Optimized magneto-optical trap for experiments with ultracold atoms near surfaces. *Physical Review A*, **2004**, 69,	2.6	58
82	Atom fiber for omnidirectional guiding of cold neutral atoms. *Optics Letters*, **2004**, 29, 2145-7	3	13
81	A Bose□Einstein condensate in a microtrap. *Journal of Optics B: Quantum and Semiclassical Optics*, **2003**, 5, S143-S149		16
80	Fundamental limits for coherent manipulation on atom chips. *Applied Physics B: Lasers and Optics*, **2003**, 76, 173-182	1.9	58
79	Bose-Einstein condensation in a simple microtrap. *Physical Review A*, **2003**, 67,	2.6	71

78	Trapping and manipulating neutral atoms with electrostatic fields. *Physical Review Letters*, **2003**, 91, 233201	7.4	69
77	Possibility of single-atom detection on a chip. *Physical Review A*, **2003**, 67,	2.6	74
76	Multimode interferometer for guided matter waves. *Physical Review Letters*, **2002**, 88, 100401	7.4	110
75	Quantum information processing with neutral atoms on an atom chip. *Journal of Modern Optics*, **2002**, 49, 1375-1388	1.1	30
74	Microscopic Atom Optics: From Wires to an Atom Chip. *Advances in Atomic, Molecular and Optical Physics*, **2002**, 263-356	1.7	501
73	Atom Chips **2002**, 243-246		
72	On the observation of decoherence with a movable mirror. *European Physical Journal D*, **2001**, 13, 93-107	1.3	7
71	Miniaturizing atom optics: from wires to atom chips. *Comptes Rendus Physique*, **2001**, 2, 551-563		1
70	Trapping neutral atoms with a wire. *Physical Review A*, **2001**, 64,	2.6	16
69	Optics and Interferometry with Atoms and Molecules **2001**, 63-80		
68	Requirements for coherent atom channeling. *Optics Communications*, **2000**, 179, 129-135	2	12
67	Micromanipulation of neutral atoms with nanofabricated structures. *Applied Physics B: Lasers and Optics*, **2000**, 70, 721-730	1.9	40
66	Matter waves in time-modulated complex light potentials. *Physical Review A*, **2000**, 62,	2.6	15
65	Beam splitter for guided atoms. *Physical Review Letters*, **2000**, 85, 5483-7	7.4	157
64	Quantum gates with neutral atoms: Controlling collisional interactions in time-dependent traps. *Physical Review A*, **2000**, 61,	2.6	167
63	Filtered Talbot lens: Producing 2n-periodic atomic patterns with standing-wave fields having period *Physical Review A*, **2000**, 61,	2.6	6
62	Atoms and wires: toward atom chips. *IEEE Journal of Quantum Electronics*, **2000**, 36, 1364-1377	2	3
61	Controlling cold atoms using nanofabricated surfaces: atom chips. *Physical Review Letters*, **2000**, 84, 4749-52	7.4	289

60	Nanofabricated atom optics: Atom chips. *Journal of Modern Optics*, **2000**, 47, 2789-2809	1.1	11
59	Guiding Neutral Atoms with a Wire. *Physical Review Letters*, **1999**, 82, 2014-2017	7.4	150
58	Dynamical diffraction of atomic matter waves by crystals of light. *Physical Review A*, **1999**, 60, 456-472	2.6	33
57	Neuer Erfolg in der Atomoptik Eine Drahtautobahn f□kalte Atome. *Physik in Unserer Zeit*, **1999**, 30, 135-135	0.1	
56	A neutral atom and a wire: towards mesoscopic atom optics. *Applied Physics B: Lasers and Optics*, **1999**, 69, 291-301	1.9	50
55	Adiabatic following in standing-wave diffraction of atoms. *Applied Physics B: Lasers and Optics*, **1999** , 69, 303-309	1.9	52
54	Determining the electron forward-scattering amplitude using electron interferometry. *Physical Review A*, **1999**, 59, R942-R945	2.6	10
53	Matter wave sidebands from a complex potential with temporal helicity. *Proceedings of the Royal Society A: Mathematical, Physical and Engineering Sciences*, **1999**, 455, 1509-1520	2.4	5
52	Matter Wave Diffraction at Standing Light Waves **1999**, 245-247		
51	Optics and Interferometry with Atoms and Molecules **1999**, 143-152		
50	Atom Interferometers and Atomic Coherence. *Fortschritte Der Physik*, **1998**, 46, 801-808	5.7	1
49	Quantum wires and quantum dots for neutral atoms. *European Physical Journal D*, **1998**, 4, 57-62	1.3	56
48	Diffractive matter wave optics in time. *Journal of the Optical Society of America B: Optical Physics*, **1998**, 15, 2817	1.7	6
47	Absorptive masks of light: A useful tool for spatial probing in atom optics. *Journal of Vacuum Science & Technology an Official Journal of the American Vacuum Society B, Microelectronics Processing and Phenomena*, **1998**, 16, 3850		9
46	Probing a Singular Potential with Cold Atoms: A Neutral Atom and a Charged Wire. *Physical Review Letters*, **1998**, 81, 737-741	7.4	79
45	Tailored Complex Potentials and Friedel's Law in Atom Optics. *Physical Review Letters*, **1997**, 79, 3327-3330	7.4	66
44	Nanometer definition of atomic beams with masks of light. *Physical Review A*, **1997**, 56, R4365-R4368	2.6	43
43	Scattering a neutral atom from a charged wire. *Europhysics Letters*, **1997**, 38, 405-410	1.6	31

42	Anomalous transmission in atom optics. *Journal of Modern Optics*, **1997**, 44, 2629-2641	1.1	3
41	Optics and Interferometry with Atoms and Molecules **1997**, 1-83		11
40	Classical and Quantum Atom Fringes **1997**, 85-120		8
39	Modulation of atomic de Broglie waves using Bragg diffraction. *Quantum and Semiclassical Optics: Journal of the European Optical Society Part B*, **1996**, 8, 497-509		15
38	Classical and quantum binding of a particle with arbitrary spin in the magnetic field of a current-carrying wire: a simple guide for atoms. *Quantum and Semiclassical Optics: Journal of the European Optical Society Part B*, **1996**, 8, 693-712		9
37	Trapping polar molecules with a charged wire. *Europhysics Letters*, **1996**, 36, 407-412	1.6	16
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