

# Holger Mller

## List of Publications by Year in Descending Order

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The third column is the impact factor (IF) of the journal, and the fourth column is the number of citations of the article.

47  
papers

2,349  
citations

24  
h-index

48  
g-index

56  
ext. papers

2,974  
ext. citations

10.3  
avg, IF

5.25  
L-index

#	Paper	IF	Citations
47	Perspective: Emerging strategies for determining atomic-resolution structures of macromolecular complexes within cells.. <i>Journal of Structural Biology</i> , <b>2021</b> , 214, 107827	3.4	2
46	High-power near-concentric Fabry-Perot cavity for phase contrast electron microscopy. <i>Review of Scientific Instruments</i> , <b>2021</b> , 92, 053005	1.7	6
45	Optical Electrophysiology: Toward the Goal of Label-Free Voltage Imaging. <i>Journal of the American Chemical Society</i> , <b>2021</b> , 143, 10482-10499	16.4	5
44	The Bose-Einstein Condensate and Cold Atom Laboratory. <i>EPJ Quantum Technology</i> , <b>2021</b> , 8,	6.9	22
43	Raman transitions driven by phase-modulated light in a cavity atom interferometer. <i>Physical Review A</i> , <b>2021</b> , 103,	2.6	3
42	Using an Atom Interferometer to Infer Gravitational Entanglement Generation. <i>PRX Quantum</i> , <b>2021</b> , 2,	6.1	10
41	Label-free optical detection of bioelectric potentials using electrochromic thin films. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , <b>2020</b> , 117, 17260-17268	11.5	10
40	Observation of the Relativistic Reversal of the Ponderomotive Potential. <i>Physical Review Letters</i> , <b>2020</b> , 124, 174801	7.4	4
39	A Flight Capable Atomic Gravity Gradiometer With a Single Laser <b>2020</b> ,		1
38	Symmetric Bloch oscillations of matter waves. <i>Physical Review A</i> , <b>2020</b> , 102,	2.6	8
37	Gravity surveys using a mobile atom interferometer. <i>Science Advances</i> , <b>2019</b> , 5, eaax0800	14.3	60
36	Laser phase plate for transmission electron microscopy. <i>Nature Methods</i> , <b>2019</b> , 16, 1016-1020	21.6	60
35	Embedded control system for mobile atom interferometers. <i>Review of Scientific Instruments</i> , <b>2019</b> , 90, 073103	1.7	6
34	Probing gravity by holding atoms for 20 seconds. <i>Science</i> , <b>2019</b> , 366, 745-749	33.3	49
33	Atom-Interferometry Measurement of the Fine Structure Constant. <i>Annalen Der Physik</i> , <b>2019</b> , 531, 1800346	34.6	10
32	Measurement of a Li7 tune-out wavelength by phase-patterned atom interferometry. <i>Physical Review A</i> , <b>2019</b> , 100,	2.6	2
31	Measurement of the fine-structure constant as a test of the Standard Model. <i>Science</i> , <b>2018</b> , 360, 191-195	33.3	357

30	Efficient Adiabatic Spin-Dependent Kicks in an Atom Interferometer. <i>Physical Review Letters</i> , <b>2018</b> , 121, 040402	7.4	17
29	Attractive force on atoms due to blackbody radiation. <i>Nature Physics</i> , <b>2018</b> , 14, 257-260	16.2	22
28	Bis an die Grenzen des Messbaren. <i>Physik in Unserer Zeit</i> , <b>2018</b> , 49, 228-235	0.1	
27	Testing sub-gravitational forces on atoms from a miniature in-vacuum source mass. <i>Nature Physics</i> , <b>2017</b> , 13, 938-942	16.2	85
26	Multiaxis atom interferometry with a single-diode laser and a pyramidal magneto-optical trap. <i>Optica</i> , <b>2017</b> , 4, 1545	8.6	52
25	Chameleon dark energy and atom interferometry. <i>Physical Review D</i> , <b>2016</b> , 94,	4.9	49
24	Controlling the multiport nature of Bragg diffraction in atom interferometry. <i>Physical Review A</i> , <b>2016</b> , 94,	2.6	16
23	Quantum test of the equivalence principle and space-time aboard the International Space Station. <i>New Journal of Physics</i> , <b>2016</b> , 18, 025018	2.9	52
22	Atom interferometry in an optical cavity. <i>Physical Review Letters</i> , <b>2015</b> , 114, 100405	7.4	57
21	High-Resolution Atom Interferometers with Suppressed Diffraction Phases. <i>Physical Review Letters</i> , <b>2015</b> , 115, 083002	7.4	35
20	Antimatter interferometry for gravity measurements. <i>Physical Review Letters</i> , <b>2014</b> , 112, 121102	7.4	41
19	Generalization of the Matsumoto-Tonomura approximation for the phase shift within an open aperture. <i>Ultramicroscopy</i> , <b>2014</b> , 138, 1-3	3.1	1
18	A clock directly linking time to a particle's mass. <i>Science</i> , <b>2013</b> , 339, 554-7	33.3	84
17	Low-frequency terrestrial gravitational-wave detectors. <i>Physical Review D</i> , <b>2013</b> , 88,	4.9	54
16	Influence of the Coriolis force in atom interferometry. <i>Physical Review Letters</i> , <b>2012</b> , 108, 090402	7.4	91
15	Force-free gravitational redshift: proposed gravitational Aharonov-Bohm experiment. <i>Physical Review Letters</i> , <b>2012</b> , 108, 230404	7.4	43
14	Precision tests of general relativity with matter waves. <i>Journal of Modern Optics</i> , <b>2011</b> , 58, 2021-2027	1.1	13
13	Sources and technology for an atomic gravitational wave interferometric sensor. <i>General Relativity and Gravitation</i> , <b>2011</b> , 43, 1905-1930	2.3	22

12	A precision measurement of the gravitational redshift by the interference of matter waves. <i>Nature</i> , <b>2010</b> , 463, 926-9	50.4	203
11	Müller, Peters & Chu reply. <i>Nature</i> , <b>2010</b> , 467, E2-E2	50.4	33
10	Noise-immune conjugate large-area atom interferometers. <i>Physical Review Letters</i> , <b>2009</b> , 103, 050402	7.4	51
9	Atom interferometers with scalable enclosed area. <i>Physical Review Letters</i> , <b>2009</b> , 102, 240403	7.4	88
8	COHERENT CONTROL OF ULTRACOLD MATTER: FRACTIONAL QUANTUM HALL PHYSICS AND LARGE-AREA ATOM INTERFEROMETRY <b>2009</b> ,		2
7	Atom-interferometry tests of the isotropy of post-Newtonian gravity. <i>Physical Review Letters</i> , <b>2008</b> , 100, 031101	7.4	219
6	Atom interferometry with up to 24-photon-momentum-transfer beam splitters. <i>Physical Review Letters</i> , <b>2008</b> , 100, 180405	7.4	170
5	Atom-wave diffraction between the Raman-Nath and the Bragg regime: Effective Rabi frequency, losses, and phase shifts. <i>Physical Review A</i> , <b>2008</b> , 77,	2.6	75
4	Nanosecond electro-optical switching with a repetition rate above 20 MHz. <i>Review of Scientific Instruments</i> , <b>2007</b> , 78, 124702	1.7	8
3	Tests of relativity by complementary rotating Michelson-Morley experiments. <i>Physical Review Letters</i> , <b>2007</b> , 99, 050401	7.4	92
2	Phase-locked, low-noise, frequency agile titanium:sapphire lasers for simultaneous atom interferometers. <i>Optics Letters</i> , <b>2006</b> , 31, 202-4	3	27
1	Active sub-Rayleigh alignment of parallel or antiparallel laser beams. <i>Optics Letters</i> , <b>2005</b> , 30, 3323-5	3	23