

Holger MÃ¼ller

List of Publications by Year in descending order

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Version: 2024-02-01

55
papers

3,439
citations

212478

28
h-index

232693

48
g-index

56
all docs

56
docs citations

56
times ranked

2636
citing authors

#	ARTICLE	IF	CITATIONS
1	Perspective: Emerging strategies for determining atomic-resolution structures of macromolecular complexes within cells. <i>Journal of Structural Biology</i> , 2022, 214, 107827.	1.3	3
2	The Bose-Einstein Condensate and Cold Atom Laboratory. <i>EPJ Quantum Technology</i> , 2021, 8, .	2.9	85
3	Raman transitions driven by phase-modulated light in a cavity atom interferometer. <i>Physical Review A</i> , 2021, 103, .	1.0	5
4	High-power near-concentric Fabry-Perot cavity for phase contrast electron microscopy. <i>Review of Scientific Instruments</i> , 2021, 92, 053005.	0.6	24
5	Optical Electrophysiology: Toward the Goal of Label-Free Voltage Imaging. <i>Journal of the American Chemical Society</i> , 2021, 143, 10482-10499.	6.6	13
6	Using an Atom Interferometer to Infer Gravitational Entanglement Generation. <i>PRX Quantum</i> , 2021, 2, .	3.5	46
7	Symmetric Bloch oscillations of matter waves. <i>Physical Review A</i> , 2020, 102, .	1.0	21
8	Offset simultaneous conjugate atom interferometers. <i>Physical Review A</i> , 2020, 101, .	1.0	0
9	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> , 2020, 117, 17260-17268.	3.3	25
10	Observation of the Relativistic Reversal of the Ponderomotive Potential. <i>Physical Review Letters</i> , 2020, 124, 174801.	2.9	17
11	Standard model of particle physics tested by the fine-structure constant. <i>Nature</i> , 2020, 588, 37-38.	13.7	7
12	Mobile quantum gravimeter with a novel pyramidal magneto-optical trap. , 2020, , .		2
13	Sensing gravity by holding atoms for 20 seconds. , 2020, , .		1
14	A Flight Capable Atomic Gravity Gradiometer With a Single Laser. , 2020, , .		6
15	Embedded control system for mobile atom interferometers. <i>Review of Scientific Instruments</i> , 2019, 90, 073103.	0.6	12
16	Probing gravity by holding atoms for 20 seconds. <i>Science</i> , 2019, 366, 745-749.	6.0	88
17	Gravity surveys using a mobile atom interferometer. <i>Science Advances</i> , 2019, 5, eaax0800.	4.7	122
18	Laser phase plate for transmission electron microscopy. <i>Nature Methods</i> , 2019, 16, 1016-1020.	9.0	118

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19	Atom Interferometry Measurement of the Fine Structure Constant. Annalen Der Physik, 2019, 531, 1800346.	0.9	22
20	Measurement of a Li7 tune-out wavelength by phase-patterned atom interferometry. Physical Review A, 2019, 100, .	1.0	7
21	Measurement of the fine-structure constant as a test of the Standard Model. Science, 2018, 360, 191-195.	6.0	574
22	Attractive force on atoms due to blackbody radiation. Nature Physics, 2018, 14, 257-260.	6.5	42
23	Efficient Adiabatic Spin-Dependent Kicks in an Atom Interferometer. Physical Review Letters, 2018, 121, 040402.	2.9	33
24	Testing sub-gravitational forces on atoms from a miniature in-vacuum source mass. Nature Physics, 2017, 13, 938-942.	6.5	124
25	Multiaxis atom interferometry with a single-diode laser and a pyramidal magneto-optical trap. Optica, 2017, 4, 1545.	4.8	78
26	Chameleon dark energy and atom interferometry. Physical Review D, 2016, 94, .	1.6	79
27	Controlling the multiport nature of Bragg diffraction in atom interferometry. Physical Review A, 2016, 94, .	1.0	24
28	Quantum test of the equivalence principle and space-time aboard the International Space Station. New Journal of Physics, 2016, 18, 025018.	1.2	75
29	High-Resolution Atom Interferometers with Suppressed Diffraction Phases. Physical Review Letters, 2015, 115, 083002.	2.9	47
30	Atom Interferometry in an Optical Cavity. Physical Review Letters, 2015, 114, 100405.	2.9	77
31	Antimatter Interferometry for Gravity Measurements. Physical Review Letters, 2014, 112, 121102.	2.9	46
32	Generalization of the Matsumoto-Tonomura approximation for the phase shift within an open aperture. Ultramicroscopy, 2014, 138, 1-3.	0.8	2
33	Time for detection. Nature Physics, 2014, 10, 906-907.	6.5	3
34	Precision experiments and fundamental physics at low energies - Part I. Annalen Der Physik, 2013, 525, A111-A112.	0.9	4
35	Precision experiments and fundamental physics at low energies - Part II. Annalen Der Physik, 2013, 525, A127.	0.9	3
36	A Clock Directly Linking Time to a Particle's Mass. Science, 2013, 339, 554-557.	6.0	94

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37	Low-frequency terrestrial gravitational-wave detectors. Physical Review D, 2013, 88, .	1.6	70
38	Matter-wave clocks. , 2013, , .		0
39	Influence of the Coriolis Force in Atom Interferometry. Physical Review Letters, 2012, 108, 090402.	2.9	117
40	Force-Free Gravitational Redshift: Proposed Gravitational Aharonov-Bohm Experiment. Physical Review Letters, 2012, 108, 230404.	2.9	52
41	Precision tests of general relativity with matter waves. Journal of Modern Optics, 2011, 58, 2021-2027.	0.6	14
42	Sources and technology for an atomic gravitational wave interferometric sensor. General Relativity and Gravitation, 2011, 43, 1905-1930.	0.7	25
43	A precision measurement of the gravitational redshift by the interference of matter waves. Nature, 2010, 463, 926-929.	13.7	257
44	Müller, Peters & Chu reply. Nature, 2010, 467, E2-E2.	13.7	38
45	Noise-Immune Conjugate Large-Area Atom Interferometers. Physical Review Letters, 2009, 103, 050402.	2.9	59
46	Atom Interferometers with Scalable Enclosed Area. Physical Review Letters, 2009, 102, 240403.	2.9	106
47	COHERENT CONTROL OF ULTRACOLD MATTER: FRACTIONAL QUANTUM HALL PHYSICS AND LARGE-AREA ATOM INTERFEROMETRY. , 2009, , .		2
48	Atom-wave diffraction between the Raman-Nath and the Bragg regime: Effective Rabi frequency, losses, and phase shifts. Physical Review A, 2008, 77, .	1.0	97
49	Atom-Interferometry Tests of the Isotropy of Post-Newtonian Gravity. Physical Review Letters, 2008, 100, 031101.	2.9	263
50	Atom Interferometry with up to 24-Photon-Momentum-Transfer Beam Splitters. Physical Review Letters, 2008, 100, 180405.	2.9	222
51	ARE ACTIVE AND PASSIVE ELECTRIC CHARGES EQUAL?. , 2008, , .		0
52	Nanosecond electro-optical switching with a repetition rate above 20MHz. Review of Scientific Instruments, 2007, 78, 124702.	0.6	9
53	Tests of Relativity by Complementary Rotating Michelson-Morley Experiments. Physical Review Letters, 2007, 99, 050401.	2.9	119
54	Phase-locked, low-noise, frequency agile titanium:sapphire lasers for simultaneous atom interferometers. Optics Letters, 2006, 31, 202.	1.7	32

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55	Active sub-Rayleigh alignment of parallel or antiparallel laser beams. Optics Letters, 2005, 30, 3323.	1.7	28