Stefan Ulmer

List of Publications by Year
in descending order

Source: https://exaly.com/author-pdf/4399634/publications.pdf

Version: 2024-02-01

75	1,761	236612	288905
papers	citations	25 h-index	40 g-index

85	85	85	986
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	A 16-parts-per-trillion measurement of the antiproton-to-proton chargeâ€“mass ratio. Nature, 2022, 601, 53-57.	13.7	25
2	Millicharged Dark Matter Detection with Ion Traps. PRX Quantum, 2022, 3, .	3.5	20
3	Sympathetic cooling schemes for separately trapped ions coupled via image currents. New Journal of Physics, 2022, 24, 033021.	1.2	6
4	Direct measurement of the 3He+ magnetic moments. Nature, 2022, 606, 878-883.	13.7	15
5	Constraints on the Coupling between Axionlike Dark Matter and Photons Using an Antiproton Superconducting Tuned Detection Circuit in a Cryogenic Penning Trap. Physical Review Letters, 2021, 126, 041301.	2.9	32
6	Measurement of the principal quantum number distribution in a beam of antihydrogen atoms. European Physical Journal D, 2021, 75, 1.	0.6	10
7	Quantum logic inspired techniques for spacetime-symmetry tests with (anti-)protons. New Journal of Physics, 2021, 23, 073045.	1.2	7
8	Sympathetic cooling of a trapped proton mediated by an LC circuit. Nature, 2021, 596, 514-518.	13.7	17
9	Direct <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:mrow><mml:mi>Q</mml:mi></mml:mrow></mml:math> -Value Determination of the <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:msup><mml:mi>Î²</mml:mi><mml:mo>â^’</mml:mo></mml:msup></mml:math> Decay of <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"	2.9	16
10	139ÂGHz UV phase-locked Raman laser system for thermometry and sideband cooling of ⁹Be⁺ ions in a Penning trap. Journal of Physics B: Atomic, Molecular and Optical Physics, 2021, 54, 195402.	0.6	7
11	Elementary Laserâ€Less Quantum Logic Operations with (Antiâ€)Protons in Penning Traps. Advanced Quantum Technologies, 2020, 3, 1900133.	1.8	3
12	Detection of metastable electronic states by Penning trap mass spectrometry. Nature, 2020, 581, 42-46.	13.7	31
13	Cryogenic ⁹Be⁺ Penning trap for precision measurements with (anti-)protons. Measurement Science and Technology, 2020, 31, 035003.	1.4	17
14	Superconducting Solenoid System with Adjustable Shielding Factor for Precision Measurements of the Properties of the Antiproton. Physical Review Applied, 2019, 12, .	1.5	6
15	Measurement of Ultralow Heating Rates of a Single Antiproton in a Cryogenic Penning Trap. Physical Review Letters, 2019, 122, 043201.	2.9	10
16	Antiproton beams with low energy spread for antihydrogen production. Journal of Instrumentation, 2019, 14, P05009-P05009.	0.5	4
17	A Novel Penningâ€Trap Design for the Highâ€Precision Measurement of the 3 He 2 + Nuclear Magnetic Moment. Annalen Der Physik, 2019, 531, 1800485.	0.9	5
18	Hyperfine spectroscopy of hydrogen and antihydrogen in ASACUSA. Hyperfine Interactions, 2019, 240, 1.	0.2	18

#	Article	IF	Citations
19	Direct limits on the interaction of antiprotons with axion-like dark matter. Nature, 2019, 575, 310-314.	13.7	47
20	Challenging the standard model by high-precision comparisons of the fundamental properties of protons and antiprotons. Philosophical Transactions Series A, Mathematical, Physical, and Engineering Sciences, 2018, 376, 20170275.	1.6	3
21	350-fold improved measurement of the antiproton magnetic moment using a multi-trap method. Hyperfine Interactions, 2018, 239, 1.	0.2	4
22	A New Experiment for the Measurement of the g-Factors of ³He⁺ and ³He²⁺. Journal of Physics: Conference Series, 2018, 1138, 012004.	0.3	9
23	Monte-Carlo based performance assessment of ASACUSAâ€™s antihydrogen detector. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 2018, 910, 90-95.	0.7	3
24	Recent Developments from ASACUSA on Antihydrogen Detection. EPJ Web of Conferences, 2018, 181, 01003.	0.1	10
25	Progress towards an improved comparison of the proton-to-antiproton charge-to-mass ratios. Hyperfine Interactions, 2018, 239, 1.	0.2	2
26	Towards sympathetic cooling of single (anti-)protons. Hyperfine Interactions, 2018, 239, 1.	0.2	4
27	The ASACUSA antihydrogen and hydrogen program: results and prospects. Philosophical Transactions Series A, Mathematical, Physical, and Engineering Sciences, 2018, 376, 20170273.	1.6	33
28	Sympathetic cooling of protons and antiprotons with a common endcap Penning trap. Journal of Modern Optics, 2018, 65, 568-576.	0.6	27
29	Sixfold improved single particle measurement of the magnetic moment of the antiproton. Nature Communications, 2017, 8, 14084.	5.8	40
30	Optical transition seen in antihydrogen. Nature, 2017, 541, 467-468.	13.7	0
31	Observation of individual spin quantum transitions of a single antiproton. Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics, 2017, 769, 1-6.	1.5	17
32	A parts-per-billion measurement of the antiproton magnetic moment. Nature, 2017, 550, 371-374.	13.7	96
33	High-Precision Measurement of the Protonâ€™s Atomic Mass. Physical Review Letters, 2017, 119, 033001.	2.9	85
34	Double-trap measurement of the proton magnetic moment at 0.3 parts per billion precision. Science, 2017, 358, 1081-1084.	6.0	81
35	Improved limit on the directly measured antiproton lifetime. New Journal of Physics, 2017, 19, 083023.	1.2	30
36	Antihydrogen Synthesis in a Double-Cusp Trap. , 2017, , .		2

#	Article	IF	Citations
37	Towards Sympathetic Laser Cooling and Detection of Single (Anti-)Protons. , 2017, , .		1
38	Manipulation and Transport of Antiprotons for an Efficient Production of Antihydrogen Atoms. , 2017, , .		1
39	Highly sensitive superconducting circuits at â^¼700 kHz with tunable quality factors for image-current detection of single trapped antiprotons. Review of Scientific Instruments, 2016, 87, 113305.	0.6	32
40	Antihydrogen synthesis in a double-CUSP trap towards test of the CPT-symmetry. Hyperfine Interactions, 2016, 237, 1.	0.2	0
41	Towards measuring the ground state hyperfine splitting of antihydrogen â€“ a progress report. Hyperfine Interactions, 2016, 237, 1.	0.2	8
42	PRECISE TESTS OF FUNDAMENTAL SYMMETRIES WITH TRAPPED IONS. Advanced Textbooks in Physics, 2016, , 335-376.	0.1	0
43	BASE â€“ The Baryon Antibaryon Symmetry Experiment. European Physical Journal: Special Topics, 2015, 224, 3055-3108.	1.2	53
44	The development of the antihydrogen beam detector and the detection of the antihydrogen atoms for in-flight hyperfine spectroscopy. Journal of Physics: Conference Series, 2015, 635, 022061.	0.3	3
45	The ASACUSA CUSP: an antihydrogen experiment. Hyperfine Interactions, 2015, 235, 13-20.	0.2	5
46	Das magnetische Moment des Protons. Physik in Unserer Zeit, 2015, 46, 92-97.	0.0	0
47	High-precision comparison of the antiproton-to-proton charge-to-mass ratio. Nature, 2015, 524, 196-199.	13.7	114
48	A reservoir trap for antiprotons. International Journal of Mass Spectrometry, 2015, 389, 10-13.	0.7	23
49	A source of antihydrogen for in-flight hyperfine spectroscopy. Nature Communications, 2014, 5, 3089.	5.8	149
50	Towards a high-precision measurement of the antiproton magnetic moment. Hyperfine Interactions, 2014, 228, 31-36.	0.2	7
51	Towards a spin polarized antihydrogen beam. Hyperfine Interactions, 2014, 228, 67-76.	0.2	1
52	Direct high-precision measurement of the magnetic moment of the proton. Nature, 2014, 509, 596-599.	13.7	79
53	The magnetic moments of the proton and the antiproton. Journal of Physics: Conference Series, 2014, 488, 012033.	0.3	5
54	The Magnetic Moments of the Proton and the Antiproton. Springer Tracts in Modern Physics, 2014, , 165-201.	0.1	2

#	Article	IF	Citations
55	CPT TEST WITH (ANTI)PROTON MAGNETIC MOMENTS BASED ON QUANTUM LOGIC COOLING AND READOUT. , 2014, , 41-44.		9
56	Demonstration of the double Penning Trap technique with a single proton. Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics, 2013, 723, 78-81.	1.5	26
57	A cryogenic detection system at 28.9MHZ for the non-destructive observation of a single proton at low particle energy. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 2013, 705, 55-60.	0.7	32
58	Resolution of Single Spin Flips of a Single Proton. Physical Review Letters, 2013, 110, 140405.	2.9	44
59	Measurement of the hyperfine structure of antihydrogen in a beam. Hyperfine Interactions, 2013, 215, 1-8.	0.2	27
60	Towards the production of anti-hydrogen beams. , 2013, , .		0
61	CPT symmetry tests with cold and antihydrogen. Annalen Der Physik, 2013, 525, 493-504.	0.9	16
62	An experiment for the direct determination of theg-factor of a single proton in a Penning trap. New Journal of Physics, 2012, 14, 063011.	1.2	32
63	PENTATRAP: a novel cryogenic multi-Penning-trap experiment for high-precision mass measurements on highly charged ions. Applied Physics B: Lasers and Optics, 2012, 107, 983-996.	1.1	72
64	The trap design of PENTATRAP. Applied Physics B: Lasers and Optics, 2012, 107, 997-1005.	1.1	37
65	Towards a direct measurement of the g-factor of a single isolated protonThis paper was presented at the International Conference on Precision Physics of Simple Atomic Systems, held at Â‰cole de Physique, les Houches, France, 30 Mayâ€“4 June, 2010.. Canadian Journal of Physics, 2011, 89, 165-168.	0.4	2
66	QuantensprÃ¼nge des Proton-Spins. Physik in Unserer Zeit, 2011, 42, 216-217.	0.0	0
67	Observation of Spin Flips with a Single Trapped Proton. Physical Review Letters, 2011, 106, 253001.	2.9	70
68	Direct Measurement of the Free Cyclotron Frequency of a Single Particle in a Penning Trap. Physical Review Letters, 2011, 107, 103002.	2.9	20
69	The quality factor of a superconducting rf resonator in a magnetic field. Review of Scientific Instruments, 2009, 80, 123302.	0.6	46
70	g-factor experiments on simple systems in Penning traps. Journal of Physics B: Atomic, Molecular and Optical Physics, 2009, 42, 154021.	0.6	20
71	Developments for the direct determination of the g-factor of a single proton in a Penning trap. Hyperfine Interactions, 2009, 194, 93-98.	0.2	5
72	Recent developments in ion detection techniques for Penning trap mass spectrometry at TRIGA-TRAP. European Physical Journal A, 2009, 42, 311-317.	1.0	30

#	Article	IF	Citations
73	Developments for the direct determination of the g-factor of a single proton in a Penning trap. , 2009, , 441-446.		0
74	Calculation of electrostatic fields using quasi-Green's functions: application to the hybrid Penning trap. New Journal of Physics, 2008, 10, 103009.	1.2	19
75	Penning Trap Measurement of the Magnetic Moment of the Antiproton. AIP Conference Proceedings, 2005, , .	0.3	10