Stefan Eriksson

List of Publications by Year
in descending order

66 papers	2,312 citations	218677 26 h-index	206112 48 g-index
67 all docs	67 docs citations	67 times ranked	1368 citing authors

#	Article	IF	Citations
1	Laser cooling of antihydrogen atoms. Nature, 2021, 592, 35-42.	27.8	47
2	Sympathetic cooling of positrons to cryogenic temperatures for antihydrogen production. Nature Communications, 2021, 12, 6139.	12.8	18
3	Magnetically trapped atoms in the vicinity of an optical nanofibre. Applied Physics B: Lasers and Optics, 2020, 126, 1.	2.2	0
4	Investigation of the fine structure of antihydrogen. Nature, 2020, 578, 375-380.	27.8	43
5	Characterization of the 1Sâ€“2S transition in antihydrogen. Nature, 2018, 557, 71-75.	27.8	107
6	Enhanced Control and Reproducibility of Non-Neutral Plasmas. Physical Review Letters, 2018, 120, 025001.	7.8	18
7	Precision measurements on trapped antihydrogen in the ALPHA experiment. Philosophical Transactions Series A, Mathematical, Physical, and Engineering Sciences, 2018, 376, 20170268.	3.4	10
8	Observation of the 1Sâ€“2P Lyman-Î± transition in antihydrogen. Nature, 2018, 561, 211-215.	27.8	51
9	Observation of the 1Sâ€“2S transition in trapped antihydrogen. Nature, 2017, 541, 506-510.	27.8	122
10	Antihydrogen accumulation for fundamental symmetry tests. Nature Communications, 2017, 8, 681.	12.8	64
11	Observation of the hyperfine spectrum of antihydrogen. Nature, 2017, 548, 66-69.	27.8	101
12	Limit on the electric charge of antihydrogen. Hyperfine Interactions, 2017, 238, 1.	0.5	0
13	Cold neutral atoms via charge exchange from excited state positronium: a proposal. New Journal of Physics, 2017, 19, 053020.	2.9	6
14	Towards a test of the weak equivalence principle of gravity using anti-hydrogen at CERN. , 2016, , .		0
15	An improved limit on the charge of antihydrogen from stochastic acceleration. Nature, 2016, 529, 373-376.	27.8	48
16	Antiproton cloud compression in the ALPHA apparatus at CERN. Hyperfine Interactions, 2015, 235, 21-28.	0.5	4
17	The GBAR antimatter gravity experiment. Hyperfine Interactions, 2015, 233, 21-27.	0.5	109
18	In situ electromagnetic field diagnostics with an electron plasma in a Penningâ€“Malmberg trap. New Journal of Physics, 2014, 16, 013037.	2.9	17

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19	The Gbar project, or how does antimatter fall?. Hyperfine Interactions, 2014, 228, 141-150.	0.5	47
20	An experimental limit on the charge of antihydrogen. Nature Communications, 2014, 5, 3955.	12.8	40
21	The ALPHA antihydrogen trapping apparatus. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 2014, 735, 319-340.	1.6	51
22	Description and first application of a new technique to measure the gravitational mass of antihydrogen. Nature Communications, 2013, 4, 1785.	12.8	195
23	Silicon vertex detector upgrade in the ALPHA experiment. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 2013, 732, 134-136.	1.6	7
24	Autoresonant-spectrometric determination of the residual gas composition in the ALPHA experiment apparatus. Review of Scientific Instruments, 2013, 84, 065110.	1.3	0
25	Electron plasmas as a diagnostic tool for hyperfine spectroscopy of antihydrogen. , 2013, , .		1
26	Experimental and computational study of the injection of antiprotons into a positron plasma for antihydrogen production. Physics of Plasmas, 2013, 20, .	1.9	19
27	Antihydrogen in a bottle. Physics Education, 2013, 48, 212-220.	0.5	1
28	Discriminating between antihydrogen and mirror-trapped antiprotons in a minimum-B trap. New Journal of Physics, 2012, 14, 015010.	2.9	18
29	Antiparticle plasmas for antihydrogen trapping. , 2012, , .		0
30	Resonant quantum transitions in trapped antihydrogen atoms. Nature, 2012, 483, 439-443.	27.8	134
31	The ALPHA â€" detector: Module Production and Assembly. Journal of Instrumentation, 2012, 7, C01051-C01051.	1.2	5
32	Antihydrogen formation by autoresonant excitation of antiproton plasmas. Hyperfine Interactions, 2012, 212, 61-67.	0.5	0
33	Trapped antihydrogen. Hyperfine Interactions, 2012, 212, 15-29.	0.5	12
34	Progress towards microwave spectroscopy of trapped antihydrogen. Hyperfine Interactions, 2012, 212, 81-90.	0.5	7
35	Microwave-plasma interactions studied via mode diagnostics in ALPHA. Hyperfine Interactions, 2012, 212, 117-123.	0.5	0
36	Alternative method for reconstruction of antihydrogen annihilation vertices. Hyperfine Interactions, 2012, 212, 101-107.	0.5	1

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37	Antihydrogen annihilation reconstruction with the ALPHA silicon detector. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 2012, 684, 73-81.	1.6	24
38	Microwave-plasma interactions studied via mode diagnostics in ALPHA. , 2012, , 117-123.		0
39	Microwave sidebands for atomic physics experiments by period one oscillation in optically injected diode lasers. Europhysics Letters, 2011, 96, 53001.	2.0	0
40	Centrifugal Separation and Equilibration Dynamics in an Electron-Antiproton Plasma. Physical Review Letters, 2011, 106, 145001.	7.8	26
41	Trapped antihydrogen. , 2011, , 15-29.		0
42	Progress towards microwave spectroscopy of trapped antihydrogen. , 2011, , 81-90.		0
43	Atom chip for BEC interferometry. Journal of Physics B: Atomic, Molecular and Optical Physics, 2010, 43, 051003.	1.5	18
44	Trapped antihydrogen. Nature, 2010, 468, 673-676.	27.8	298
45	Measuring Energy Differences by BEC Interferometry on a Chip. Physical Review Letters, 2010, 105, 243003.	7.8	58
46	Atom Detection and Photon Production in a Scalable, Open, Optical Microcavity. Physical Review Letters, 2007, 99, 063601.	7.8	96
47	Integration of a tunable optical micro-cavity for single atom detection on an atom chip. , 2007, , .		0
48	Pyramidal micromirrors for microsystems and atom chips. Applied Physics Letters, 2006, 88, 071116.	3.3	40
49	MEMS actuators for aligning and tuning optical micro cavities on atom chips. , 2006, , .		0
50	Permanent-magnet atom chips for the study of long, thin atom clouds. Journal of Physics: Conference Series, 2005, 19, 70-73.	0.4	3
51	Preparation of a Boseâ€"Einstein condensate on a permanent-magnet atom chip. Journal of Physics: Conference Series, 2005, 19, 74-77.	0.4	4
52	Cold atoms in videotape micro-traps. European Physical Journal D, 2005, 35, 105-110.	1.3	15
53	Integrated optical components on atom chips. European Physical Journal D, 2005, 35, 135-139.	1.3	37
54	A three-dimensional electrostatic actuator with a locking mechanism for microcavities on atom chips. Journal of Micromechanics and Microengineering, 2005, 15, S39-S46.	2.6	11

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55	Microfabricated high-finesse optical cavity with open access and small volume. Applied Physics Letters, 2005, 87, 211106.	3.3	140
56	Bose-Einstein condensation on a permanent-magnet atom chip. Physical Review A, 2005, 72, .	2.5	59
57	Strong nuclear force in cold antihydrogen-helium collisions. Physical Review A, 2004, 70, .	2.5	26
58	Leptonic annihilation in hydrogen-antihydrogen collisions. Physical Review A, 2004, 70, .	2.5	20
59	Positronâ€"Electron Annihilation in Hydrogenâ€"Antihydrogen Collisions. Advances in Quantum Chemistry, 2004, 47, 465-480.	0.8	0
60	Hydrogen-Antihydrogen Molecule and Its Properties. Few-Body Systems, 2004, 34, 63.	1.5	9
61	Micron-sized atom traps made from magneto-optical thin films. Applied Physics B: Lasers and Optics, 2004, 79, 811-816.	2.2	27
62	Observations on the dynamics of semiconductor lasers subjected to external optical injection. Journal of Optics B: Quantum and Semiclassical Optics, 2002, 4, 149-154.	1.4	36
63	Dependence of the experimental stability diagram of an optically injected semiconductor laser on the laser current. Optics Communications, 2002, 210, 343-353.	2.1	20
64	Periodic oscillation within the chaotic region in a semiconductor laser subjected to external optical injection. Optics Letters, 2001, 26, 142.	3.3	30
65	A simple extended cavity diode laser for spectroscopy around 640 nm. Optics and Laser Technology, 1999, 31, 473-477.	4.6	11
66	Nonlinear dynamics of semiconductor lasers subject to external optical injection. , 0, , .		0