

Timothy Friesen

List of Publications by Year in descending order

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44
papers

1,673
citations

394421

19
h-index

434195

31
g-index

47
all docs

47
docs citations

47
times ranked

791
citing authors

#	ARTICLE	IF	CITATIONS
1	Trapped antihydrogen. Nature, 2010, 468, 673-676.	27.8	298
2	Description and first application of a new technique to measure the gravitational mass of antihydrogen. Nature Communications, 2013, 4, 1785.	12.8	195
3	Resonant quantum transitions in trapped antihydrogen atoms. Nature, 2012, 483, 439-443.	27.8	134
4	Observation of the $1S \rightarrow 2S$ transition in trapped antihydrogen. Nature, 2017, 541, 506-510.	27.8	122
5	Characterization of the $1S \rightarrow 2S$ transition in antihydrogen. Nature, 2018, 557, 71-75.	27.8	107
6	Observation of the hyperfine spectrum of antihydrogen. Nature, 2017, 548, 66-69.	27.8	101
7	Evaporative Cooling of Antiprotons to Cryogenic Temperatures. Physical Review Letters, 2010, 105, 013003.	7.8	89
8	Antihydrogen accumulation for fundamental symmetry tests. Nature Communications, 2017, 8, 681.	12.8	64
9	Autoresonant Excitation of Antiproton Plasmas. Physical Review Letters, 2011, 106, 025002.	7.8	62
10	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
11	Observation of the $1S \rightarrow 2P$ Lyman- α transition in antihydrogen. Nature, 2018, 561, 211-215.	27.8	51
12	An improved limit on the charge of antihydrogen from stochastic acceleration. Nature, 2016, 529, 373-376.	27.8	48
13	Laser cooling of antihydrogen atoms. Nature, 2021, 592, 35-42.	27.8	47
14	Search for trapped antihydrogen. Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics, 2011, 695, 95-104.	4.1	44
15	Investigation of the fine structure of antihydrogen. Nature, 2020, 578, 375-380.	27.8	43
16	An experimental limit on the charge of antihydrogen. Nature Communications, 2014, 5, 3955.	12.8	40
17	Centrifugal Separation and Equilibration Dynamics in an Electron-Antiproton Plasma. Physical Review Letters, 2011, 106, 145001.	7.8	26
18	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

#	ARTICLE	IF	CITATIONS
19	Experimental and computational study of the injection of antiprotons into a positron plasma for antihydrogen production. <i>Physics of Plasmas</i> , 2013, 20, .	1.9	19
20	Discriminating between antihydrogen and mirror-trapped antiprotons in a minimum-B trap. <i>New Journal of Physics</i> , 2012, 14, 015010.	2.9	18
21	Enhanced Control and Reproducibility of Non-Neutral Plasmas. <i>Physical Review Letters</i> , 2018, 120, 025001.	7.8	18
22	Sympathetic cooling of positrons to cryogenic temperatures for antihydrogen production. <i>Nature Communications</i> , 2021, 12, 6139.	12.8	18
23	In situ electromagnetic field diagnostics with an electron plasma in a Penningâ€Malmberg trap. <i>New Journal of Physics</i> , 2014, 16, 013037.	2.9	17
24	Trapped antihydrogen. <i>Hyperfine Interactions</i> , 2012, 212, 15-29.	0.5	12
25	Silicon vertex detector upgrade in the ALPHA experiment. <i>Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment</i> , 2013, 732, 134-136.	1.6	7
26	The ALPHA â€ detector: Module Production and Assembly. <i>Journal of Instrumentation</i> , 2012, 7, C01051-C01051.	1.2	5
27	Electron cyclotron resonance (ECR) magnetometry with a plasma reservoir. <i>Physics of Plasmas</i> , 2020, 27, .	1.9	5
28	Antiproton cloud compression in the ALPHA apparatus at CERN. <i>Hyperfine Interactions</i> , 2015, 235, 21-28.	0.5	4
29	Antiparticle sources for antihydrogen production and trapping. <i>Journal of Physics: Conference Series</i> , 2011, 262, 012001.	0.4	1
30	Alternative method for reconstruction of antihydrogen annihilation vertices. <i>Hyperfine Interactions</i> , 2012, 212, 101-107.	0.5	1
31	Electron plasmas as a diagnostic tool for hyperfine spectroscopy of antihydrogen. , 2013, , .		1
32	Antimatter transport processes. <i>Journal of Physics: Conference Series</i> , 2010, 257, 012004.	0.4	0
33	Search for trapped antihydrogen in ALPHA This paper was presented at the International Conference on Precision Physics of Simple Atomic Systems, held at Åcole de Physique, les Houches, France, 30 Mayâ€%â€â€%# June, 2010.. <i>Canadian Journal of Physics</i> , 2011, 89, 7-16.		0
34	Towards antihydrogen trapping and spectroscopy at ALPHA. <i>Hyperfine Interactions</i> , 2011, 199, 39-48.	0.5	0
35	Antiparticle plasmas for antihydrogen trapping. , 2012, , .		0
36	Antihydrogen formation by autoresonant excitation of antiproton plasmas. <i>Hyperfine Interactions</i> , 2012, 212, 61-67.	0.5	0

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37	Microwave-plasma interactions studied via mode diagnostics in ALPHA. <i>Hyperfine Interactions</i> , 2012, 212, 117-123.	0.5	0
38	Autoresonant-spectrometric determination of the residual gas composition in the ALPHA experiment apparatus. <i>Review of Scientific Instruments</i> , 2013, 84, 065110.	1.3	0
39	Evaporative cooling of antiprotons for the production of trappable antihydrogen. , 2013, , .		0
40	Limit on the electric charge of antihydrogen. <i>Hyperfine Interactions</i> , 2017, 238, 1.	0.5	0
41	Trapped antihydrogen. , 2011, , 15-29.		0
42	Towards antihydrogen trapping and spectroscopy at ALPHA. , 2011, , 39-48.		0
43	Microwave-plasma interactions studied via mode diagnostics in ALPHA. , 2012, , 117-123.		0
44	Status and Prospects for CPT Tests with the ALPHA Experiment. , 2020, , .		0