

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	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	Electron cyclotron resonance (ECR) magnetometry with a plasma reservoir. Physics of Plasmas, 2020, 27, .	1.9	5
4	Investigation of the fine structure of antihydrogen. Nature, 2020, 578, 375-380.	27.8	43
5	Status and Prospects for CPT Tests with the ALPHA Experiment. , 2020, , .		0
6	Characterization of the $1S \leftrightarrow 2S$ transition in antihydrogen. Nature, 2018, 557, 71-75.	27.8	107
7	Enhanced Control and Reproducibility of Non-Neutral Plasmas. Physical Review Letters, 2018, 120, 025001.	7.8	18
8	Observation of the $1S \leftrightarrow 2P$ Lyman- $\hat{1}\pm$ transition in antihydrogen. Nature, 2018, 561, 211-215.	27.8	51
9	Observation of the $1S \leftrightarrow 2S$ 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	An improved limit on the charge of antihydrogen from stochastic acceleration. Nature, 2016, 529, 373-376.	27.8	48
14	Antiproton cloud compression in the ALPHA apparatus at CERN. Hyperfine Interactions, 2015, 235, 21-28.	0.5	4
15	In situ electromagnetic field diagnostics with an electron plasma in a Penning-Malmberg trap. New Journal of Physics, 2014, 16, 013037.	2.9	17
16	An experimental limit on the charge of antihydrogen. Nature Communications, 2014, 5, 3955.	12.8	40
17	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
18	Description and first application of a new technique to measure the gravitational mass of antihydrogen. Nature Communications, 2013, 4, 1785.	12.8	195

#	ARTICLE	IF	CITATIONS
19	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
20	Autoresonant-spectrometric determination of the residual gas composition in the ALPHA experiment apparatus. Review of Scientific Instruments, 2013, 84, 065110.	1.3	0
21	Electron plasmas as a diagnostic tool for hyperfine spectroscopy of antihydrogen. , 2013, , .		1
22	Evaporative cooling of antiprotons for the production of trappable antihydrogen. , 2013, , .		0
23	Experimental and computational study of the injection of antiprotons into a positron plasma for antihydrogen production. Physics of Plasmas, 2013, 20, .	1.9	19
24	Discriminating between antihydrogen and mirror-trapped antiprotons in a minimum-B trap. New Journal of Physics, 2012, 14, 015010.	2.9	18
25	Antiparticle plasmas for antihydrogen trapping. , 2012, , .		0
26	Resonant quantum transitions in trapped antihydrogen atoms. Nature, 2012, 483, 439-443.	27.8	134
27	The ALPHA " detector: Module Production and Assembly. Journal of Instrumentation, 2012, 7, C01051-C01051.	1.2	5
28	Antihydrogen formation by autoresonant excitation of antiproton plasmas. Hyperfine Interactions, 2012, 212, 61-67.	0.5	0
29	Trapped antihydrogen. Hyperfine Interactions, 2012, 212, 15-29.	0.5	12
30	Microwave-plasma interactions studied via mode diagnostics in ALPHA. Hyperfine Interactions, 2012, 212, 117-123.	0.5	0
31	Alternative method for reconstruction of antihydrogen annihilation vertices. Hyperfine Interactions, 2012, 212, 101-107.	0.5	1
32	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
33	Microwave-plasma interactions studied via mode diagnostics in ALPHA. , 2012, , 117-123.		0
34	Antiparticle sources for antihydrogen production and trapping. Journal of Physics: Conference Series, 2011, 262, 012001.	0.4	1
35	Search for trapped antihydrogen in ALPHA This paper was presented at the International Conference on Precision Physics of Simple Atomic Systems, held at École de Physique, les Houches, France, 30 May - 4 June, 2010.. Canadian Journal of Physics, 2011, 89, 7-16.		0
36	Towards antihydrogen trapping and spectroscopy at ALPHA. Hyperfine Interactions, 2011, 199, 39-48.	0.5	0

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37	Search for trapped antihydrogen. Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics, 2011, 695, 95-104.	4.1	44
38	Centrifugal Separation and Equilibration Dynamics in an Electron-Antiproton Plasma. Physical Review Letters, 2011, 106, 145001.	7.8	26
39	Autoresonant Excitation of Antiproton Plasmas. Physical Review Letters, 2011, 106, 025002.	7.8	62
40	Trapped antihydrogen. , 2011, , 15-29.		0
41	Towards antihydrogen trapping and spectroscopy at ALPHA. , 2011, , 39-48.		0
42	Trapped antihydrogen. Nature, 2010, 468, 673-676.	27.8	298
43	Evaporative Cooling of Antiprotons to Cryogenic Temperatures. Physical Review Letters, 2010, 105, 013003.	7.8	89
44	Antimatter transport processes. Journal of Physics: Conference Series, 2010, 257, 012004.	0.4	0