

# Eoin Butler

## List of Publications by Year in descending order

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Version: 2024-02-01

47  
papers

1,551  
citations

430874

18  
h-index

434195

31  
g-index

50  
all docs

50  
docs citations

50  
times ranked

720  
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	Observation of the hyperfine spectrum of antihydrogen. Nature, 2017, 548, 66-69.	27.8	101
6	Evaporative Cooling of Antiprotons to Cryogenic Temperatures. Physical Review Letters, 2010, 105, 013003.	7.8	89
7	Antihydrogen accumulation for fundamental symmetry tests. Nature Communications, 2017, 8, 681.	12.8	64
8	Autoresonant Excitation of Antiproton Plasmas. Physical Review Letters, 2011, 106, 025002.	7.8	62
9	Compression of Antiproton Clouds for Antihydrogen Trapping. Physical Review Letters, 2008, 100, 203401.	7.8	53
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	An improved limit on the charge of antihydrogen from stochastic acceleration. Nature, 2016, 529, 373-376.	27.8	48
12	Search for trapped antihydrogen. Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics, 2011, 695, 95-104.	4.1	44
13	An experimental limit on the charge of antihydrogen. Nature Communications, 2014, 5, 3955.	12.8	40
14	Antiproton, positron, and electron imaging with a microchannel plate/phosphor detector. Review of Scientific Instruments, 2009, 80, 123701.	1.3	39
15	Antihydrogen formation dynamics in a multipolar neutral anti-atom trap. Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics, 2010, 685, 141-145.	4.1	37
16	Physics with antihydrogen. Journal of Physics B: Atomic, Molecular and Optical Physics, 2015, 48, 232001.	1.5	33
17	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
18	Experimental and computational study of the injection of antiprotons into a positron plasma for antihydrogen production. Physics of Plasmas, 2013, 20, .	1.9	19

#	ARTICLE	IF	CITATIONS
19	Discriminating between antihydrogen and mirror-trapped antiprotons in a minimum-B trap. New Journal of Physics, 2012, 14, 015010.	2.9	18
20	In situ electromagnetic field diagnostics with an electron plasma in a Penningâ€™Malmberg trap. New Journal of Physics, 2014, 16, 013037.	2.9	17
21	Trapped antihydrogen. Hyperfine Interactions, 2012, 212, 15-29.	0.5	12
22	Particle Physics Aspects of Antihydrogen Studies with ALPHA at CERN. AIP Conference Proceedings, 2008, , .	0.4	11
23	A novel antiproton radial diagnostic based on octupole induced ballistic loss. Physics of Plasmas, 2008, 15, 032107.	1.9	8
24	Progress towards microwave spectroscopy of trapped antihydrogen. Hyperfine Interactions, 2012, 212, 81-90.	0.5	7
25	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
26	Magnetic multipole induced zero-rotation frequency bounce-resonant loss in a Penningâ€™Malmberg trap used for antihydrogen trapping. Physics of Plasmas, 2009, 16, 100702.	1.9	5
27	The ALPHA â€™ detector: Module Production and Assembly. Journal of Instrumentation, 2012, 7, C01051-C01051.	1.2	5
28	First Attempts at Antihydrogen Trapping in ALPHA. AIP Conference Proceedings, 2008, , .	0.4	4
29	Antiproton compression and radial measurements. AIP Conference Proceedings, 2008, , .	0.4	1
30	Antiparticle sources for antihydrogen production and trapping. Journal of Physics: Conference Series, 2011, 262, 012001.	0.4	1
31	Alternative method for reconstruction of antihydrogen annihilation vertices. Hyperfine Interactions, 2012, 212, 101-107.	0.5	1
32	Electron plasmas as a diagnostic tool for hyperfine spectroscopy of antihydrogen. , 2013, , .		1
33	Antimatter transport processes. Journal of Physics: Conference Series, 2010, 257, 012004.	0.4	0
34	Search for trapped antihydrogen in ALPHA This paper was presented at the International Conference on Precision Physics of Simple Atomic Systems, held at Å%cole de Physique, les Houches, France, 30 Mayâ€™%â€™â€™%â€™%â€™ June, 2010.. Canadian Journal of Physics, 2011, 89, 7-16.		0
35	Towards antihydrogen trapping and spectroscopy at ALPHA. Hyperfine Interactions, 2011, 199, 39-48.	0.5	0
36	Antiparticle plasmas for antihydrogen trapping. , 2012, , .		0

#	ARTICLE	IF	CITATIONS
37	Antihydrogen formation by autoresonant excitation of antiproton plasmas. <i>Hyperfine Interactions</i> , 2012, 212, 61-67.	0.5	0
38	Microwave-plasma interactions studied via mode diagnostics in ALPHA. <i>Hyperfine Interactions</i> , 2012, 212, 117-123.	0.5	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	Safety Demonstration of a Class 1 Smart Device. <i>Nuclear Technology</i> , 2018, 202, 132-140.	1.2	0
42	THE ALPHA ANTIHYDROGEN EXPERIMENT. , 2008, , .		0
43	ALPHA ANTIHYDROGEN EXPERIMENT. , 2010, , .		0
44	Trapped antihydrogen. , 2011, , 15-29.		0
45	Progress towards microwave spectroscopy of trapped antihydrogen. , 2011, , 81-90.		0
46	Towards antihydrogen trapping and spectroscopy at ALPHA. , 2011, , 39-48.		0
47	Microwave-plasma interactions studied via mode diagnostics in ALPHA. , 2012, , 117-123.		0