

# Luca Penasa

## List of Publications by Year in descending order

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Version: 2024-02-01

52  
papers

383  
citations

840728

11  
h-index

839512

18  
g-index

53  
all docs

53  
docs citations

53  
times ranked

298  
citing authors

#	ARTICLE	IF	CITATIONS
1	Laser excitation of the $n=2$ state of positronium for antihydrogen production. <i>Physical Review A</i> , 2016, 94, .	2.5	37
2	Pulsed production of antihydrogen. <i>Communications Physics</i> , 2021, 4, .	5.3	37
3	Positron bunching and electrostatic transport system for the production and emission of dense positronium clouds into vacuum. <i>Nuclear Instruments &amp; Methods in Physics Research B</i> , 2015, 362, 86-92.	1.4	34
4	Molecular transport through 3-hydroxybutyrate co-3-hydroxyhexanoate biopolymer films with dispersed graphene oxide nanoparticles: Gas barrier, structural and mechanical properties. <i>Polymer Testing</i> , 2020, 81, 106181.	4.8	23
5	Production of $n=2$ positronium via $S$ state. <i>Physical Review A</i> , 2019, 99, .	2.5	21
6	The AEGIS experiment. <i>Hyperfine Interactions</i> , 2015, 233, 13-20.	0.5	18
7	Compression of a mixed antiproton and electron non-neutral plasma to high densities. <i>European Physical Journal D</i> , 2018, 72, 1.	1.3	17
8	Velocity-selected production of $n=2$ metastable positronium. <i>Physical Review A</i> , 2019, 99, .	2.5	17
9	A simple and cost-effective high voltage radio frequency driver for multipolar ion guides. <i>International Journal of Mass Spectrometry</i> , 2007, 265, 224-229.	1.5	15
10	Rydberg-positronium velocity and self-ionization studies in a 1T magnetic field and cryogenic environment. <i>Physical Review A</i> , 2020, 102, .	2.5	14
11	High-yield thermalized positronium at room temperature emitted by morphologically tuned nanochanneled silicon targets. <i>Journal of Physics B: Atomic, Molecular and Optical Physics</i> , 2021, 54, 085004.	1.5	11
12	AEGIS at ELENA: outlook for physics with a pulsed cold antihydrogen beam. <i>Philosophical Transactions Series A, Mathematical, Physical, and Engineering Sciences</i> , 2018, 376, 20170274.	3.4	8
13	A $100\text{nm}$ -resolution position-sensitive detector for slow positronium. <i>Nuclear Instruments &amp; Methods in Physics Research B</i> , 2019, 457, 44-48.	1.4	8
14	Efficient $n=2$ positronium production by stimulated decay from the $S$ state. <i>Physical Review A</i> , 2019, 99, .	2.5	8
15	Testing the Weak Equivalence Principle with an antimatter beam at CERN. <i>Journal of Physics: Conference Series</i> , 2015, 631, 012047.	0.4	7
16	Characterization of a transmission positron/positronium converter for antihydrogen production. <i>Nuclear Instruments &amp; Methods in Physics Research B</i> , 2017, 407, 55-66.	1.4	7
17	The AEGIS experiment at CERN: measuring antihydrogen free-fall in earth's gravitational field to test WEP with antimatter. <i>Journal of Physics: Conference Series</i> , 2017, 791, 012014.	0.4	7
18	Positron bunching system for producing positronium clouds into vacuum. <i>Journal of Physics: Conference Series</i> , 2014, 505, 012031.	0.4	6

#	ARTICLE	IF	CITATIONS
19	Direct detection of antiprotons with the Timepix3 in a new electrostatic selection beamline. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 2016, 831, 12-17.	1.6	6
20	Calibration and Equalisation of Plastic Scintillator Detectors for Antiproton Annihilation Identification Over Positron/Positronium Background. Acta Physica Polonica B, 2020, 51, 213.	0.8	6
21	Particle tracking at cryogenic temperatures: the Fast Annihilation Cryogenic Tracking (FACT) detector for the AEGIS antimatter gravity experiment. Journal of Instrumentation, 2015, 10, C02023-C02023.	1.2	5
22	Positronium Rydberg excitation diagnostic in a 1T cryogenic environment. AIP Conference Proceedings, 2019, , .	0.4	5
23	A cryogenic tracking detector for antihydrogen detection in the $\langle \text{mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline" id="d1e454" altimg="si123.svg"} \rangle \langle \text{mml:mtext} \rangle \text{AEGIS} \langle \text{mml:mtext} \rangle \langle \text{mml:math} \rangle$ experiment. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 2020, 960, 163637.	1.6	5
24	Measurement of antiproton annihilation on Cu, Ag and Au with emulsion films. Journal of Instrumentation, 2017, 12, P04021-P04021.	1.2	4
25	Imaging a positronium cloud in a 1 Tesla. EPJ Web of Conferences, 2019, 198, 00004.	0.3	4
26	Gravity and antimatter: the AEGIS experiment at CERN. Journal of Physics: Conference Series, 2020, 1342, 012016.	0.4	4
27	Hybrid Imaging and Timing Ps Laser Excitation Diagnostics for Pulsed Antihydrogen Production. Acta Physica Polonica A, 2020, 137, 96-100.	0.5	4
28	Forward emission of positronium from nanochanneled silicon membranes. Physical Review B, 2022, 105, .	3.2	4
29	Towards the first measurement of matter-antimatter gravitational interaction. EPJ Web of Conferences, 2018, 182, 02040.	0.3	3
30	Advances in Ps Manipulations and Laser Studies in the AEGIS Experiment. Acta Physica Polonica B, 2017, 48, 1583.	0.8	3
31	Probing antimatter gravity â€“ The AEGIS experiment at CERN. EPJ Web of Conferences, 2016, 126, 02016.	0.3	2
32	Time-of-flight apparatus for the measurement of slow positronium emitted by nanochannel converters at cryogenic temperatures. Nuclear Instruments & Methods in Physics Research B, 2021, 499, 32-38.	1.4	2
33	Experiments with low-energy antimatter. EPJ Web of Conferences, 2015, 96, 01007.	0.3	1
34	Emulsion detectors for the antihydrogen detection in AEGIS. Hyperfine Interactions, 2015, 233, 29-34.	0.5	1
35	The DAQ system for the AEGIS experiment. Journal of Physics: Conference Series, 2017, 898, 032014.	0.4	1
36	AEGIS latest results. EPJ Web of Conferences, 2018, 181, 01037.	0.3	1

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37	Monte-Carlo simulation of positronium laser excitation and anti-hydrogen formation via charge exchange. <i>Hyperfine Interactions</i> , 2019, 240, 1.	0.5	1
38	The AEGIS experiment: towards antimatter gravity measurements. <i>Journal of Physics: Conference Series</i> , 2019, 1390, 012104.	0.4	1
39	Techniques for Production and Detection of <sup>23</sup> S Positronium. <i>Acta Physica Polonica A</i> , 2020, 137, 91-95.	0.5	1
40	Developments for pulsed antihydrogen production towards direct gravitational measurement on antimatter. <i>Physica Scripta</i> , 2020, 95, 114001.	2.5	1
41	High-resolution MCP-TimePix3 imaging/timing detector for antimatter physics. <i>Measurement Science and Technology</i> , 0, , .	2.6	1
42	Positron Manipulation and Positronium Laser Excitation in AEGIS. <i>Defect and Diffusion Forum</i> , 0, 373, 11-16.	0.4	0
43	Overview of Recent Work on Laser Excitation of Positronium for the Formation of Antihydrogen. , 2017, , .		0
44	Antiproton tagging and vertex fitting in a Timepix3 detector. <i>Journal of Instrumentation</i> , 2018, 13, P06004-P06004.	1.2	0
45	A low cost 2/3 of 4 $\langle \text{mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline" id="d1e423" altimg="si5.svg" \rangle \langle \text{mml:mi} \rangle \langle \text{mml:mi} \rangle \langle \text{mml:math} \rangle$ detector for the study of Ps decay. <i>Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment</i> , 2019, 942, 162416.	1.6	0
46	Production of long-lived positronium states via laser excitation to 33P level. <i>AIP Conference Proceedings</i> , 2019, , .	0.4	0
47	Antimatter Gravity Measurements with Cold Antihydrogen: the AEGIS Experiment. , 2017, , .		0
48	Positronium for Antihydrogen Production in the AEGIS Experiment. <i>Acta Physica Polonica A</i> , 2017, 132, 1443-1449.	0.5	0
49	Open Volumes Structure and Molecular Transport in Biopolymer Nanocomposites. <i>Acta Physica Polonica A</i> , 2020, 137, 118-121.	0.5	0
50	Protocol for pulsed antihydrogen production in the AEGIS apparatus. <i>Journal of Physics: Conference Series</i> , 2020, 1612, 012025.	0.4	0
51	A fiber detector to monitor ortho-Ps formation and decay. <i>Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment</i> , 2022, 1027, 166275.	1.6	0
52	Method for measuring positron number in high intensity nanosecond positron bunches based on Poisson statistic. <i>Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment</i> , 2022, , 166661.	1.6	0