

# Marcin J Zieliński

## List of Publications by Year in descending order

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Version: 2024-02-01

65  
papers

1,683  
citations

361296

20  
h-index

289141

40  
g-index

66  
all docs

66  
docs citations

66  
times ranked

3363  
citing authors

#	ARTICLE	IF	CITATIONS
1	Abashian-Booth-Crowe Effect in Basic Double-Pionic Fusion: A New Resonance?. Physical Review Letters, 2011, 106, 242302.	2.9	210
2	Trapped Antihydrogen in Its Ground State. Physical Review Letters, 2012, 108, 113002.	2.9	165
3	Evidence for a $B^0 \rightarrow \pi^0 \pi^0$ resonance. Physical Review Letters, 2016, 117, 022003.	1.5	132
4	Test of a single module of the J-PET scanner based on plastic scintillators. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 2014, 764, 317-321.	0.7	109
5	Search for a dark photon in the $\pi^0 \rightarrow \gamma \gamma$ decay. Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics, 2013, 726, 187-193.	1.5	105
6	A novel method for the line-of-response and time-of-flight reconstruction in TOF-PET detectors based on a library of synchronized model signals. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 2015, 775, 54-62.	0.7	73
7	Measurement of the $n\pi^+ p\bar{p}$ reaction in search for the recently observed $d\pi^0$ (2380) resonance. Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics, 2015, 743, 325-332.	1.5	63
8	Measurement of the $p \rightarrow n \pi^+$ resonance structure in $p \rightarrow n \pi^+$ scattering. Physical Review C, 2013, 88, .	1.1	62
9	Neutron-proton scattering in the context of the $d\pi^0$ resonance. Physical Review C, 2014, 90, .	1.1	54
10	Novel method for hit-position reconstruction using voltage signals in plastic scintillators and its application to Positron Emission Tomography. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 2014, 764, 186-192.	0.7	51
11	Compressive sensing of signals generated in plastic scintillators in a novel J-PET instrument. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 2015, 786, 105-112.	0.7	46
12	Adiabatic Cooling of Antiprotons. Physical Review Letters, 2011, 106, 073002.	2.9	45
13	Search for $\bar{\Lambda}$ -mesic $^4\text{He}$ with the WASA-at-COSY detector. Physical Review C, 2013, 87, .	1.1	40
14	Determination of the scattering length in free space. Physical Review Letters, 2014, 113, 062004.	1.5	38
15		1.5	34
16	Measurement of the Dalitz plot distribution with the WASA detector at COSY. Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics, 2009, 677, 24-29.	1.5	31
17	A novel method based solely on field programmable gate array (FPGA) units enabling measurement of time and charge of analog signals in positron emission tomography (PET). Bio-Algorithms and Med-Systems, 2014, 10, 41-45.	1.0	31
18	Abashian-Booth-Crowe resonance structure in the double pionic fusion to $^4\text{He}$ . Physical Review C, 2012, 86, .	1.1	30

#	ARTICLE	IF	CITATIONS
19	Measurement of the $\Lambda(1520)$ resonance in the $p + d \rightarrow \Lambda + \alpha$ reaction. Physical Review C, 2014, 90, .	1.1	20
20	Near-threshold production of the $\Lambda(1520)$ meson via the quasifree $n + p \rightarrow \Lambda + p$ reaction. Physical Review C, 2009, 79, .	1.1	20
21	Trigger-less and reconfigurable data acquisition system for positron emission tomography. Bio-Algorithms and Med-Systems, 2014, 10, 37-40.	1.0	20
22	Plastic scintillators for positron emission tomography obtained by the bulk polymerization method. Bio-Algorithms and Med-Systems, 2014, 10, 27-31.	1.0	19
23	Dose rate effects in the radiation damage of the plastic scintillators of the CMS hadron endcap calorimeter. Journal of Instrumentation, 2016, 11, T10004-T10004.	0.5	17
24	Measurement of the invariant mass distributions for the reaction at excess energy of. Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics, 2010, 684, 11-16. <i>Generalized Dalitz plot analysis of the near-threshold <math>\Lambda(1520)</math></i>	1.5	15
25	$\Lambda(1520)$ resonance in the $p + d \rightarrow \Lambda + \alpha$ reaction. Physical Review C, 2009, 80, .	1.1	13
26	Centrifugal Separation of Antiprotons and Electrons. Physical Review Letters, 2010, 105, 213002.	2.9	13
27	3D PET image reconstruction based on the maximum likelihood estimation method (MLEM) algorithm. Bio-Algorithms and Med-Systems, 2014, 10, 1-7.	1.0	13
28	Studies of unicellular microorganisms <i>Saccharomyces cerevisiae</i> by means of positron annihilation lifetime spectroscopy. Nukleonika, 2015, 60, 749-753.	0.3	13
29	Novel scintillating material 2-(4-styrylphenyl)benzoxazole for the fully digital and MRI compatible J-PET tomograph based on plastic scintillators. PLoS ONE, 2017, 12, e0186728.	1.1	13
30	Cross section ratio and angular distributions of the reaction $p + d \rightarrow \Lambda + \alpha$ at 48.8 MeV and 59.8 MeV excess energy. European Physical Journal A, 2014, 50, 1.	1.0	12
31	Reconstruction of hit time and hit position of annihilation quanta in the J-PET detector using the Mahalanobis distance. Nukleonika, 2015, 60, 765-769.	0.3	11
32	Determination of the Total Width of the $\Lambda(1520)$ Meson. Physical Review Letters, 2010, 105, 122001.	2.9	10
33	Invariant-mass distributions for the $pp \rightarrow pp + \Lambda$ reaction at $Q = 10$ MeV. European Physical Journal A, 2010, 43, 131-136.	1.0	9
34	Charge symmetry breaking in $d + \alpha \rightarrow \Lambda + \alpha$ with WASA-at-COSY. Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics, 2014, 739, 44-49.	1.5	9
35	Two-proton correlation function for the $pp \rightarrow pp + \Lambda$ and $pp \rightarrow pp + \pi$ reactions. Journal of Physics G: Nuclear and Particle Physics, 2010, 37, 055003.	1.4	8
36	Pumped helium system for cooling positron and electron traps to 1.2K. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 2011, 640, 232-240.	0.7	7

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37	J-PET analysis framework for the prototype TOF-PET detector. Bio-Algorithms and Med-Systems, 2014, 10, 33-36.	1.0	7
38	Upper limit of the total cross section for the $\pi^+p \rightarrow \pi^+p$ reaction. Physical Review C, 2010, 81, .	1.1	5
39	Investigation of the $\pi^+p$ reaction with the FZ Jülich WASA-at-COSY facility. Physical Review C, 2013, 88, .	1.1	5
40	Simulations of $\pi^+$ quanta scattering in a single module of the J-PET detector. Bio-Algorithms and Med-Systems, 2014, 10, 71-77.	1.0	5
41	Application of WLS strips for position determination in strip PET tomograph based on plastic scintillators. Bio-Algorithms and Med-Systems, 2014, 10, 59-63.	1.0	5
42	Calibration of photomultipliers gain used in the J-PET detector. Bio-Algorithms and Med-Systems, 2014, 10, 13-17.	1.0	5
43	Processing optimization with parallel computing for the J-PET scanner. Nukleonika, 2015, 60, 745-748.	0.3	5
44	Tevatron Constraints on Models of the Higgs Boson with Exotic Spin and Parity Using Decays to Bottom-Antibottom Quark Pairs. Physical Review Letters, 2015, 114, 151802.	2.9	5
45	Search for Polarization Effects in the Antiproton Production Process. Acta Physica Polonica B, 2015, 46, 191.	0.3	5
46	Microstructure and Thermal Stability of Transition Metal Nitrides and Borides on GaN. Materials Research Society Symposia Proceedings, 2000, 622, 6341.	0.1	4
47	Database and data structure for the novel TOF-PET detector developed for the J-PET project. Bio-Algorithms and Med-Systems, 2014, 10, 79-83.	1.0	4
48	PALS investigations of free volumes thermal expansion of J-PET plastic scintillator synthesized in polystyrene matrix. Nukleonika, 2015, 60, 777-781.	0.3	4
49	Computing support for advanced medical data analysis and imaging. Bio-Algorithms and Med-Systems, 2014, 10, 53-58.	1.0	3
50	Determination of the map of efficiency of the Jagiellonian Positron Emission Tomograph (J-PET) detector with the GATE package. Bio-Algorithms and Med-Systems, 2014, 10, 85-90.	1.0	3
51	A novel method for calibration and monitoring of time synchronization of TOF-PET scanners by means of cosmic rays. Bio-Algorithms and Med-Systems, 2014, 10, 19-25.	1.0	3
52	Determination of the COSY Proton Beam Polarization Using the WASA Detector. Acta Physica Polonica B, 2015, 46, 153.	0.3	3
53	J-PET: A Novel TOF-PET Detector based on Plastic Scintillators. , 2016, , .		3
54	Application of the compress sensing theory for improvement of the TOF resolution in a novel J-PET instrument. Nukleonika, 2016, 61, 35-39.	0.3	3

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55	Searches for discrete symmetries violation in ortho-positronium decay using the J-PET detector. Nukleonika, 2015, 60, 729-732.	0.3	3
56	Application of Compressive Sensing Theory for the Reconstruction of Signals in Plastic Scintillators. Acta Physica Polonica B, Proceedings Supplement, 2013, 6, 1121.	0.0	3
57	System Response Kernel Calculation for List-mode Reconstruction in Strip PET Detector. Acta Physica Polonica B, Proceedings Supplement, 2013, 6, 1027.	0.0	3
58	Polarization determination for the studies of the eta meson production. EPJ Web of Conferences, 2014, 81, 02013.	0.1	2
59	Study of the $\eta$ -Meson Production with Polarized Proton Beam. Acta Physica Polonica B, 2014, 45, 697.	0.3	2
60	List-mode reconstruction in 2D strip PET. Bio-Algorithms and Med-Systems, 2014, 10, 9-12.	1.0	2
61	Studies on Antihydrogen Atoms with the ATRAP Experiment at CERN. Acta Physica Polonica B, Proceedings Supplement, 2013, 6, 1093.	0.0	2
62	MEASUREMENT OF THE $\hat{\rho}^+ \hat{\rho}^- \hat{\rho}^0$ DECAY WITH WASA-at-COSY DETECTOR. International Journal of Modern Physics A, 2011, 26, 622-624.	0.5	1
63	Study of the hadronic production of kaon pairs below the threshold for the $\eta$ meson. Nuclear Physics, Section B, Proceedings Supplements, 2008, 181-182, 194-198.	0.5	0
64	Test of charge conjugation invariance in the decay of the $\eta$ -meson into $\pi^+ \pi^- \pi^0$ . EPJ Web of Conferences, 2012, 37, 09037.	0.1	0
65	Production and interaction of the $\eta$ -meson with nucleons and nuclei. EPJ Web of Conferences, 2016, 130, 03004.	0.1	0