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List of Publications by Year
in descending order

Version: 2024-02-01

56 papers	1,330 citations	361296 20 h-index	345118 36 g-index
57 all docs	57 docs citations	57 times ranked	346 citing authors

#	Article	IF	Citations
1	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
2	Time resolution of the plastic scintillator strips with matrix photomultiplier readout for J-PET tomograph. Physics in Medicine and Biology, 2016, 61, 2025-2047.	1.6	99
3	Feasibility study of the positronium imaging with the J-PET tomograph. Physics in Medicine and Biology, 2019, 64, 055017.	1.6	97
4	J-PET: A New Technology for the Whole-body PET Imaging. Acta Physica Polonica B, 2017, 48, 1567.	0.3	84
5	Positronium imaging with the novel multiphoton PET scanner. Science Advances, 2021, 7, eabh4394.	4.7	79
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	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
8	Estimating the NEMA characteristics of the J-PET tomograph using the GATE package. Physics in Medicine and Biology, 2018, 63, 165008.	1.6	49
9	Testing CPT symmetry in ortho-positronium decays with positronium annihilation tomography. Nature Communications, 2021, 12, 5658.	5.8	49
10	Simulating NEMA characteristics of the modular total-body J-PET scannerâ€"an economic total-body PET from plastic scintillators. Physics in Medicine and Biology, 2021, 66, 175015.	1.6	48
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	Performance assessment of the 2 Î³positronium imaging with the total-body PET scanners. EJNMMI Physics, 2020, 7, 44.	1.3	44
13	Trilateration-based reconstruction of ortho -positronium decays into three photons with the J-PET detector. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 2016, 819, 54-59.	0.7	42
14	Sampling FEE and Trigger-less DAQ for the J-PET Scanner. Acta Physica Polonica B, 2016, 47, 491.	0.3	36
15	Feasibility studies of the polarization of photons beyond the optical wavelength regime with the J-PET detector. European Physical Journal C, 2018, 78, 970.	1.4	32
16	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
17	Determination of the $3gamma $ Fraction from Positron Annihilation in Mesoporous Materials for Symmetry Violation Experiment with J-PET Scanner. Acta Physica Polonica B, 2016, 47, 453.	0.3	25
18	Analysis Framework for the J-PET Scanner. Acta Physica Polonica A, 2015, 127, 1491-1494.	0.2	24

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19	Estimating relationship between the time over threshold and energy loss by photons in plastic scintillators used in the J-PET scanner. EJNMMI Physics, 2020, 7, 39.	1.3	21
20	Trigger-less and reconfigurable data acquisition system for positron emission tomography. Bio-Algorithms and Med-Systems, 2014, 10, 37-40.	1.0	20
21	Plastic scintillators for positron emission tomography obtained by the bulk polymerization method. Bio-Algorithms and Med-Systems, 2014, 10, 27-31.	1.0	19
22	The J-PET detectorâ€"a tool for precision studies of ortho-positronium decays. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 2021, 1008, 165452.	0.7	19
23	Multiple Scattering and Accidental Coincidences in the J-PET Detector Simulated Using GATE Package. Acta Physica Polonica A, 2015, 127, 1505-1512.	0.2	18
24	Technical Attenuation Length Measurement of Plastic Scintillator Strips for the Total-Body J-PET Scanner. IEEE Transactions on Nuclear Science, 2020, 67, 2286-2289.	1.2	14
25	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
26	Studies of unicellular microorganisms Saccharomyces cerevisiae by means of positron annihilation lifetime spectroscopy. Nukleonika, 2015, 60, 749-753.	0.3	13
27	Hit Time and Hit Position Reconstruction in the J-PET Detector Based on a Library of Averaged Model Signals. Acta Physica Polonica A, 2015, 127, 1495-1499.	0.2	13
28	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
29	Blue-emitting polystyrene scintillators for plastic scintillation dosimetry. Bio-Algorithms and Med-Systems, 2021, 17, 191-197.	1.0	13
30	A Pilot Study of the Novel J-PET Plastic Scintillator with 2-(4-styrylphenyl)benzoxazole as a Wavelength Shifter. Acta Physica Polonica A, 2015, 127, 1487-1490.	0.2	11
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	Commissioning of the J-PET detector in view of the positron annihilation lifetime spectroscopy. Hyperfine Interactions, 2018, 239, 1.	0.2	10
33	Optimisation of the event-based TOF filtered back-projection for online imaging in total-body J-PET. Medical Image Analysis, 2021, 73, 102199.	7.0	10
34	141: A novel TOF-PET detector based on organic scintillators. Radiotherapy and Oncology, 2014, 110, S69-S70.	0.3	9
35	Synchronization and Calibration of the 24-Modules J-PET Prototype With 300-mm Axial Field of View. IEEE Transactions on Instrumentation and Measurement, 2021, 70, 1-10.	2.4	8
36	J-PET analysis framework for the prototype TOF-PET detector. Bio-Algorithms and Med-Systems, 2014, 10, 33-36.	1.0	7

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37	Simulations of Î³ quanta scattering in a single module of the J-PET detector. Bio-Algorithms and Med-Systems, 2014, 10, 71-77.	1.0	5
38	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
39	Calibration of photomultipliers gain used in the J-PET detector. Bio-Algorithms and Med-Systems, 2014, 10, 13-17.	1.0	5
40	Processing optimization with parallel computing for the J-PET scanner. Nukleonika, 2015, 60, 745-748.	0.3	5
41	GPU Accelerated Image Reconstruction in a Two-Strip J-PET Tomograph. Acta Physica Polonica A, 2015, 127, 1500-1504.	0.2	5
42	Synthesis and Characterization of Plastic Scintillators for the Total-body J-PET Scanner. Acta Physica Polonica B, 2020, 51, 225.	0.3	5
43	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
44	PALS investigations of free volumes thermal expansion of J-PET plastic scintillator synthesized in polystyrene matrix. Nukleonika, 2015, 60, 777-781.	0.3	4
45	Computing support for advanced medical data analysis and imaging. Bio-Algorithms and Med-Systems, 2014, 10, 53-58.	1.0	3
46	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
47	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
48	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
49	Feasibility Study of the Time Reversal Symmetry Tests in Decay of Metastable Positronium Atoms with the J-PET Detector. Advances in High Energy Physics, 2018, 2018, 1-10.	0.5	3
50	Hit-Time and Hit-Position Reconstruction in Strips of Plastic Scintillators Using Multithreshold Readouts. IEEE Transactions on Radiation and Plasma Medical Sciences, 2020, 4, 528-537.	2.7	3
51	Searches for discrete symmetries violation in ortho-positronium decay using the J-PET detector. Nukleonika, 2015, 60, 729-732.	0.3	3
52	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
53	System Response Kernel Calculation for List-mode Reconstruction in Strip PET Detector. Acta Physica Polonica B, Proceedings Supplement, 2013, 6, 1027.	0.0	3
54	List-mode reconstruction in 2D strip PET. Bio-Algorithms and Med-Systems, 2014, 10, 9-12.	1.0	2

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55	A feasibility study of the time reversal violation test based on polarization of annihilation photons from the decay of ortho-Positronium with the J-PET detector. Hyperfine Interactions, 2018, 239, 1.	0.2	2
56	A novel TOF-PET detector based on plastic scintillators. , 2015, , .		1