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List of Publications by Year in descending order

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526264

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69
all docs

69
docs citations

69
times ranked

663
citing authors

#	ARTICLE	IF	CITATIONS
1	Organ-Dedicated Molecular Imaging Systems. IEEE Transactions on Radiation and Plasma Medical Sciences, 2018, 2, 388-403.	3.7	64
2	Performance Study of a Large Monolithic LYSO PET Detector With Accurate Photon DOI Using Retroreflector Layers. IEEE Transactions on Radiation and Plasma Medical Sciences, 2017, 1, 229-237.	3.7	61
3	A PET Design Based on SiPM and Monolithic LYSO Crystals: Performance Evaluation. IEEE Transactions on Nuclear Science, 2016, 63, 2471-2477.	2.0	56
4	The MINDView brain PET detector, feasibility study based on SiPM arrays. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 2016, 818, 82-90.	1.6	54
5	Initial Results of the MINDView PET Insert Inside the 3T mMR. IEEE Transactions on Radiation and Plasma Medical Sciences, 2019, 3, 343-351.	3.7	47
6	Exploring TOF capabilities of PET detector blocks based on large monolithic crystals and analog SiPMs. Physica Medica, 2020, 70, 10-18.	0.7	38
7	NEMA Performance Evaluation of CareMiBrain dedicated brain PET and Comparison with the whole-body and dedicated brain PET systems. Scientific Reports, 2019, 9, 15484.	3.3	34
8	Metascintillators for Ultrafast Gamma Detectors: A Review of Current State and Future Perspectives. IEEE Transactions on Radiation and Plasma Medical Sciences, 2022, 6, 5-15.	3.7	32
9	Evaluating heterogeneity of primary tumor 18F-FDG uptake in breast cancer with a dedicated breast PET (MAMMI). Nuclear Medicine Communications, 2014, 35, 446-452.	1.1	29
10	Detector block performance based on a monolithic LYSO crystal using a novel signal multiplexing method. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 2018, 912, 372-377.	1.6	29
11	Timing evaluation of a PET detector block based on semi-monolithic LYSO crystals. Medical Physics, 2021, 48, 8010-8023.	3.0	27
12	PESIC: An Integrated Front-End for PET Applications. IEEE Transactions on Nuclear Science, 2008, 55, 27-33.	2.0	26
13	Initial performance evaluation of a high resolution Albira small animal positron emission tomography scanner with monolithic crystals and depth-of-interaction encoding from a user's perspective. Measurement Science and Technology, 2009, 20, 104011.	2.6	26
14	Calibration of Gamma Ray Impacts in Monolithic-Based Detectors Using Voronoi Diagrams. IEEE Transactions on Radiation and Plasma Medical Sciences, 2020, 4, 350-360.	3.7	23
15	Acoustic Holograms for Bilateral Blood-Brain Barrier Opening in a Mouse Model. IEEE Transactions on Biomedical Engineering, 2022, 69, 1359-1368.	4.2	23
16	Metascintillators: New Results for TOF-PET Applications. IEEE Transactions on Radiation and Plasma Medical Sciences, 2022, 6, 510-516.	3.7	22
17	Feasibility Study of a Small Animal PET Insert Based on a Single LYSO Monolithic Tube. Frontiers in Medicine, 2018, 5, 328.	2.6	20
18	Novel method to measure the intrinsic spatial resolution in PET detectors based on monolithic crystals. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 2019, 920, 58-67.	1.6	20

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19	The MINDVIEW project: First results. <i>European Psychiatry</i> , 2018, 50, 21-27.	0.2	19
20	DOI measurement with monolithic scintillation crystals: A primary performance evaluation. , 2007, , .		14
21	Simultaneous imaging of hard and soft biological tissues in a low-field dental MRI scanner. <i>Scientific Reports</i> , 2020, 10, 21470.	3.3	14
22	In-depth evaluation of TOF-PET detectors based on crystal arrays and the TOFPET2 ASIC. <i>Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment</i> , 2020, 977, 164295.	1.6	13
23	Simulation Study of Resistor Networks Applied to an Array of 256 SiPMs. <i>IEEE Transactions on Nuclear Science</i> , 2013, 60, 592-598.	2.0	10
24	A novel brain PET insert for the MINDView project. , 2014, , .		9
25	Pilot performance of a dedicated prostate PET suitable for diagnosis and biopsy guidance. <i>EJNMMI Physics</i> , 2020, 7, 38.	2.7	9
26	Time of flight measurements based on FPGA and SiPMs for PETâ€™MR. <i>Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment</i> , 2014, 734, 127-131.	1.6	8
27	High-dose-rate brachytherapy boost for prostate cancer: Analysis of dose-volume histogram parameters for predicting late rectal toxicity. <i>Brachytherapy</i> , 2017, 16, 511-517.	0.5	8
28	Characterization of a High-Aspect Ratio Detector With Lateral Sides Readout for Compton PET. <i>IEEE Transactions on Radiation and Plasma Medical Sciences</i> , 2020, 4, 546-554.	3.7	8
29	Experimental Validation of a Rodent PET Scanner Prototype Based on a Single LYSO Crystal Tube. <i>IEEE Transactions on Radiation and Plasma Medical Sciences</i> , 2022, 6, 697-706.	3.7	8
30	Improved Digital Pulse Height Estimation for PET Detectors Using LMS Adaptive Filters. <i>IEEE Transactions on Nuclear Science</i> , 2008, 55, 48-53.	2.0	7
31	Analysis of time resolution in a dual head. $\langle \text{mml:math} \text{xmlns:mml="http://www.w3.org/1998/Math/MathML" altimg="si2.gif" overflow="scroll"} \rangle \langle \text{mml:mi} \text{LSO} \langle \text{mml:mi} \rangle \langle \text{mml:mo} \rangle + \langle \text{mml:mo} \rangle \langle \text{mml:mi} \rangle \text{PSPMT} \langle \text{mml:mi} \rangle \langle \text{mml:math} \rangle$ PET system using low pass filter interpolation and digital constant fraction discriminator techniques. <i>Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment</i> , 2009, 604, 347-350.	1.6	7
32	Minimization of Parallax Error in Dedicated Breast PET. <i>IEEE Transactions on Nuclear Science</i> , 2013, 60, 739-745.	2.0	7
33	3-D photon impact determination using fitting approaches to the Light Distribution. , 2014, , .		7
34	Design and preliminary performance of a readout ASIC for CZT based high resolution PET. , 2011, , .		6
35	Interobserver variability in rectum contouring in high-dose-rate brachytherapy for prostate cancer: A multi-institutional prospective analysis. <i>Brachytherapy</i> , 2018, 17, 208-213.	0.5	6
36	QR-Factorization Algorithm for Computed Tomography (CT): Comparison With FDK and Conjugate Gradient (CG) Algorithms. <i>IEEE Transactions on Radiation and Plasma Medical Sciences</i> , 2018, 2, 459-469.	3.7	6

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37	Characterization of Viscoelastic Media Combining Ultrasound and Magnetic-Force Induced Vibrations on an Embedded Soft Magnetic Sphere. IEEE Transactions on Ultrasonics, Ferroelectrics, and Frequency Control, 2021, 68, 3540-3548.	3.0	6
38	Prepolarized MRI of hard tissues and solid-state matter. NMR in Biomedicine, 2022, 35, .	2.8	6
39	Expandable programmable integrated front-end for scintillator based photodetectors. , 2012, , .		5
40	Performance of large BGO arrays coupled to SiPM photosensors â€” Continued study. , 2015, , .		5
41	Pilot Studies With BGO Scintillators Coupled to Low-Noise, Large-Area, SiPM Arrays. IEEE Transactions on Nuclear Science, 2016, 63, 2482-2486.	2.0	5
42	PET Detector based on a Semi-Monolithic Crystal with DOI and TOF Capabilities. , 2020, , .		5
43	Next generation of the Albira small animal PET based on high density SiPM arrays. , 2015, , .		4
44	PET detector block with accurate 4D capabilities. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 2018, 912, 132-136.	1.6	4
45	Simulation Study of a Frame-Based Motion Correction Algorithm for Positron Emission Imaging. Sensors, 2021, 21, 2608.	3.8	4
46	Front-end circuit for position sensitive silicon and vacuum tube photomultipliers with gain control and depth of interaction measurement. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 2007, 576, 118-122.	1.6	3
47	3D photon impact determination in monolithic based PET detectors using FPGA processing. , 2016, , .		3
48	A brain PET insert MR compatible: Final design and first results. , 2016, , .		3
49	A novel metascintillator approach for ultra-fast timing in Positron Emission Tomography. , 2020, , .		3
50	Low-Field Rampable Magnet for a High-Resolution MRI System. IEEE Transactions on Magnetics, 2020, 56, 1-7.	2.1	2
51	2-D Feasibility Study of Joint Reconstruction of Attenuation and Activity in Limited Angle TOF-PET. IEEE Transactions on Radiation and Plasma Medical Sciences, 2021, 5, 712-722.	3.7	2
52	Architecture-Level Optimization on Digital Silicon Photomultipliers for Medical Imaging. Sensors, 2022, 22, 122.	3.8	2
53	Preliminary performance evaluation of a high resolution small animal PET scanner with monolithic crystals and depth-of-interaction encoding. , 2008, , .		1
54	Pile-up discrimination method applied to novel gamma-ray detectors based on SiPMs arrays. , 2014, , .		1

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55	A PET detector ring with homogenous spatial resolution in the presence of a magnetic field. , 2015, , .		1
56	Pilot tests of a PET insert based on monolithic crystals in a 7T MR. , 2016, , .		1
57	Noise rejection in monolithic PET detectors. , 2016, , .		1
58	Performance evaluation of the mindview PET using GATE and STIR. , 2016, , .		1
59	Implementation of Monolithic Crystals in Stand- Alone Brain PET, and PET-MR Insert, Developments. , 2017, , .		1
60	A Method to Measure the Intrinsic Detector Resolution on Monolithic Crystals. , 2017, , .		1
61	TOF-PET Detectors Based on ASIC Technology and Analog SiPMs. , 2018, , .		1
62	Platform for Image-Guided Noninvasive Brain Delivery of Magnetic Particles: Concept and Technical Progress. IEEE Magnetics Letters, 2018, 9, 1-5.	1.1	1
63	144 channel measurement IC for CZT sensors with energy and time resolution. , 2013, , .		0
64	Position sensitive photosensors based on SiPM arrays. , 2014, , .		0
65	Continuous or pixelated scintillators?, not longer a discussion. , 2014, , .		0
66	Preliminary characterization of ASIC-based detectors for TOF-PET applications. , 2016, , .		0
67	Progress Report for an Accurate PET Detector Based on SiPMs and the TOPPET ASIC. , 2017, , .		0
68	A Direct Ray Tracing Reconstruction Algorithm Using an Adaptive Median Filter. , 2017, , .		0
69	A Fast 0.5 T Prepolarizer Module for Preclinical Magnetic Resonance Imaging. IEEE Transactions on Magnetics, 2022, 58, 1-8.	2.1	0