

# Yuxuan Zhang

## List of Publications by Year in descending order

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78  
papers

450  
citations

840776  
11  
h-index

839539  
18  
g-index

78  
all docs

78  
docs citations

78  
times ranked

304  
citing authors

#	ARTICLE	IF	CITATIONS
1	The Engineering and Initial Results of a Transformable Low-cost High-Resolution PET Camera. IEEE Transactions on Nuclear Science, 2007, 54, 1583-1588.	2.0	39
2	High-Resolution L(Y)SO Detectors Using PMT-Quadrant-Sharing for Human and Animal PET Cameras. IEEE Transactions on Nuclear Science, 2008, 55, 862-869.	2.0	38
3	Reconstruction of a complex object from two in-line holograms. Optics Express, 2003, 11, 572.	3.4	34
4	Engineering and Performance (NEMA and Animal) of a Lower-Cost Higher-Resolution Animal PET/CT Scanner Using Photomultiplier-Quadrant-Sharing Detectors. Journal of Nuclear Medicine, 2012, 53, 1786-1793.	5.0	26
5	A New Statistics-Based Online Baseline Restorer for a High Count-Rate Fully Digital System. IEEE Transactions on Nuclear Science, 2010, 57, 550-555.	2.0	23
6	PET resolution and image quality optimization study for different detector block geometries and DOI designs. , 2007, , .		19
7	Monte Carlo Simulation Study on the Time Resolution of a PMT-Quadrant-Sharing LSO Detector Block for Time-of-Flight PET. IEEE Transactions on Nuclear Science, 2009, 56, 2614-2620.	2.0	17
8	The initial design and feasibility study of an affordable high-resolution 100-cm long PET. , 2007, , .		15
9	A Lower-Cost High-Resolution LYSO Detector Development for Positron Emission Mammography (PEM). IEEE Transactions on Nuclear Science, 2009, 56, 2621-2627.	2.0	14
10	A Real Time Coincidence System for High Count-Rate TOF or Non-TOF PET Cameras Using Hybrid Method Combining AND-Logic and Time-Mark Technology. IEEE Transactions on Nuclear Science, 2010, 57, 708-714.	2.0	14
11	A Simulation Study on Optically Decoding Reflecting Windows for PMT Quadrant Sharing Scintillation Detector Block. IEEE Transactions on Nuclear Science, 2006, 53, 2557-2562.	2.0	12
12	GATE Monte Carlo Simulation of a High-Sensitivity and High-Resolution LSO-Based Small Animal PET Camera. IEEE Transactions on Nuclear Science, 2007, 54, 1568-1573.	2.0	12
13	Real time digital implementation of the high-yield-pileup-event-recover (HYPER) method. , 2007, , .		11
14	Ultra-High Resolution LYSO PQS-SSS Heptahedron Blocks for Low-Cost MuPET. IEEE Transactions on Nuclear Science, 2011, 58, 626-633.	2.0	11
15	High resolution GSO block detectors using PMT-quadrant-sharing design for small animal PET. IEEE Transactions on Nuclear Science, 2006, 53, 40-43.	2.0	10
16	A High-Resolution Time-of-Flight Clinical PET Detection System Using a Gapless PMT-Quadrant-Sharing Method. IEEE Transactions on Nuclear Science, 2015, 62, 2067-2074.	2.0	10
17	An Accurate Timing Alignment Method With Time-to-Digital Converter Linearity Calibration for High-Resolution TOF PET. IEEE Transactions on Nuclear Science, 2015, 62, 799-804.	2.0	10
18	An Improved Quadrant-Sharing BGO Detector for a Low Cost Rodent-Research PET (RRPET). , 0, , .		9

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19	The System Design, Engineering Architecture, and Preliminary Results of a Lower-Cost High-Sensitivity High-Resolution Positron Emission Mammography Camera. IEEE Transactions on Nuclear Science, 2010, 57, 104-110.	2.0	9
20	A Comparison of BGO, GSO, MLS, LGSO, LYSO and LSO Scintillation Materials for High-Spatial-Resolution Animal PET Detectors. , 0, , .		8
21	New 9\$,imes,\$9 and 10\$,imes,\$10 BGO Block Detector for Human PET Using PMT Quadrant Sharing Design. IEEE Transactions on Nuclear Science, 2008, 55, 457-462.	2.0	8
22	Timing Performance Evaluation of PMT-Quadrant-Sharing LYSO Detectors for Time-of-Flight PET. IEEE Transactions on Nuclear Science, 2011, 58, 2155-2160.	2.0	8
23	A novel depth-of-interaction block detector for positron emission tomography using a dichotomous orthogonal symmetry decoding concept. Physics in Medicine and Biology, 2016, 61, 1608-1633.	3.0	8
24	A Breast Phantom Lesion Study With the High Resolution Transformable HOTPET Camera. IEEE Transactions on Nuclear Science, 2010, 57, 2504-2509.	2.0	7
25	C3N4 film deposited by synchrotron radiation assisted CVD. Materials Science and Engineering B: Solid-State Materials for Advanced Technology, 2000, 78, 109-112.	3.5	6
26	Performance characteristics of a high resolution oncologic transformable PET in brain/breast and whole-body modes. , 2007, , .		6
27	High-definition positron emission tomography using restored sinograms. , 2008, , .		6
28	A Dual-Layer TOF-DOI Detector <newline/>Block for Whole-Body PET. IEEE Transactions on Nuclear Science, 2012, 59, 1805-1808.	2.0	6
29	Performance Evaluation of the Low-Cost High-Sensitivity Rodent Research PET (RRPET) Camera Using Monte Carlo Simulations. , 0, , .		4
30	Ultrahigh-Resolution L(Y)SO Detectors Using PMT-Quadrant-Sharing for Human & Animal PET Cameras. , 2006, , .		4
31	Design study of a lower-cost ultrahigh-resolution high-sensitivity PET for neuroimaging. , 2009, , .		4
32	A scintillator attenuation spectrometer for intense gamma-rays. Review of Scientific Instruments, 2022, 93, .	1.3	4
33	A Comparison of Five Whole-Body PET Scanners by Scanning Hoffman Brain Phantom. , 2006, , .		3
34	A low dead time full digital Pulse-Shape-Discriminator (PSD)for DOI PET. , 2007, , .		3
35	An evaluation of missing data compensation methods for a PET camera by comparing to no-gap data. , 2008, , .		3
36	Evaluation of a self-normalization method for two PET cameras using prompt, delay or total emission data. , 2014, , .		3

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37	Lower-cost depth-of-interaction PET detector designs using dichotomous-3D decoding. , 2015, , .		3
38	Monte Carlo simulation study on the time resolution of a PMT-quadrant-sharing LSO detector block for time-of-flight PET. , 2007, , .		2
39	The system design, engineering architecture and preliminary results of a lower-cost high-sensitivity high-resolution Positron Emission Mammography camera. , 2008, , .		2
40	A low-cost coincidence system with capability of multiples coincidence for high count-rate TOF or non-TOF PET cameras using hybrid method combining AND-logic and Time-mark technology. , 2009, , .		2
41	A real time coincidence system for high count-rate TOF or non-TOF PET cameras using hybrid method combining AND-logic and Time-mark technology. , 2009, , .		2
42	Design and development of a gapless ring with modular PMT-quadrant-sharing detector (PQS) for a time-of-flight PET camera. , 2013, , .		2
43	Soft X-ray in-line holographic experiment. Science Bulletin, 1998, 43, 641-643.	1.7	1
44	Characteristics of 40,000 quadrant-sharing BGO detectors made by the slab-sandwich-slice technique. , 0, , .		1
45	High Resolution GSO Block Detectors Using PMT-Quadrant-Sharing Design for Human Whole Body and Breast/Brain PET Applications. , 0, , .		1
46	The Engineering and Initial Results of a Transformable Low-cost Ultra-high Resolution PET Camera. , 2006, , .		1
47	Low-cost High-resolution 3rd Generation PMT-Quadrant-Sharing BGO Block Detectors for Human and Animal PET. , 2006, , .		1
48	A GATE Monte Carlo Simulation of the Performance of a High-Sensitivity and High-Resolution LSO Based Small Animal PET Camera. , 2006, , .		1
49	Monte Carlo simulation study on the time resolution of a PMT-quadrant-sharing LSO detector block for time-of-flight PET. , 2008, , .		1
50	A new statistics-based online baseline restorer (SOBLR) for a high count-rate fully digital system. , 2009, , .		1
51	The engineering design and construction of an ultra-high resolution high-sensitivity preclinical PET/CT &#x2014; MuPET. , 2010, , .		1
52	Comparison of Brain Phantom Lesion Imaging Capability of the Brain and Whole-Body Modes of the Transformable HOTPET Camera. IEEE Transactions on Nuclear Science, 2011, 58, 730-735.	2.0	1
53	A dual-layer TOF-DOI detector block for whole-body PET. , 2011, , .		1
54	New PMT-Quadrant-Sharing shallow block detector development for high performance TOF PET applications. , 2012, , .		1

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55	A fast and accurate timing alignment method with TDC linearity calibration for a high-resolution TOF-PET. , 2013, , .		1
56	Soft x-ray holographic computerized tomography imaging: experimental research. Journal of the Optical Society of America A: Optics and Image Science, and Vision, 2003, 20, 588.	1.5	0
57	A simulation study on optically decoding reflecting windows for PMT quadrant sharing scintillation detector block. , 0, , .		0
58	An evaluation of the effect of partial-septa on detection of small lesions in brain phantom study using MDAPET camera. , 0, , .		0
59	Performance characteristics of four new high resolution L(Y)so detectorblocks for human PET. , 2007, , .		0
60	Low-cost high-resolution 3rd generation PMT-quadrant- sharing (PQS) BGO block detectors for human and animal PET. , 2007, , .		0
61	A comparison of breast lesion imaging capability of a whole-body PET camera and a brain/breast PET camera. , 2008, , .		0
62	A lower-cost high-resolution LYSO detector development for positron emission mammography (PEM). , 2008, , .		0
63	A first study on the timing performance of PMT-Quadrant-Sharing LYSO detector array for time-of-flight PET. , 2009, , .		0
64	A Hoffman brain phantom lesion study with the transformable HOTPET camera. , 2009, , .		0
65	The systematic errors in the random coincidence estimation using a delayed window. , 2009, , .		0
66	Timing alignment study of PMT-Quadrant-Sharing (PQS) detectors for time-of-flight PET. , 2010, , .		0
67	Comparison of two light reflector patterns designed for PMT-Quadrant-Sharing (PQS) Time-of-Flight PET detectors. , 2010, , .		0
68	Improvement of dead time and decoding resolution for position-sensitive detectors using a fully dynamic approach of light collection. , 2010, , .		0
69	A study of transit time variation in the PMT with a gain programmable voltage divider for a TOF PET. , 2010, , .		0
70	New ultra high resolution LYSO pentagon detector blocks for lower-cost murine PET-CT (MuPET/CT). , 2010, , .		0
71	Feasibility study of the quantitative corrections for the brain input function imaging from the carotid artery images by an ultra-high resolution dedicated brain PET. , 2010, , .		0
72	System design and development of a lower-cost animal PET-CT (MuPET) with large axial solid PET ring of 1.25-mm LYSO detectors. , 2010, , .		0

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73	Full 4D emission data collection and reconstruction for small animal PET imaging. , 2011, , .		0
74	Comparison of a GATE Monte Carlo simulation predictions to the performance of a high-resolution LYSO based dedicated animal PET camera. , 2011, , .		0
75	A comparison of resolution recovery performed in projection-space and image-space for a high resolution small animal PET scanner. , 2013, , .		0
76	Validation of GATE optical transportation with experimental single scintillator dual-end readout data. , 2014, , .		0
77	A practical depth-of-interaction PET/MR detector with dichotomous-orthogonal-symmetry decoding. EJNMMI Physics, 2015, 2, A12.	2.7	0
78	High-Resolution PET/CT Development. , 2017, , 85-101.		0