

Andrew L Goertzen

List of Publications by Year in descending order

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Version: 2024-02-01

88
papers

1,929
citations

304602

22
h-index

265120

42
g-index

89
all docs

89
docs citations

89
times ranked

2310
citing authors

#	ARTICLE	IF	CITATIONS
1	Bone microarchitecture assessed by TBS predicts osteoporotic fractures independent of bone density: The manitoba study. <i>Journal of Bone and Mineral Research</i> , 2011, 26, 2762-2769.	3.1	486
2	NEMA NU 4-2008 Comparison of Preclinical PET Imaging Systems. <i>Journal of Nuclear Medicine</i> , 2012, 53, 1300-1309.	2.8	191
3	Design and Performance of a Resistor Multiplexing Readout Circuit for a SiPM Detector. <i>IEEE Transactions on Nuclear Science</i> , 2013, 60, 1541-1549.	1.2	87
4	Simultaneous molecular and anatomical imaging of the mouse in vivo. <i>Physics in Medicine and Biology</i> , 2002, 47, 4315-4328.	1.6	86
5	Long-Term Proton Pump Inhibitor Use Is Not Associated With Changes in Bone Strength and Structure. <i>American Journal of Gastroenterology</i> , 2017, 112, 95-101.	0.2	62
6	Quantitative computed tomography in porcine lung injury with variable versus conventional ventilation: Recruitment and surfactant replacement*. <i>Critical Care Medicine</i> , 2011, 39, 1721-1730.	0.4	57
7	Machine learning identified an Alzheimer's disease-related FDG-PET pattern which is also expressed in Lewy body dementia and Parkinson's disease dementia. <i>Scientific Reports</i> , 2018, 8, 13236.	1.6	52
8	Performance of a PET Insert for High-Resolution Small-Animal PET/MRI at 7 Tesla. <i>Journal of Nuclear Medicine</i> , 2018, 59, 536-542.	2.8	49
9	Imaging of Weak-Source Distributions in LSO-Based Small-Animal PET Scanners. <i>Journal of Nuclear Medicine</i> , 2007, 48, 1692-1698.	2.8	45
10	First Results From a High-Resolution Small Animal SiPM PET Insert for PET/MR Imaging at 7T. <i>IEEE Transactions on Nuclear Science</i> , 2016, 63, 2424-2433.	1.2	45
11	First results from the high-resolution mouse SPECT annular scintillation camera. <i>IEEE Transactions on Medical Imaging</i> , 2005, 24, 863-867.	5.4	40
12	A comparison of x-ray detectors for mouse CT imaging. <i>Physics in Medicine and Biology</i> , 2004, 49, 5251-5265.	1.6	39
13	Regional hypometabolism in the 3xTg mouse model of Alzheimer's disease. <i>Neurobiology of Disease</i> , 2019, 127, 264-277.	2.1	36
14	Viability and proliferation potential of adipose-derived stem cells following labeling with a positron-emitting radiotracer. <i>European Journal of Nuclear Medicine and Molecular Imaging</i> , 2011, 38, 1323-1334.	3.3	35
15	Practical Aspects of 18F-FDG PET When Receiving 18F-FDG from a Distant Supplier. <i>Journal of Nuclear Medicine Technology</i> , 2009, 37, 164-169.	0.4	30
16	Assessment of three techniques for delivering stem cells to the heart using PET and MR imaging. <i>EJNMMI Research</i> , 2013, 3, 72.	1.1	29
17	Evaluation of High Density Pixellated Crystal Blocks With SiPM Readout as Candidates for PET/MR Detectors in a Small Animal PET Insert. <i>IEEE Transactions on Nuclear Science</i> , 2012, 59, 1791-1797.	1.2	28
18	Effect of phantom voxelization in CT simulations. <i>Medical Physics</i> , 2002, 29, 492-498.	1.6	25

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19	Evaluation of a 16:3 Signal Multiplexor to Acquire Signals From a SPM Array With Dual and Single Layer LYSO Crystal Blocks. IEEE Transactions on Nuclear Science, 2011, 58, 2175-2180.	1.2	25
20	Resolution of pulmonary edema with variable mechanical ventilation in a porcine model of acute lung injury. Canadian Journal of Anaesthesia, 2011, 58, 740-750.	0.7	25
21	Development and evaluation of a LOR-based image reconstruction with 3D system response modeling for a PET insert with dual-layer offset crystal design. Physics in Medicine and Biology, 2013, 58, 8379-8399.	1.6	24
22	Distinct brain metabolic patterns separately associated with cognition, motor function, and aging in Parkinson's disease dementia. Neurobiology of Aging, 2017, 60, 81-91.	1.5	24
23	Multiplexing Approaches for a 12 x 4 Array of Silicon Photomultipliers. IEEE Transactions on Nuclear Science, 2014, 61, 35-43.	1.2	23
24	Improvement of the spatial resolution of the MicroPET R4 scanner by wobbling the bed. Medical Physics, 2008, 35, 1223-1231.	1.6	21
25	Development of a PET Scanner for Simultaneously Imaging Small Animals with MRI and PET. Sensors, 2014, 14, 14654-14671.	2.1	21
26	Validation of a GATE Model of ^{176}Lu Intrinsic Radioactivity in LSO PET Systems. IEEE Transactions on Nuclear Science, 2011, 58, 682-686.	1.2	20
27	Characterization of a New MR Compatible Small Animal PET Scanner Using Monte-Carlo Simulations. IEEE Transactions on Nuclear Science, 2013, 60, 1637-1644.	1.2	18
28	Comparison of single and dual layer detector blocks for pre-clinical MRI-compatible PET. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 2013, 702, 56-58.	0.7	18
29	Fracture Risk Indices From DXA-Based Finite Element Analysis Predict Incident Fractures Independently From FRAX: The Manitoba BMD Registry. Journal of Clinical Densitometry, 2019, 22, 338-345.	0.5	15
30	Improved event positioning in a gamma ray detector using an iterative position-weighted centre-of-gravity algorithm. Physics in Medicine and Biology, 2013, 58, N189-N200.	1.6	14
31	Performance Characterization of MPPC Modules for TOF-PET Applications. IEEE Transactions on Radiation and Plasma Medical Sciences, 2019, 3, 475-482.	2.7	13
32	Five-year experience of quality control for a 3D LSO-based whole-body PET scanner: Results and considerations. Physica Medica, 2012, 28, 210-220.	0.4	12
33	A prospective cohort study to assess the role of FDG-PET in differentiating benign and malignant follicular neoplasms. Annals of Medicine and Surgery, 2016, 12, 27-31.	0.5	12
34	Comparison of femoral strength and fracture risk index derived from DXA-based finite element analysis for stratifying hip fracture risk: A cross-sectional study. Bone, 2018, 110, 386-391.	1.4	11
35	Application of HDMI [®] cables as an MRI compatible single cable solution for Readout and power supply of SiPM based PET detectors. , 2012, , .		10
36	Blood Flow and Glucose Metabolism Dissociation in the Putamen Is Predictive of Levodopa Induced Dyskinesia in Parkinson's Disease Patients. Frontiers in Neurology, 2019, 10, 1217.	1.1	10

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37	A method for determination of the timing stability of PET scanners. IEEE Transactions on Medical Imaging, 2005, 24, 1053-1057.	5.4	9
38	Evaluation of high density pixilated crystal blocks with SiPM readout as candidates for PET/MR detectors in a small animal PET insert. , 2011, , .		9
39	An algorithm for automatic crystal identification in pixelated scintillation detectors using thin plate splines and Gaussian mixture models. Physics in Medicine and Biology, 2016, 61, N90-N101.	1.6	9
40	Geometry Optimization of a Dual-Layer Offset Detector for Use in Simultaneous PET/MR Neuroimaging. IEEE Transactions on Radiation and Plasma Medical Sciences, 2019, 3, 275-284.	2.7	9
41	Alzheimer's Disease-Related Metabolic Pattern in Diverse Forms of Neurodegenerative Diseases. Diagnostics, 2021, 11, 2023.	1.3	9
42	A method for measuring the energy spectrum of coincidence events in positron emission tomography. Physics in Medicine and Biology, 2010, 55, 535-549.	1.6	8
43	Calibration of Dual-Ended Readout of Axially Oriented 100-mm-Long LYSO Crystals for Use in a Compact PET System. IEEE Transactions on Nuclear Science, 2012, 59, 561-567.	1.2	8
44	CRAX: A simple cardiovascular risk assessment tool to predict risk of acute myocardial infarction or death. Journal of Nuclear Cardiology, 2020, 27, 2365-2374.	1.4	8
45	Simulation guided optimization of Dual Layer Offset detector design for use in small animal PET. , 2011, , .		7
46	Evaluation of very highly pixellated crystal blocks with SiPM readout as candidates for PET/MR detectors in a small animal PET insert. , 2012, , .		7
47	Performance evaluation of SensL SiPM arrays for high-resolution PET. , 2013, , .		7
48	On the Significance of Defective Block Detectors in Clinical 18F-FDG PET/CT Imaging. Molecular Imaging and Biology, 2011, 13, 265-274.	1.3	6
49	A PET detector interface board and slow control system based on the Raspberry Pi. , 2013, , .		6
50	A study of inter-crystal scatter in dual-layer offset scintillator arrays for brain-dedicated PET scanners. Physics in Medicine and Biology, 2019, 64, 115007.	1.6	6
51	Prediction of 2-year major adverse cardiac events from myocardial perfusion scintigraphy and clinical risk factors. Journal of Nuclear Cardiology, 2022, 29, 1956-1963.	1.4	6
52	Measurement of energy and timing resolution of very highly pixellated LYSO crystal blocks with multiplexed SiPM readout for use in a small animal PET/MR insert. , 2013, , .		5
53	18F, 11C and 68Ga in small animal PET imaging. Nuklearmedizin - NuclearMedicine, 2013, 52, 250-261.	0.3	5
54	Towards a second-generation PET/MR insert with enhanced timing and count rate performance. Physics in Medicine and Biology, 2019, 64, 085017.	1.6	5

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55	Changes in Metabolic Activity and Gait Function by Dual-Task Cognitive Game-Based Treadmill System in Parkinson's Disease: Protocol of a Randomized Controlled Trial. <i>Frontiers in Aging Neuroscience</i> , 2021, 13, 680270.	1.7	5
56	On the Imaging of Very Weak Sources in an LSO Pet Scanner. , 2006, , .		4
57	Observations on dual-ended readout of 100mm long LYSO crystals. <i>Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment</i> , 2011, 652, 275-279.	0.7	4
58	Use of systematic surface roughing to enhance the spatial resolution of the dual-ended readout of axially-oriented 100 mm long LYSO crystals. <i>Physics in Medicine and Biology</i> , 2012, 57, N501-N512.	1.6	4
59	Pixelated Geiger-Mode Avalanche Photo-Diode Characterization Through Dark Current Measurement. <i>IEEE Transactions on Nuclear Science</i> , 2014, 61, 1369-1375.	1.2	4
60	Characterization of a Small Animal PET Detector Block Incorporating a Digital Photon Counter Array. <i>IEEE Transactions on Nuclear Science</i> , 2015, 62, 732-739.	1.2	4
61	Geometry optimization of dual-layer offset detectors for compact ring diameter PET systems. , 2016, , .		4
62	Imaging Cerebral Glucose Metabolism during Dual-Task Walking in Patients with Parkinson's disease. <i>Journal of Neuroimaging</i> , 2021, 31, 356-362.	1.0	4
63	Data Acquisition for a Preclinical MR Compatible PET Insert Using the OpenPET Platform. <i>IEEE Transactions on Radiation and Plasma Medical Sciences</i> , 2017, 1, 495-504.	2.7	3
64	Comparison of acrylic polymer adhesive tapes and silicone optical grease in light sharing detectors for positron emission tomography. <i>Physics in Medicine and Biology</i> , 2018, 63, 05NT02.	1.6	3
65	A phoswich detector design for improved spatial sampling in PET. <i>Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment</i> , 2018, 882, 124-128.	0.7	3
66	Quantifying the effects of defective block detectors in a 3D whole body pet camera. , 2007, , .		2
67	Coincidences originating from a single photon: An unrecognized and potentially significant source of scatter in small animal PET?. , 2009, , .		2
68	Variations on the NEMA NU4-2008 testing procedures and effect on the performance measurement results. , 2011, , .		2
69	Analytical modeling and implementation of detector response for fully 3D computer simulation and image reconstruction of an MRI compatible PET insert with a dual-layer offset crystal design. , 2012, , .		2
70	Evaluation of performance and stability of an MR compatible PET detector. , 2014, , .		2
71	Age-related reduction of hemispheric asymmetry by pigeons: A behavioral and FDG-PET imaging investigation of visual discrimination. <i>Learning and Behavior</i> , 2022, 50, 125-139.	0.5	2
72	Evaluation of the Spatial Resolution Improvement of the MicroPET R4 Scanner with a Wobbling Bed. , 2006, , .		1

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73	Improvement in spatial resolution of dual-ended readout of 100 mm long LYSO Crystals through use of systematic crystal surface roughing. , 2011, , .		1
74	Evaluation of the SensL SPMMatrix for use as a detector for PET and gamma camera applications. , 2011, , .		1
75	A MPPC based tool for timing and spatial resolution characterization of PET detectors. , 2012, , .		1
76	Simulation studies of a phoswich PET detector design with a two-fold improvement in spatial sampling. , 2013, , .		1
77	Evaluation of SiPM photodetectors for use in phoswich detectors. , 2014, , .		1
78	Count rate performance of brain-dedicated PET scanners: a Monte Carlo simulation study. Physics in Medicine and Biology, 2019, 64, 215013.	1.6	1
79	A Cube-Based Dual-GPU List-Mode Reconstruction Algorithm for PET Imaging. IEEE Transactions on Radiation and Plasma Medical Sciences, 2022, 6, 463-474.	2.7	1
80	A comparison of methods to calculate the energy spectrum of a PET system operating in coincidence mode. , 2007, , .		0
81	Radiosynthesis of <i>cis</i> - ¹²⁴ Iodo-L-proline as a prototype probe for imaging anterograde axoplasmic transport systems using positron emission tomography (PET). Journal of Labelled Compounds and Radiopharmaceuticals, 2007, 50, 636-637.	0.5	0
82	Accelerated microPET Transmission Imaging. IEEE Transactions on Nuclear Science, 2008, 55, 2501-2507.	1.2	0
83	Validation of GATE simulations of the ¹⁷⁶ Lu intrinsic activity in LSO detectors. , 2009, , .		0
84	Estimation of NECR, scatter fraction, and sensitivity of a new MR compatible small animal PET insert based on Monte-Carlo simulations. , 2012, , .		0
85	Characterization of a handheld gamma camera for intraoperative use for sentinel lymph node biopsy. , 2013, , .		0
86	Dual-Modality Preclinical PET/CT Instrumentation. , 2014, , 367-386.		0
87	Optical Simulation of Dual-Ended Readout of Axially-Oriented 100 mm Long LYSO Crystals for Use in a Compact PET System. IEEE Transactions on Nuclear Science, 2014, 61, 3-13.	1.2	0
88	Maximization of Digital Photon Counter efficiency when using Neighbor Logic. , 2014, , .		0