

Simon Cherry

List of Publications by Year in descending order

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369
papers

28,108
citations

6606

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373
docs citations

373
times ranked

17727
citing authors

#	ARTICLE	IF	CITATIONS
1	Rapid Automated Algorithm for Aligning and Reslicing PET Images. Journal of Computer Assisted Tomography, 1992, 16, 620-633.	0.5	1,697
2	Automated Image Registration: I. General Methods and Intrasubject, Intramodality Validation. Journal of Computer Assisted Tomography, 1998, 22, 139-152.	0.5	1,528
3	MRI-PET Registration with Automated Algorithm. Journal of Computer Assisted Tomography, 1993, 17, 536-546.	0.5	1,467
4	A Critical Role for Dnmt1 and DNA Methylation in T Cell Development, Function, and Survival. Immunity, 2001, 15, 763-774.	6.6	1,124
5	Simultaneous PET-MRI: a new approach for functional and morphological imaging. Nature Medicine, 2008, 14, 459-465.	15.2	1,008
6	High-resolution 3D Bayesian image reconstruction using the microPET small-animal scanner. Physics in Medicine and Biology, 1998, 43, 1001-1013.	1.6	580
7	MicroPET: a high resolution PET scanner for imaging small animals. IEEE Transactions on Nuclear Science, 1997, 44, 1161-1166.	1.2	557
8	Total-Body PET: Maximizing Sensitivity to Create New Opportunities for Clinical Research and Patient Care. Journal of Nuclear Medicine, 2018, 59, 3-12.	2.8	474
9	First Human Imaging Studies with the EXPLORER Total-Body PET Scanner*. Journal of Nuclear Medicine, 2019, 60, 299-303.	2.8	453
10	Imaging adenoviral-directed reporter gene expression in living animals with positron emission tomography. Proceedings of the National Academy of Sciences of the United States of America, 1999, 96, 2333-2338.	3.3	444
11	Optical imaging of Cerenkov light generation from positron-emitting radiotracers. Physics in Medicine and Biology, 2009, 54, N355-N365.	1.6	365
12	Repetitive, non-invasive imaging of the dopamine D2 receptor as a reporter gene in living animals. Gene Therapy, 1999, 6, 785-791.	2.3	356
13	Simultaneous PET and MR imaging. Physics in Medicine and Biology, 1997, 42, 1965-1970.	1.6	346
14	A smart and versatile theranostic nanomedicine platform based on nanoporphyrin. Nature Communications, 2014, 5, 4712.	5.8	345
15	In vivomolecular and genomic imaging: new challenges for imaging physics. Physics in Medicine and Biology, 2004, 49, R13-R48.	1.6	327
16	Imaging Transgene Expression with Radionuclide Imaging Technologies. Neoplasia, 2000, 2, 118-138.	2.3	317
17	Simultaneous <i>in vivo</i> positron emission tomography and magnetic resonance imaging. Proceedings of the National Academy of Sciences of the United States of America, 2008, 105, 3705-3710.	3.3	301
18	Performance evaluation of the microPET P4: a PET system dedicated to animal imaging. Physics in Medicine and Biology, 2001, 46, 1845-1862.	1.6	281

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19	Simple charge division readouts for imaging scintillator arrays using a multi-channel PMT. IEEE Transactions on Nuclear Science, 1996, 43, 1634-1641.	1.2	272
20	Hyperspectral and multispectral bioluminescence optical tomography for small animal imaging. Physics in Medicine and Biology, 2005, 50, 5421-5441.	1.6	266
21	Performance test of an LSO-APD detector in a 7-T MRI scanner for simultaneous PET/MRI. Journal of Nuclear Medicine, 2006, 47, 639-47.	2.8	257
22	Cardiac Myocyte-Specific Excision of the $\hat{\text{I}}^{21}$ Integrin Gene Results in Myocardial Fibrosis and Cardiac Failure. Circulation Research, 2002, 90, 458-464.	2.0	256
23	Retroviral Expression in Embryonic Stem Cells and Hematopoietic Stem Cells. Molecular and Cellular Biology, 2000, 20, 7419-7426.	1.1	255
24	MicroPET II: design, development and initial performance of an improved microPET scanner for small-animal imaging. Physics in Medicine and Biology, 2003, 48, 1519-1537.	1.6	249
25	Simultaneous acquisition of multislice PET and MR images: initial results with a MR-compatible PET scanner. Journal of Nuclear Medicine, 2006, 47, 1968-76.	2.8	245
26	Fast gradient-based methods for Bayesian reconstruction of transmission and emission PET images. IEEE Transactions on Medical Imaging, 1994, 13, 687-701.	5.4	243
27	Use of Positron Emission Tomography in Animal Research. ILAR Journal, 2001, 42, 219-232.	1.8	230
28	Quantification of target gene expression by imaging reporter gene expression in living animals. Nature Medicine, 2000, 6, 933-937.	15.2	219
29	Imaging of adenoviral-directed herpes simplex virus type 1 thymidine kinase reporter gene expression in mice with radiolabeled ganciclovir. Journal of Nuclear Medicine, 1998, 39, 2003-11.	2.8	213
30	Combining anatomy and function: the path to true image fusion. European Radiology, 2001, 11, 1968-1974.	2.3	210
31	Bayesian reconstruction of PET images: methodology and performance analysis. Physics in Medicine and Biology, 1996, 41, 1777-1807.	1.6	209
32	Performance evaluation of microPET: a high-resolution lutetium oxyorthosilicate PET scanner for animal imaging. Journal of Nuclear Medicine, 1999, 40, 1164-75.	2.8	205
33	Multimodality Imaging: Beyond PET/CT and SPECT/CT. Seminars in Nuclear Medicine, 2009, 39, 348-353.	2.5	199
34	Application of Silicon Photomultipliers to Positron Emission Tomography. Annals of Biomedical Engineering, 2011, 39, 1358-1377.	1.3	197
35	MULTIMODALITY IN VIVO IMAGING SYSTEMS: Twice the Power or Double the Trouble?. Annual Review of Biomedical Engineering, 2006, 8, 35-62.	5.7	187
36	In vivo imaging of neuronal activation and plasticity in the rat brain by high resolution positron emission tomography (microPET). Nature Biotechnology, 2000, 18, 655-660.	9.4	183

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37	Performance Evaluation of the uEXPLORER Total-Body PET/CT Scanner Based on NEMA NU 2-2018 with Additional Tests to Characterize PET Scanners with a Long Axial Field of View. <i>Journal of Nuclear Medicine</i> , 2021, 62, 861-870.	2.8	178
38	Total-body imaging: Transforming the role of positron emission tomography. <i>Science Translational Medicine</i> , 2017, 9, .	5.8	175
39	Development of a PET detector system compatible with MRI/NMR systems. <i>IEEE Transactions on Nuclear Science</i> , 1997, 44, 1167-1171.	1.2	174
40	Small-Animal X-ray Dose from Micro-CT. <i>Molecular Imaging</i> , 2004, 3, 149-158.	0.7	168
41	PET/MR Images Acquired with a Compact MR-compatible PET Detector in a 7-T Magnet. <i>Radiology</i> , 2007, 244, 807-814.	3.6	165
42	3D PET using a Conventional Multislice Tomograph without Septa. <i>Journal of Computer Assisted Tomography</i> , 1991, 15, 655-668.	0.5	160
43	Cerenkov luminescence tomography for small-animal imaging. <i>Optics Letters</i> , 2010, 35, 1109.	1.7	154
44	<i>In vivo</i> Cerenkov luminescence imaging: a new tool for molecular imaging. <i>Philosophical Transactions Series A, Mathematical, Physical, and Engineering Sciences</i> , 2011, 369, 4605-4619.	1.6	145
45	Depth of interaction resolution measurements for a high resolution PET detector using position sensitive avalanche photodiodes. <i>Physics in Medicine and Biology</i> , 2006, 51, 2131-2142.	1.6	142
46	Depth of interaction calibration for PET detectors with dual-ended readout by PSAPDs. <i>Physics in Medicine and Biology</i> , 2009, 54, 433-445.	1.6	142
47	Quantitative Assessment of Longitudinal Metabolic Changes In Vivo after Traumatic Brain Injury in the Adult Rat using FDG-MicroPET. <i>Journal of Cerebral Blood Flow and Metabolism</i> , 2000, 20, 1492-1501.	2.4	140
48	NaGdF ₄ :Eu ³⁺ Nanoparticles for Enhanced X-ray Excited Optical Imaging. <i>Chemistry of Materials</i> , 2014, 26, 1881-1888.	3.2	138
49	Optimization and performance evaluation of the microPET II scanner for in vivo small-animal imaging. <i>Physics in Medicine and Biology</i> , 2004, 49, 2527-2545.	1.6	135
50	The 2006 Henry N. Wagner Lecture: Of mice and men (and positrons)--advances in PET imaging technology. <i>Journal of Nuclear Medicine</i> , 2006, 47, 1735-45.	2.8	132
51	Fully 3D Bayesian image reconstruction for the ECAT EXACT HR+. <i>IEEE Transactions on Nuclear Science</i> , 1998, 45, 1096-1103.	1.2	131
52	Total-Body Dynamic Reconstruction and Parametric Imaging on the uEXPLORER. <i>Journal of Nuclear Medicine</i> , 2020, 61, 285-291.	2.8	129
53	High-resolution PET detector design: modelling components of intrinsic spatial resolution. <i>Physics in Medicine and Biology</i> , 2005, 50, 179-195.	1.6	127
54	Fundamentals of Positron Emission Tomography and Applications in Preclinical Drug Development. <i>Journal of Clinical Pharmacology</i> , 2001, 41, 482-491.	1.0	126

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55	Small-Animal Preclinical Nuclear Medicine Instrumentation and Methodology. <i>Seminars in Nuclear Medicine</i> , 2008, 38, 209-222.	2.5	121
56	Optimal whole-body PET scanner configurations for different volumes of LSO scintillator: a simulation study. <i>Physics in Medicine and Biology</i> , 2012, 57, 4077-4094.	1.6	114
57	Comparison of 3-D maximum a posteriori and filtered backprojection algorithms for high-resolution animal imaging with microPET. <i>IEEE Transactions on Medical Imaging</i> , 2000, 19, 507-512.	5.4	113
58	Initial Characterization of a Dedicated Breast PET/CT Scanner During Human Imaging. <i>Journal of Nuclear Medicine</i> , 2009, 50, 1401-1408.	2.8	113
59	Towards in vivo nuclear microscopy: iodine-125 imaging in mice using micro-pinholes. <i>European Journal of Nuclear Medicine and Molecular Imaging</i> , 2002, 29, 933-938.	3.3	111
60	A study of artefacts in simultaneous PET and MR imaging using a prototype MR compatible PET scanner. <i>Physics in Medicine and Biology</i> , 1999, 44, 2015-2027.	1.6	107
61	Design and evaluation of an LSO PET detector for breast cancer imaging. <i>Medical Physics</i> , 2000, 27, 1535-1543.	1.6	106
62	Detector development for microPET II: a 1.1/4 resolution PET scanner for small animal imaging. <i>Physics in Medicine and Biology</i> , 2001, 46, 2899-2910.	1.6	106
63	Joint L_1 and total variation regularization for fluorescence molecular tomography. <i>Physics in Medicine and Biology</i> , 2012, 57, 1459-1476.	1.6	105
64	Seeing is believing: Non-invasive, quantitative and repetitive imaging of reporter gene expression in living animals, using positron emission tomography. <i>Journal of Neuroscience Research</i> , 2000, 59, 699-705.	1.3	103
65	Development and evaluation of an automated atlas-based image analysis method for microPET studies of the rat brain. <i>NeuroImage</i> , 2003, 20, 2100-2118.	2.1	103
66	A Prototype PET Scanner with DOI-Encoding Detectors. <i>Journal of Nuclear Medicine</i> , 2008, 49, 1132-1140.	2.8	99
67	Quantitative image reconstruction for total-body PET imaging using the 2-meter long EXPLORER scanner. <i>Physics in Medicine and Biology</i> , 2017, 62, 2465-2485.	1.6	98
68	Design studies of a high resolution PET detector using APD arrays. <i>IEEE Transactions on Nuclear Science</i> , 2000, 47, 1051-1057.	1.2	94
69	A Prototype High-Resolution Small-Animal PET Scanner Dedicated to Mouse Brain Imaging. <i>Journal of Nuclear Medicine</i> , 2016, 57, 1130-1135.	2.8	94
70	Measurements of blood-brain barrier permeability in patients undergoing radiotherapy and chemotherapy for primary cerebral lymphoma. <i>European Journal of Cancer & Clinical Oncology</i> , 1991, 27, 1356-1361.	0.9	92
71	Neural correlates of pair-bonding in a monogamous primate. <i>Brain Research</i> , 2007, 1184, 245-253.	1.1	91
72	Subsecond total-body imaging using ultrasensitive positron emission tomography. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2020, 117, 2265-2267.	3.3	91

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73	PET imaging of transgene expression. <i>Biological Psychiatry</i> , 2000, 48, 337-348.	0.7	89
74	Attenuation correction using count-limited transmission data in positron emission tomography. <i>Journal of Nuclear Medicine</i> , 1993, 34, 143-50.	2.8	89
75	Simultaneous molecular and anatomical imaging of the mouse in vivo. <i>Physics in Medicine and Biology</i> , 2002, 47, 4315-4328.	1.6	86
76	Applications for Preclinical PET/MRI. <i>Seminars in Nuclear Medicine</i> , 2013, 43, 19-29.	2.5	86
77	Collection of scintillation light from small BGO crystals. <i>IEEE Transactions on Nuclear Science</i> , 1995, 42, 1058-1063.	1.2	85
78	Dual APD array readout of LSO crystals: optimization of crystal surface treatment. <i>IEEE Transactions on Nuclear Science</i> , 2002, 49, 649-654.	1.2	85
79	Innovations in Instrumentation for Positron Emission Tomography. <i>Seminars in Nuclear Medicine</i> , 2018, 48, 311-331.	2.5	85
80	Optical fiber readout of scintillator arrays using a multi-channel PMT: a high resolution PET detector for animal imaging. <i>IEEE Transactions on Nuclear Science</i> , 1996, 43, 1932-1937.	1.2	84
81	Complementary emerging techniques: high-resolution PET and MRI. <i>Current Opinion in Neurobiology</i> , 2001, 11, 621-629.	2.0	83
82	A three-dimensional multispectral fluorescence optical tomography imaging system for small animals based on a conical mirror design. <i>Optics Express</i> , 2009, 17, 7571.	1.7	83
83	PET and NMR dual acquisition (PANDA): applications to isolated, perfused rat hearts. <i>NMR in Biomedicine</i> , 1997, 10, 138-142.	1.6	78
84	Synthesis of 8-[¹⁸ F]fluoroguanine derivatives: in vivo probes for imaging gene expression with positron emission tomography. <i>Nuclear Medicine and Biology</i> , 2000, 27, 157-162.	0.3	78
85	A comparison of PET detector modules employing rectangular and round photomultiplier tubes. <i>IEEE Transactions on Nuclear Science</i> , 1995, 42, 1064-1068.	1.2	74
86	Experimental characterization and system simulations of depth of interaction PET detectors using 0.5 mm and 0.7 mm LSO arrays. <i>Physics in Medicine and Biology</i> , 2009, 54, 4605-4619.	1.6	74
87	Machine Learning in PET: From Photon Detection to Quantitative Image Reconstruction. <i>Proceedings of the IEEE</i> , 2020, 108, 51-68.	16.4	72
88	Performance measurements of a depth-encoding PET detector module based on position-sensitive avalanche photodiode read-out. <i>Physics in Medicine and Biology</i> , 2004, 49, 4293-4304.	1.6	71
89	Persistent neuroinflammation and cognitive impairment in a rat model of acute diisopropylfluorophosphate intoxication. <i>Journal of Neuroinflammation</i> , 2016, 13, 267.	3.1	71
90	Design of a small animal MR compatible PET scanner. <i>IEEE Transactions on Nuclear Science</i> , 1999, 46, 565-570.	1.2	70

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91	maxPET, a dedicated mammary and axillary region PET imaging system for breast cancer. IEEE Transactions on Nuclear Science, 2001, 48, 811-815.	1.2	69
92	The Integration of Positron Emission Tomography With Magnetic Resonance Imaging. Proceedings of the IEEE, 2008, 96, 416-438.	16.4	69
93	Bismuth germanate coupled to near ultraviolet silicon photomultipliers for time-of-flight PET. Physics in Medicine and Biology, 2016, 61, L38-L47.	1.6	69
94	Lutetium oxyorthosilicate block detector readout by avalanche photodiode arrays for high resolution animal PET. Physics in Medicine and Biology, 2004, 49, 4305-4319.	1.6	68
95	Deficits in Striatal Dopamine D2 Receptors and Energy Metabolism Detected by in Vivo MicroPET Imaging in a Rat Model of Huntington's Disease. Experimental Neurology, 2000, 166, 287-297.	2.0	66
96	On the assessment of spatial resolution of PET systems with iterative image reconstruction. Physics in Medicine and Biology, 2016, 61, N193-N202.	1.6	66
97	Total-Body PET and Highly Stable Chelators Together Enable Meaningful ⁸⁹ Zr-Antibody PET Studies up to 30 Days After Injection. Journal of Nuclear Medicine, 2020, 61, 453-460.	2.8	66
98	Noninvasive Measurement of Myocardial Activity Concentrations and Perfusion Defect Sizes in Rats With a New Small-Animal Positron Emission Tomograph. Circulation, 2002, 106, 118-123.	1.6	65
99	Evaluation of high performance data acquisition boards for simultaneous sampling of fast signals from PET detectors. Physics in Medicine and Biology, 2005, 50, 29-44.	1.6	65
100	Computed Cerenkov luminescence yields for radionuclides used in biology and medicine. Physics in Medicine and Biology, 2015, 60, 4263-4280.	1.6	65
101	Radiofluorinated L-m-Tyrosines: New In-Vivo Probes for Central Dopamine Biochemistry. Journal of Cerebral Blood Flow and Metabolism, 1996, 16, 667-678.	2.4	64
102	A microPET/CT system for in vivo small animal imaging. Physics in Medicine and Biology, 2007, 52, 3881-3894.	1.6	64
103	Design and development of an MR-compatible PET scanner for imaging small animals. IEEE Transactions on Nuclear Science, 2005, 52, 1376-1380.	1.2	63
104	Continuous depth-of-interaction encoding using phosphor-coated scintillators. Physics in Medicine and Biology, 2009, 54, 1757-1771.	1.6	62
105	X-ray luminescence optical tomography imaging: experimental studies. Optics Letters, 2013, 38, 2339.	1.7	62
106	Design features and performance of a PET system for animal research. Journal of Nuclear Medicine, 1992, 33, 595-604.	2.8	62
107	Chromatin remodeling directly activates V(D)J recombination. Proceedings of the National Academy of Sciences of the United States of America, 1999, 96, 10788-10793.	3.3	61
108	Infection-induced type I interferons activate CD11b on B-1 cells for subsequent lymph node accumulation. Nature Communications, 2015, 6, 8991.	5.8	60

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109	Using convolutional neural networks to estimate time-of-flight from PET detector waveforms. <i>Physics in Medicine and Biology</i> , 2018, 63, 02LT01.	1.6	60
110	Improved Detection of Focal Cerebral Blood Flow Changes Using Three-Dimensional Positron Emission Tomography. <i>Journal of Cerebral Blood Flow and Metabolism</i> , 1993, 13, 630-638.	2.4	59
111	An improved analytical detector response function model for multilayer small-diameter PET scanners. <i>Physics in Medicine and Biology</i> , 2003, 48, 979-994.	1.6	57
112	Noninvasive methods for quantitating blood time-activity curves from mouse PET images obtained with fluorine-18-fluorodeoxyglucose. <i>Journal of Nuclear Medicine</i> , 1998, 39, 729-34.	2.8	57
113	Fetal Gene Transfer Using Lentiviral Vectors: In Vivo Detection of Gene Expression by microPET and Optical Imaging in Fetal and Infant Monkeys. <i>Human Gene Therapy</i> , 2006, 17, 1254-1261.	1.4	56
114	The performance of a multiwire proportional chamber positron camera for clinical use. <i>Physics in Medicine and Biology</i> , 1989, 34, 1043-1062.	1.6	55
115	Position Sensitive APDs for Small Animal PET Imaging. <i>IEEE Transactions on Nuclear Science</i> , 2004, 51, 91-95.	1.2	55
116	In vivo positron-emission tomography imaging of progression and transformation in a mouse model of mammary neoplasia. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2004, 101, 11438-11443.	3.3	55
117	A hyperspectral fluorescence system for 3D in vivo optical imaging. <i>Physics in Medicine and Biology</i> , 2006, 51, 2029-2043.	1.6	55
118	Simulation of light transport in scintillators based on 3D characterization of crystal surfaces. <i>Physics in Medicine and Biology</i> , 2013, 58, 2185-2198.	1.6	55
119	Fabrication and characterization of a 0.5-mm lutetium oxyorthosilicate detector array for high-resolution PET applications. <i>Journal of Nuclear Medicine</i> , 2007, 48, 115-21.	2.8	55
120	Cardiac PET imaging in mice with simultaneous cardiac and respiratory gating. <i>Physics in Medicine and Biology</i> , 2005, 50, 2979-2989.	1.6	54
121	Effects of scatter on model parameter estimates in 3D PET studies of the human brain. <i>IEEE Transactions on Nuclear Science</i> , 1995, 42, 1174-1179.	1.2	53
122	Noninvasive determination of myocardial blood flow, oxygen consumption and efficiency in normal humans by carbon-11 acetate positron emission tomography imaging. <i>European Journal of Nuclear Medicine and Molecular Imaging</i> , 1999, 26, 1465-1574.	3.3	53
123	Tapered LSO arrays for small animal PET. <i>Physics in Medicine and Biology</i> , 2011, 56, 139-153.	1.6	53
124	In Vivo Tracking of Th1 Cells by PET Reveals Quantitative and Temporal Distribution and Specific Homing in Lymphatic Tissue. <i>Journal of Nuclear Medicine</i> , 2014, 55, 301-307.	2.8	53
125	Effects of reflector and crystal surface on the performance of a depth-encoding PET detector with dual-ended readout. <i>Medical Physics</i> , 2014, 41, 072503.	1.6	51
126	Total-Body Quantitative Parametric Imaging of Early Kinetics of ¹⁸ F-FDG. <i>Journal of Nuclear Medicine</i> , 2021, 62, 738-744.	2.8	50

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127	High-Throughput Imaging of Brain Gene Expression. <i>Genome Research</i> , 2002, 12, 244-254.	2.4	49
128	Periocular and Intra-Articular Injection of Canine Adipose-Derived Mesenchymal Stem Cells: An In Vivo Imaging and Migration Study. <i>Journal of Ocular Pharmacology and Therapeutics</i> , 2012, 28, 307-317.	0.6	49
129	Ultrafast timing enables reconstruction-free positron emission imaging. <i>Nature Photonics</i> , 2021, 15, 914-918.	15.6	49
130	PET characteristics of a dedicated breast PET/CT scanner prototype. <i>Physics in Medicine and Biology</i> , 2009, 54, 4273-4287.	1.6	48
131	An integrated model of scintillator-reflector properties for advanced simulations of optical transport. <i>Physics in Medicine and Biology</i> , 2017, 62, 4811-4830.	1.6	48
132	Multiplex Three-Dimensional Brain Gene Expression Mapping in a Mouse Model of Parkinson's Disease. <i>Genome Research</i> , 2002, 12, 868-884.	2.4	47
133	Characterization of Large-Area SiPM Array for PET Applications. <i>IEEE Transactions on Nuclear Science</i> , 2016, 63, 8-16.	1.2	47
134	Simultaneous PET and Multispectral 3-Dimensional Fluorescence Optical Tomography Imaging System. <i>Journal of Nuclear Medicine</i> , 2011, 52, 1268-1275.	2.8	46
135	Activating Photodynamic Therapy in vitro with Cerenkov Radiation Generated from Yttrium-90. <i>Journal of Environmental Pathology, Toxicology and Oncology</i> , 2016, 35, 185-192.	0.6	44
136	Cyclosporine, a P-glycoprotein modulator, increases [¹⁸ F]MPPF uptake in rat brain and peripheral tissues: microPET and ex vivo studies. <i>European Journal of Nuclear Medicine and Molecular Imaging</i> , 2008, 35, 2256-2266.	3.3	43
137	A combined time-of-flight and depth-of-interaction detector for total-body positron emission tomography. <i>Medical Physics</i> , 2016, 43, 939-950.	1.6	43
138	The Changing Design of Positron Imaging Systems. <i>Molecular Imaging and Biology</i> , 1998, 1, 31-45.	0.3	42
139	Radiolabeling Rhesus Monkey CD34 ⁺ Hematopoietic and Mesenchymal Stem Cells with ⁶⁴ Cu-Pyruvaldehyde-Bis(N4-Methylthiosemicarbazone) for MicroPET Imaging. <i>Molecular Imaging</i> , 2008, 7, 7290.2008.00001.	0.7	42
140	Evaluation of a 3D reconstruction algorithm for multi-slice PET scanners. <i>Physics in Medicine and Biology</i> , 1992, 37, 779-790.	1.6	41
141	Evaluation of copper(II)-pyruvaldehyde bis (N-4-methylthiosemicarbazone) for tissue blood flow measurement using a trapped tracer model. <i>European Journal of Nuclear Medicine and Molecular Imaging</i> , 1994, 21, 336-341.	2.2	41
142	Three-dimensional fluorescence optical tomography in small-animal imaging using simultaneous positron-emission-tomography priors. <i>Optics Letters</i> , 2009, 34, 2933.	1.7	41
143	Observations regarding scatter fraction and NEC measurements for small animal PET. <i>IEEE Transactions on Nuclear Science</i> , 2006, 53, 127-132.	1.2	40
144	PET Performance Evaluation of an MR-Compatible PET Insert. <i>IEEE Transactions on Nuclear Science</i> , 2009, 56, 574-580.	1.2	40

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145	Challenges to the Pair Bond: Neural and Hormonal Effects of Separation and Reunion in a Monogamous Primate. <i>Frontiers in Behavioral Neuroscience</i> , 2016, 10, 221.	1.0	40
146	A comparison of x-ray detectors for mouse CT imaging. <i>Physics in Medicine and Biology</i> , 2004, 49, 5251-5265.	1.6	39
147	¹¹¹ In-LLP2A-DOTA Polyethylene Glycol-Targeting $\alpha_4\beta_1$ Integrin: Comparative Pharmacokinetics for Imaging and Therapy of Lymphoid Malignancies. <i>Journal of Nuclear Medicine</i> , 2009, 50, 625-634.	2.8	39
148	Advanced optical simulation of scintillation detectors in GATE V8.0: first implementation of a reflectance model based on measured data. <i>Physics in Medicine and Biology</i> , 2017, 62, L1-L8.	1.6	39
149	Towards time-of-flight PET with a semiconductor detector. <i>Physics in Medicine and Biology</i> , 2018, 63, 04LT01.	1.6	38
150	Development and Evaluation of mini-EXPLORER: A Long Axial Field-of-View PET Scanner for Nonhuman Primate Imaging. <i>Journal of Nuclear Medicine</i> , 2018, 59, 993-998.	2.8	38
151	Performance of a high-resolution depth-encoding PET detector module using linearly-graded SiPM arrays. <i>Physics in Medicine and Biology</i> , 2018, 63, 035035.	1.6	38
152	Methods for improving image quality in whole body PET scanning. <i>IEEE Transactions on Nuclear Science</i> , 1992, 39, 1079-1083.	1.2	36
153	Small-Animal X-ray Dose from Micro-CT. <i>Molecular Imaging</i> , 2004, 3, 153535002004041.	0.7	36
154	Imaging, Behavior and Endocrine Analysis of Jealousy in a Monogamous Primate. <i>Frontiers in Ecology and Evolution</i> , 2017, 5, .	1.1	36
155	Quantitative PET in the 2020s: a roadmap. <i>Physics in Medicine and Biology</i> , 2021, 66, 06RM01.	1.6	36
156	Effects of neonatal amygdala or hippocampus lesions on resting brain metabolism in the macaque monkey: A microPET imaging study. <i>NeuroImage</i> , 2008, 39, 832-846.	2.1	35
157	Numerical simulation of x-ray luminescence optical tomography for small-animal imaging. <i>Journal of Biomedical Optics</i> , 2014, 19, 046002.	1.4	35
158	Compton PET: a layered structure PET detector with high performance. <i>Physics in Medicine and Biology</i> , 2019, 64, 10LT01.	1.6	35
159	New PET technologies embracing progress and pushing the limits. <i>European Journal of Nuclear Medicine and Molecular Imaging</i> , 2021, 48, 2711-2726.	3.3	35
160	Studies of the interactions of an MRI system with the shielding in a combined PET/MRI scanner. <i>Physics in Medicine and Biology</i> , 2010, 55, 265-280.	1.6	34
161	Biodistribution and pharmacokinetics of a telodendrimer micellar paclitaxel nanoformulation in a mouse xenograft model of ovarian cancer. <i>International Journal of Nanomedicine</i> , 2012, 7, 1587.	3.3	34
162	Optimizing light transport in scintillation crystals for time-of-flight PET: an experimental and optical Monte Carlo simulation study. <i>Biomedical Optics Express</i> , 2015, 6, 2220.	1.5	34

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163	Development of continuous detectors for a high resolution animal PET system. IEEE Transactions on Nuclear Science, 1995, 42, 1069-1074.	1.2	33
164	Effects of Image Resolution on Autoradiographic Measurements of Posterior Cingulate Activity in PDAPP Mice: Implications for Functional Brain Imaging Studies of Transgenic Mouse Models of Alzheimer's Disease. NeuroImage, 2002, 16, 1-6.	2.1	33
165	A Time-Walk Correction Method for PET Detectors Based on Leading Edge Discriminators. IEEE Transactions on Radiation and Plasma Medical Sciences, 2017, 1, 385-390.	2.7	33
166	Mini EXPLORER II: a prototype high-sensitivity PET/CT scanner for companion animal whole body and human brain scanning. Physics in Medicine and Biology, 2019, 64, 075004.	1.6	33
167	Phase 1 Trial of MLN0128 (Sapanisertib) and CB-839 HCl (Telaglenastat) in Patients With Advanced NSCLC (NCI 10327): Rationale and Study Design. Clinical Lung Cancer, 2021, 22, 67-70.	1.1	33
168	V(D) recombination is not activated by demethylation of the kappa locus. Proceedings of the National Academy of Sciences of the United States of America, 2000, 97, 8467-8472.	3.3	32
169	CdTe Strip Detector Characterization for High Resolution Small Animal PET. IEEE Transactions on Nuclear Science, 2008, 55, 870-876.	1.2	32
170	Characterizing low fluence thresholds for in vitro photodynamic therapy. Biomedical Optics Express, 2015, 6, 770.	1.5	32
171	Preliminary evidence of increased striatal dopamine in a nonhuman primate model of maternal immune activation. Translational Psychiatry, 2019, 9, 135.	2.4	32
172	Radiolabeling rhesus monkey CD34+ hematopoietic and mesenchymal stem cells with ⁶⁴ Cu-pyruvaldehyde-bis(N4-methylthiosemicarbazone) for microPET imaging. Molecular Imaging, 2008, 7, 1-11.	0.7	32
173	Simulation study of spatial resolution and sensitivity for the tapered depth of interaction PET detectors for small animal imaging. Physics in Medicine and Biology, 2010, 55, N63-N74.	1.6	31
174	Effects of pair bonding on dopamine D1 receptors in monogamous male titi monkeys (<i>Callicebus</i>). <i>Journal of Neuroendocrinology</i> , 2008, 30, 107-115.	0.8	31
175	Dual-ended readout of bismuth germanate to improve timing resolution in time-of-flight PET. Physics in Medicine and Biology, 2019, 64, 105007.	1.6	31
176	Contemporaneous positron emission tomography and MR imaging at 1.5 T. Journal of Magnetic Resonance Imaging, 1999, 9, 497-500.	1.9	30
177	Excitation spectroscopy in multispectral optical fluorescence tomography: methodology, feasibility and computer simulation studies. Physics in Medicine and Biology, 2009, 54, 4687-4704.	1.6	29
178	New shielding configurations for a simultaneous PET/MRI scanner at 7T. Journal of Magnetic Resonance, 2014, 239, 50-56.	1.2	29
179	Investigation of Depth of Interaction Encoding for a Pixelated LSO Array With a Single Multi-Channel PMT. IEEE Transactions on Nuclear Science, 2009, 56, 2594-2599.	1.2	28
180	Quantitative, Simultaneous PET/MRI for Intratumoral Imaging with an MRI-Compatible PET Scanner. Journal of Nuclear Medicine, 2012, 53, 1102-1109.	2.8	28

#	ARTICLE	IF	CITATIONS
181	Total-Body PET Kinetic Modeling and Potential Opportunities Using Deep Learning. PET Clinics, 2021, 16, 613-625.	1.5	28
182	Improved signal-to-noise in PET activation studies using switched paradigms. Journal of Nuclear Medicine, 1995, 36, 307-14.	2.8	27
183	Chemical polishing of LSO crystals to increase light output. IEEE Transactions on Nuclear Science, 2000, 47, 1018-1023.	1.2	26
184	Evaluation of a stereotactic frame for repositioning of the rat brain in serial positron emission tomography imaging studies. Journal of Neuroscience Methods, 2001, 107, 63-70.	1.3	26
185	A high efficiency pixelated detector for small animal PET. IEEE Transactions on Nuclear Science, 2004, 51, 801-804.	1.2	26
186	Performance and limitations of positron emission tomography (PET) scanners for imaging very low activity sources. Physica Medica, 2014, 30, 104-110.	0.4	26
187	High sensitivity, total body PET scanning using 3D data acquisition and reconstruction. IEEE Transactions on Nuclear Science, 1992, 39, 1088-1092.	1.2	25
188	High efficiency CsI(Tl)/HgI/sub 2/ gamma ray spectrometers. IEEE Transactions on Nuclear Science, 1995, 42, 601-605.	1.2	25
189	Effect of phantom voxelization in CT simulations. Medical Physics, 2002, 29, 492-498.	1.6	25
190	Experimental assessment of resolution improvement of a zoom-in PET. Physics in Medicine and Biology, 2011, 56, N165-N174.	1.6	25
191	Study of Čerenkov Light Emission in the Semiconductors TlBr and TlCl for TOF-PET. IEEE Transactions on Radiation and Plasma Medical Sciences, 2021, 5, 630-637.	2.7	25
192	Avalanche photodetectors with photon trapping structures for biomedical imaging applications. Optics Express, 2021, 29, 19024.	1.7	25
193	Correction and characterization of scattered events in three-dimensional PET using scanners with retractable septa. Journal of Nuclear Medicine, 1993, 34, 671-8.	2.8	25
194	Performance measurements of a SSPM-LYSO-SSPM detector module for small animal positron emission tomography. , 2009, , .		24
195	Radiolabeling and In Vivo Imaging of Transplanted Renal Lineages Differentiated from Human Embryonic Stem Cells in Fetal Rhesus Monkeys. Molecular Imaging and Biology, 2012, 14, 197-204.	1.3	24
196	A Simple Capacitive Charge-Division Readout for Position-Sensitive Solid-State Photomultiplier Arrays. IEEE Transactions on Nuclear Science, 2013, 60, 3188-3197.	1.2	24
197	Compton PET: a simulation study for a PET module with novel geometry and machine learning for position decoding. Biomedical Physics and Engineering Express, 2018, 5, 015018.	0.6	24
198	Performance comparison of depth-encoding detectors based on dual-ended readout and different SiPMs for high-resolution PET applications. Physics in Medicine and Biology, 2019, 64, 15NT03.	1.6	24

#	ARTICLE	IF	CITATIONS
199	Fast implementations of 3D PET reconstruction using vector and parallel programming techniques. IEEE Transactions on Nuclear Science, 1993, 40, 1082-1086.	1.2	23
200	Longitudinal Behavioral and 6-[18F]Fluoro-l-DOPA-PET Assessment in MPTP-Hemiparkinsonian Monkeys. Experimental Neurology, 1996, 141, 318-329.	2.0	23
201	Evaluation of Hamamatsu R5900 series PMTs for readout of high-resolution scintillator arrays. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 2000, 454, 379-388.	0.7	23
202	High-resolution voxelation mapping of human and rodent brain gene expression. Journal of Neuroscience Methods, 2003, 125, 93-101.	1.3	23
203	Comparison of large-area position-sensitive solid-state photomultipliers for small animal PET. Physics in Medicine and Biology, 2012, 57, 8119-8134.	1.6	23
204	Pulse shape discrimination and classification methods for continuous depth of interaction encoding PET detectors. Physics in Medicine and Biology, 2012, 57, 6571-6585.	1.6	23
205	Reaching 200-ps timing resolution in a time-of-flight and depth-of-interaction positron emission tomography detector using phosphor-coated crystals and high-density silicon photomultipliers. Journal of Medical Imaging, 2016, 3, 043501.	0.8	23
206	Pair bond formation leads to a sustained increase in global cerebral glucose metabolism in monogamous male titi monkeys (<i>Callicebus cupreus</i>). Neuroscience, 2017, 348, 302-312.	1.1	23
207	First Cerenkov charge-induction (CCI) TlBr detector for TOF-PET and proton range verification. Physics in Medicine and Biology, 2019, 64, 175001.	1.6	23
208	NECR analysis of 3D brain PET scanner designs. IEEE Transactions on Nuclear Science, 1995, 42, 1075-1079.	1.2	22
209	Validation of the SimSET simulation package for modeling the Siemens Biograph mCT PET scanner. Physics in Medicine and Biology, 2015, 60, N35-N45.	1.6	22
210	Cerenkov light transport in scintillation crystals explained: realistic simulation with GATE. Biomedical Physics and Engineering Express, 2019, 5, 035033.	0.6	22
211	Compton scatter and X-ray crosstalk and the use of very thin intercrystal septa in high-resolution PET detectors. IEEE Transactions on Nuclear Science, 1997, 44, 218-224.	1.2	21
212	Gene expression tomography. Physiological Genomics, 2002, 8, 159-167.	1.0	21
213	Imaging Brain Function with Positron Emission Tomography. , 2002, , 485-511.		21
214	Crystal identification in positron emission tomography using nonrigid registration to a Fourier-based template. Physics in Medicine and Biology, 2008, 53, 5011-5027.	1.6	21
215	Evaluation of Matrix9 silicon photomultiplier array for small animal PET. Medical Physics, 2015, 42, 585-599.	1.6	21
216	Quantitative accuracy in total-body imaging using the uEXPLORER PET/CT scanner. Physics in Medicine and Biology, 2021, 66, 205008.	1.6	21

#	ARTICLE	IF	CITATIONS
217	Performance comparison of dual-ended readout depth-encoding PET detectors based on BGO and LYSO crystals. <i>Physics in Medicine and Biology</i> , 2020, 65, 235030.	1.6	21
218	Comparing lesion detection performance for PET image reconstruction algorithms: a case study. <i>IEEE Transactions on Nuclear Science</i> , 1997, 44, 1558-1563.	1.2	20
219	Techniques to improve the spatial sampling of MicroPET-a high resolution animal PET tomograph. <i>IEEE Transactions on Nuclear Science</i> , 2000, 47, 422-427.	1.2	20
220	Intrinsic Spatial Resolution and Parallax Correction Using Depth-Encoding PET Detector Modules Based on Position-Sensitive APD Readout. <i>IEEE Transactions on Nuclear Science</i> , 2006, 53, 2666-2670.	1.2	20
221	Preclinical Imaging of Mammary Intraepithelial Neoplasia with Positron Emission Tomography. <i>Journal of Mammary Gland Biology and Neoplasia</i> , 2006, 11, 137-149.	1.0	20
222	Measurements of wavelength shifting (WLS) fibre readout for a highly multiplexed, depth-encoding PET detector. <i>Physics in Medicine and Biology</i> , 2007, 52, 2499-2514.	1.6	20
223	Comparison of four depth-encoding PET detector modules with wavelength shifting (WLS) and optical fiber read-out. <i>Physics in Medicine and Biology</i> , 2008, 53, 1829-1842.	1.6	20
224	Spatial Distortion Correction and Crystal Identification for MRI-Compatible Position-Sensitive Avalanche Photodiode-Based PET Scanners. <i>IEEE Transactions on Nuclear Science</i> , 2009, 56, 549-556.	1.2	20
225	Functional whole-brain imaging in behaving rodents. <i>Nature Methods</i> , 2011, 8, 301-303.	9.0	19
226	Ultra Staging to Unmask the Prescribing of Adjuvant Therapy in Cancer Patients: The Future Opportunity to Image Micrometastases Using Total-Body ¹⁸ F-FDG PET Scanning. <i>Journal of Nuclear Medicine</i> , 2014, 55, 696-697.	2.8	19
227	DigiWarp: a method for deformable mouse atlas warping to surface topographic data. <i>Physics in Medicine and Biology</i> , 2010, 55, 6197-6214.	1.6	18
228	Predicting the timing properties of phosphor-coated scintillators using Monte Carlo light transport simulation. <i>Physics in Medicine and Biology</i> , 2014, 59, 2023-2039.	1.6	18
229	Quatitation of blood-brain barrier permeability by positron emission tomography. <i>Physics in Medicine and Biology</i> , 1989, 34, 1767-1772.	1.6	17
230	Evaluation of multi-channel PMTs for readout of scintillator arrays. <i>Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment</i> , 1997, 390, 209-218.	0.7	17
231	An evaluation of exact and approximate 3-D reconstruction algorithms for a high-resolution, small-animal PET scanner. <i>IEEE Transactions on Medical Imaging</i> , 1998, 17, 1073-1080.	5.4	17
232	A study of the timing properties of position-sensitive avalanche photodiodes. <i>Physics in Medicine and Biology</i> , 2009, 54, 5155-5172.	1.6	17
233	Radiolabeling Human Peripheral Blood Stem Cells for Positron Emission Tomography (PET) Imaging in Young Rhesus Monkeys. <i>PLoS ONE</i> , 2013, 8, e77148.	1.1	17
234	Theoretical study of the benefit of long axial field-of-view PET on region of interest quantification. <i>Physics in Medicine and Biology</i> , 2018, 63, 135010.	1.6	17

#	ARTICLE	IF	CITATIONS
235	Imaging Salt Uptake Dynamics in Plants Using PET. Scientific Reports, 2019, 9, 18626.	1.6	17
236	A high-sensitivity small animal SPECT system. Physics in Medicine and Biology, 2009, 54, 1291-1305.	1.6	16
237	Image quantification with a large area multiwire proportional chamber positron camera (MUP-PET). European Journal of Nuclear Medicine and Molecular Imaging, 1989, 15, 694-700.	2.2	15
238	PET: Physics, Instrumentation, and Scanners. , 2004, , 1-124.		15
239	Signal and noise properties of position-sensitive avalanche photodiodes. Physics in Medicine and Biology, 2011, 56, 6327-6336.	1.6	15
240	A Monte Carlo investigation of the spatial resolution performance of a small-animal PET scanner designed for mouse brain imaging studies. Physica Medica, 2014, 30, 76-85.	0.4	15
241	Open-field mouse brain PET: design optimisation and detector characterisation. Physics in Medicine and Biology, 2017, 62, 6207-6225.	1.6	15
242	Quantitative assessment of Cerenkov luminescence for radioguided brain tumor resection surgery. Physics in Medicine and Biology, 2017, 62, 4183-4201.	1.6	15
243	A depth-of-interaction encoding PET detector module with dual-ended readout using large-area silicon photomultiplier arrays. Physics in Medicine and Biology, 2018, 63, 245019.	1.6	15
244	Design and evaluation of gapless curved scintillator arrays for simultaneous high-resolution and high-sensitivity brain PET. Physics in Medicine and Biology, 2019, 64, 235004.	1.6	15
245	Hybrid PET/MRI enables high-spatial resolution, quantitative imaging of amyloid plaques in an Alzheimer's disease mouse model. Scientific Reports, 2020, 10, 10379.	1.6	15
246	Quantitative in vivo measurements of tumor perfusion using rubidium-81 and positron emission tomography. Journal of Nuclear Medicine, 1990, 31, 1307-15.	2.8	15
247	Optimization of PET instrumentation for brain activation studies. IEEE Transactions on Nuclear Science, 1993, 40, 1048-1054.	1.2	14
248	Oral 18F-fluoro-2-deoxyglucose for primate PET studies without behavioral restraint: Demonstration of principle. , 1997, 42, 215-224.		14
249	A Multiplexer Design for Position-Sensitive Avalanche Photodiode Detectors in a PET Scanner. IEEE Transactions on Nuclear Science, 2008, 55, 463-468.	1.2	14
250	Total-body PET/CT " First Clinical Experiences and Future Perspectives. Seminars in Nuclear Medicine, 2022, 52, 330-339.	2.5	14
251	A study of depth of interaction measurement using bent optical fibers [in PET scanner]. IEEE Transactions on Nuclear Science, 1999, 46, 618-623.	1.2	13
252	Dynamic changes in cerebral glucose metabolism in conscious infant monkeys during the first year of life as measured by positron emission tomography. Developmental Brain Research, 2000, 120, 141-150.	2.1	13

#	ARTICLE	IF	CITATIONS
253	Design and development of 1mm resolution PET detectors with position-sensitive PMTs. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 2002, 477, 486-490.	0.7	13
254	New Covalent Capture Probes for Imaging and Therapy, Based on a Combination of Binding Affinity and Disulfide Bond Formation. Bioconjugate Chemistry, 2011, 22, 1479-1483.	1.8	13
255	Design Considerations for DOI-encoding PET Detectors Using Phosphor-Coated Crystals. IEEE Transactions on Nuclear Science, 2014, 61, 67-73.	1.2	13
256	Un-collimated single-photon imaging system for high-sensitivity small animal and plant imaging. Physics in Medicine and Biology, 2015, 60, 403-420.	1.6	13
257	Performance assessment of a software-based coincidence processor for the EXPLORER total-body PET scanner. Physics in Medicine and Biology, 2018, 63, 18NT01.	1.6	13
258	Lead-free MCP to improve coincidence time resolution and reduce MCP direct interactions. Physics in Medicine and Biology, 2021, 66, 064006.	1.6	13
259	PSPMT/APD Hybrid DOI Detectors for the PET Component of a Dedicated Breast PET/CT System—A Feasibility Study. IEEE Transactions on Nuclear Science, 2008, 55, 853-861.	1.2	12
260	H ² RSPET: a 0.5 mm resolution high-sensitivity small-animal PET scanner, a simulation study. Physics in Medicine and Biology, 2021, 66, 065016.	1.6	12
261	Development of TlBr detectors for PET imaging. Physics in Medicine and Biology, 2018, 63, 13NT04.	1.6	11
262	Recent advances in instrumentation for positron emission tomography. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 1994, 348, 577-582.	0.7	10
263	Design and optimization of a high-resolution PET detector module for small-animal PET based on a 12 Å—12 silicon photomultiplier array. Biomedical Physics and Engineering Express, 2015, 1, 045003.	0.6	10
264	Real-time whole-plant dynamics of heavy metal transport in <i>Arabidopsis halleri</i> and <i>Arabidopsis thaliana</i> by gamma-ray imaging. Plant Direct, 2019, 3, e00131.	0.8	10
265	Scanner Design Considerations for Long Axial Field-of-View PET Systems. PET Clinics, 2021, 16, 25-39.	1.5	10
266	Prototype Small-Animal PET-CT Imaging System for Image-Guided Radiation Therapy. IEEE Access, 2019, 7, 143207-143216.	2.6	9
267	Time Resolution Studies of Thallium Based Cherenkov Semiconductors. Frontiers in Physics, 2022, 10, .	1.0	9
268	Effect of refraction index and light sharing on detector element identification for 2D detector modules in Positron Emission Tomography. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 1994, 348, 618-622.	0.7	8
269	Measurement of coincidence timing resolution with CdTe detectors. , 2000, 4142, 254.		8
270	Characteristics of the PET Component of a Dedicated Breast PET/CT Scanner Prototype. , 2006, , .		8

#	ARTICLE	IF	CITATIONS
271	Evaluation of 2-[¹⁸ F]fluoroacetate Kinetics in Rodent Models of Cerebral Hypoxia/Ischemia. <i>Journal of Cerebral Blood Flow and Metabolism</i> , 2014, 34, 836-844.	2.4	8
272	Improving Depth, Energy and Timing Estimation in PET Detectors with Deconvolution and Maximum Likelihood Pulse Shape Discrimination. <i>IEEE Transactions on Medical Imaging</i> , 2016, 35, 2436-2446.	5.4	8
273	Cherenkov luminescence and PET imaging of ⁹⁰ Y: capabilities and limitations in small animal applications. <i>Physics in Medicine and Biology</i> , 2020, 65, 065006.	1.6	8
274	Evaluation of the detectability of breast cancer lesions using a modified anthropomorphic phantom. <i>Journal of Nuclear Medicine</i> , 1998, 39, 1951-7.	2.8	8
275	Development of position sensitive detectors for use in positron emission tomography of small laboratory animals. <i>Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment</i> , 1994, 348, 613-617.	0.7	7
276	Application of positron emission tomography to determine cerebral glucose utilization in conscious infant monkeys. <i>Journal of Neuroscience Methods</i> , 1999, 88, 123-133.	1.3	7
277	Radiation Detectors. , 2012, , 87-106.		7
278	Timing properties of phosphor-coated polished LSO crystals. <i>Physics in Medicine and Biology</i> , 2014, 59, N139-N151.	1.6	7
279	A Study of Position-Sensitive Solid-State Photomultiplier Signal Properties. <i>IEEE Transactions on Nuclear Science</i> , 2014, 61, 1074-1083.	1.2	7
280	Evaluation of linearly-graded SiPMs for high resolution small-animal PET. <i>Biomedical Physics and Engineering Express</i> , 2015, 1, 045008.	0.6	7
281	Cherenkov luminescence measurements with digital silicon photomultipliers: a feasibility study. <i>EJNMMI Physics</i> , 2015, 2, 32.	1.3	7
282	Energy and electron drift time measurements in a pixel CCl TlBr detector with 1.3 MeV prompt-gammas. <i>Physics in Medicine and Biology</i> , 2021, 66, 044001.	1.6	7
283	A depth-encoding PET detector for high resolution PET using 1 mm SiPMs. <i>Physics in Medicine and Biology</i> , 2020, 65, 165011.	1.6	7
284	Improving edge crystal identification in flood histograms using triangular shape crystals. <i>Biomedical Physics and Engineering Express</i> , 2018, 4, 025031.	0.6	6
285	Planar APD arrays for high-resolution PET. , 1999, , .		5
286	Photons across medicine: relating optical and nuclear imaging. <i>Biomedical Optics Express</i> , 2013, 4, 2751.	1.5	5
287	Developing a Nanoparticle-Delivered High-Efficacy Treatment for Infantile Hemangiomas Using a Mouse Hemangioendothelioma Model. <i>Plastic and Reconstructive Surgery</i> , 2016, 138, 410-417.	0.7	5
288	Optimization of a depth of interaction encoding PET block detector for a PET/MRI insert. <i>Physics in Medicine and Biology</i> , 2018, 63, 235031.	1.6	5

#	ARTICLE	IF	CITATIONS
289	Pharmacokinetics and Biodistribution of a Human Monoclonal Antibody to Oxidized LDL in Cynomolgus Monkey Using PET Imaging. PLoS ONE, 2012, 7, e45116.	1.1	5
290	Performance evaluation of dual-ended readout PET detectors based on BGO arrays with different reflector arrangements. Physics in Medicine and Biology, 2021, 66, 215001.	1.6	5
291	Statistical analysis of multiplex brain gene expression images. Neurochemical Research, 2002, 27, 1113-1121.	1.6	4
292	CdTe Orthogonal Strip Detector for Small Animal PET. , 2006, , .		4
293	A simulation study of a long axial field of view whole-body PET scanner using cylindrical and anthropomorphic phantoms. , 2008, , .		4
294	Comments on $\hat{\alpha}$ -Cerenkov radiation allows in vivo optical imaging of positron emitting radiotracers $\hat{\alpha}$ ™. Physics in Medicine and Biology, 2010, 55, L43-L44.	1.6	4
295	Lanthanide-doped nanoparticles for hybrid x-ray/optical imaging. Proceedings of SPIE, 2013, , .	0.8	4
296	Ultra low fluence rate photodynamic therapy: simulation of light emitted by the Cerenkov effect. Proceedings of SPIE, 2014, , .	0.8	4
297	Detector Performance Characterization for High Sensitivity Single-Photon Imaging. IEEE Transactions on Nuclear Science, 2014, 61, 1118-1125.	1.2	4
298	Shared-photodetector readout to improve the sensitivity of positron emission tomography. Physics in Medicine and Biology, 2018, 63, 205002.	1.6	4
299	Combined Positron Emission Tomography and Magnetic Resonance Imaging Scanners $\hat{\alpha}$ ™ Potential Neurological Applications. US Neurology, 2008, 04, 76.	0.2	4
300	A near-infrared probe for non-invasively monitoring cerebrospinal fluid flow by 18F-positron emitting tomography and fluorescence. EJNMMI Research, 2020, 10, 37.	1.1	4
301	Monitoring Gene Therapy by Positron Emission Tomography. , 2003, , 659-685.		3
302	Performance measurements of CMOS SSPM as PET detector. , 2007, , .		3
303	Statistical image reconstruction for hybrid fluorescence optical tomography and positron emission tomography. , 2011, , .		3
304	Simultaneous PET/MRI Imaging During Mouse Cerebral Hypoxia-ischemia. Journal of Visualized Experiments, 2015, , .	0.2	3
305	Performance comparison of different readouts for position-sensitive solid-state photomultiplier arrays. Biomedical Physics and Engineering Express, 2017, 3, 045019.	0.6	3
306	Imaging Salt Transport in Plants Using PET: A Feasibility Study. , 2017, , .		3

#	ARTICLE	IF	CITATIONS
307	Theoretical investigation of ultrasound-modulated Cerenkov luminescence imaging for higher-resolution imaging in turbid media. Optics Letters, 2018, 43, 3509.	1.7	3
308	Characterization of four readout circuits for an MR compatible, preclinical PET detector. Physics in Medicine and Biology, 2020, 65, 125008.	1.6	3
309	Seeing is believing: Non-invasive, quantitative and repetitive imaging of reporter gene expression in living animals, using positron emission tomography. Journal of Neuroscience Research, 2000, 59, 699.	1.3	3
310	Engineering the gain and bandwidth in avalanche photodetectors. Optics Express, 2022, 30, 16873.	1.7	3
311	<title>Parallel image reconstruction for 3D positron emission tomography from incomplete 2D projection data</title>. , 1993, 1905, 978.		2
312	Detector optimization for hand-held CsI(Tl)/HgI/sub 2/ gamma-ray scintillation spectrometer applications. IEEE Transactions on Nuclear Science, 1996, 43, 1277-1281.	1.2	2
313	Brain Imaging in Small Animals Using MicroPET 1 1Transcripts of the BRAINPET97 discussion of this chapter can be found in Section VIII.. , 1998, , 3-9.		2
314	PET Imaging of development and malignant transformation in a mouse model of mammary intraepithelial neoplasia. , 2005, , .		2
315	Characterization of a novel microCT detector for small animal computed tomography (CT). , 2007, , .		2
316	Computationally efficient perturbative forward modeling for 3D multispectral bioluminescence and fluorescence tomography. Proceedings of SPIE, 2008, , .	0.8	2
317	Imaging and timing performance of 1 cm x 1 cm position-sensitive solid-state photomultiplier. Journal of Instrumentation, 2013, 8, C02033-C02033.	0.5	2
318	The Effects of Delay on the Input Function for Early Dynamics in Total Body Parametric Imaging. , 2019, , .		2
319	Tomographic imaging with Compton PET modules: ideal case and first implementation. Journal of Instrumentation, 2021, 16, T04007.	0.5	2
320	A high resolution and high detection efficiency depth-encoding detector for brain positron emission tomography based on a 0.75 mm pitch scintillator array. Journal of Instrumentation, 2021, 16, P05015.	0.5	2
321	Small Animal PET Systems. , 2004, , 213-228.		2
322	Small Animal PET Systems. , 2004, , 213-228.		2
323	Development and Validation of an Accurate Input Function from Carotid Arteries using the uEXPLORER. , 2020, , .		2
324	Discussions with Leaders: A Conversation between Simon Cherry and Johannes Czernin. Journal of Nuclear Medicine, 2019, 60, 295-298.	2.8	2

#	ARTICLE	IF	CITATIONS
325	Investigation of Different Transcript Quantitation Tools for High-Throughput Mapping of Brain Gene Expression Using Voxelation. <i>Journal of Molecular Histology</i> , 2003, 35, 397-402.	1.0	1
326	PSPMT/APD hybrid DOI detectors for the PET component of a dedicated breast PET/CT system — A feasibility study. , 2007, , .		1
327	Spatial distortion correction and crystal identification for position-sensitive avalanche photodiode-based PET scanners. , 2008, , .		1
328	LYSO-SSPM based PET detector module for combined PET/MRI applications. , 2010, , .		1
329	Incoming Editor-in-Chief. <i>Physics in Medicine and Biology</i> , 2012, 57, .	1.6	1
330	Validation of SimSET Monte Carlo simulations of the Siemens Biograph mCT PET scanner. , 2012, , .		1
331	Establishment of Clonal MIN-O Transplant Lines for Molecular Imaging via Lentiviral Transduction & In Vitro Culture. <i>PLoS ONE</i> , 2012, 7, e39350.	1.1	1
332	Hybrid Imaging. , 2012, , 345-361.		1
333	Numerical and experimental studies of x-ray luminescence optical tomography for small animal imaging. , 2013, , .		1
334	IPEM codes of practice and topical report series. <i>Physics in Medicine and Biology</i> , 2016, 61, E5-E6.	1.6	1
335	Motion-Adaptive Gantry Development for Open-Field Mouse PET. , 2019, , .		1
336	PET and NMR dual acquisition (PANDA): applications to isolated, perfused rat hearts. , 1997, 10, 138.		1
337	The reduction of ¹⁷⁶ Lu background in Lu-based PET scanners using optimized classification. <i>Physics in Medicine and Biology</i> , 2020, 65, 175016.	1.6	1
338	The use of microPET for the development of neural repair therapeutics: studies in epilepsy and lesion models. <i>Journal of Clinical Pharmacology</i> , 2001, 41, 55S-63S.	1.0	1
339	Combined dynamic and gated C-11 acetate pet imaging provides estimates of myocardial oxygen extraction and wall tension. <i>Journal of the American College of Cardiology</i> , 1991, 17, A380.	1.2	0
340	Evaluation of copper(II)-pyruvaldehyde bis (N-4-methylthiosemicarbazone) for tissue blood flow measurement usina a trapped tracer model. <i>European Journal of Nuclear Medicine and Molecular Imaging</i> , 1994, 21, 336.	2.2	0
341	Watching biology in action. <i>Physics World</i> , 2002, 15, 29-34.	0.0	0
342	Simultaneous PET and 3D Fluorescence Optical Tomography for Small Animal Imaging: In vivo Results and System Improvements. , 2010, , .		0

#	ARTICLE	IF	CITATIONS
343	Open Access and PMB. Physics in Medicine and Biology, 2012, 57, E01.	1.6	0
344	Roberts Prize for the best paper published in 2011. Physics in Medicine and Biology, 2012, 57, .	1.6	0
345	A novel sensor for high throughput preclinical radiotracer imaging. Proceedings of SPIE, 2013, , .	0.8	0
346	Roberts Prize for the best paper published in 2012. Physics in Medicine and Biology, 2013, 58, .	1.6	0
347	Citations Prize 2012. Physics in Medicine and Biology, 2013, 58, .	1.6	0
348	In Vivo Molecular Imaging Using Cerenkov Luminescence. , 2014, , .		0
349	Roberts Prize for the best paper published in 2013. Physics in Medicine and Biology, 2014, 59, 5971-5972.	1.6	0
350	Open-field mouse brain PET: Design considerations and detector development. , 2015, , .		0
351	Roberts Prize for the best paper published in 2014. Physics in Medicine and Biology, 2015, 60, E1-E2.	1.6	0
352	Citations Prize 2016. Physics in Medicine and Biology, 2016, 61, E7-E7.	1.6	0
353	Roberts Prize for the best paper published in 2015. Physics in Medicine and Biology, 2016, 61, E3-E4.	1.6	0
354	DOI detector design and characterization for open-field mouse brain PET. , 2016, , .		0
355	Activation of photodynamic therapy in vitro with Cerenkov luminescence generated from Yttrium-90 (Conference Presentation). , 2016, , .		0
356	Direct gamma-ray detection with strip TlBr detectors for nuclear medicine applications. , 2016, , .		0
357	EXPLORER: Changing the molecular imaging paradigm with total-body PET/CT (Conference) Tj ETQq1 1 0.784314 rgBT /Overlock 10 Tj 5		
358	Orthogonal Strip TlBr Detectors for PET. , 2017, , .		0
359	2019: an update from the Editor-in-Chief. Physics in Medicine and Biology, 2019, 64, 080301.	1.6	0
360	Small Animal Imaging with Positron Emission Tomography. Frontiers in Neuroscience, 2002, , 291-312.	0.0	0

#	ARTICLE	IF	CITATIONS
361	Quantitation of PET/CT and PET/MRI images. FASEB Journal, 2006, 20, .	0.2	0
362	Fetal Gene Transfer Using Lentiviral Vectors:In VivoDetection of Gene Expression by microPET and Optical Imaging in Fetal and Infant Monkeys. Human Gene Therapy, 2006, .	1.4	0
363	In Vivo Imaging to Monitor Trafficking and Engraftment of Human CD34+ Hematopoietic Stem and Progenitor Cells in Rhesus Monkeys. Blood, 2008, 112, 3495-3495.	0.6	0
364	A high sensitivity multi-spectral three-dimensional fluorescence optical tomography system for small animal imaging. Proceedings of SPIE, 2009, , .	0.8	0
365	Cerenkov Luminescence Tomography for Small Animal Imaging. , 2010, , .		0
366	Improved in vivo Fluorescence Tomography and Quantitation in Small Animals Using a Novel Multiview, Multispectral Imaging System. , 2010, , .		0
367	Farewell from the outgoing Editor-in-Chief. Physics in Medicine and Biology, 2020, 65, 240301.	1.6	0
368	Launching our new Roadmap articles. Physics in Medicine and Biology, 2020, 65, 210301.	1.6	0
369	A Fast Local Gating Method for TOF-PET. , 2020, , .		0