

Simon Cherry

List of Publications by Year in descending order

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369
papers

28,108
citations

6613

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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.	0.9	1,697
2	Automated Image Registration: I. General Methods and Intrasubject, Intramodality Validation. Journal of Computer Assisted Tomography, 1998, 22, 139-152.	0.9	1,528
3	MRI-PET Registration with Automated Algorithm. Journal of Computer Assisted Tomography, 1993, 17, 536-546.	0.9	1,467
4	A Critical Role for Dnmt1 and DNA Methylation in T Cell Development, Function, and Survival. Immunity, 2001, 15, 763-774.	14.3	1,124
5	Simultaneous PET-MRI: a new approach for functional and morphological imaging. Nature Medicine, 2008, 14, 459-465.	30.7	1,008
6	High-resolution 3D Bayesian image reconstruction using the microPET small-animal scanner. Physics in Medicine and Biology, 1998, 43, 1001-1013.	3.0	580
7	MicroPET: a high resolution PET scanner for imaging small animals. IEEE Transactions on Nuclear Science, 1997, 44, 1161-1166.	2.0	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.	5.0	474
9	First Human Imaging Studies with the EXPLORER Total-Body PET Scanner*. Journal of Nuclear Medicine, 2019, 60, 299-303.	5.0	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.	7.1	444
11	Optical imaging of Cerenkov light generation from positron-emitting radiotracers. Physics in Medicine and Biology, 2009, 54, N355-N365.	3.0	365
12	Repetitive, non-invasive imaging of the dopamine D2 receptor as a reporter gene in living animals. Gene Therapy, 1999, 6, 785-791.	4.5	356
13	Simultaneous PET and MR imaging. Physics in Medicine and Biology, 1997, 42, 1965-1970.	3.0	346
14	A smart and versatile theranostic nanomedicine platform based on nanoporphyrin. Nature Communications, 2014, 5, 4712.	12.8	345
15	In vivomolecular and genomic imaging: new challenges for imaging physics. Physics in Medicine and Biology, 2004, 49, R13-R48.	3.0	327
16	Imaging Transgene Expression with Radionuclide Imaging Technologies. Neoplasia, 2000, 2, 118-138.	5.3	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.	7.1	301
18	Performance evaluation of the microPET P4: a PET system dedicated to animal imaging. Physics in Medicine and Biology, 2001, 46, 1845-1862.	3.0	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.	2.0	272
20	Hyperspectral and multispectral bioluminescence optical tomography for small animal imaging. Physics in Medicine and Biology, 2005, 50, 5421-5441.	3.0	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.	5.0	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.	4.5	256
23	Retroviral Expression in Embryonic Stem Cells and Hematopoietic Stem Cells. Molecular and Cellular Biology, 2000, 20, 7419-7426.	2.3	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.	3.0	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.	5.0	245
26	Fast gradient-based methods for Bayesian reconstruction of transmission and emission PET images. IEEE Transactions on Medical Imaging, 1994, 13, 687-701.	8.9	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.	30.7	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.	5.0	213
30	Combining anatomy and function: the path to true image fusion. European Radiology, 2001, 11, 1968-1974.	4.5	210
31	Bayesian reconstruction of PET images: methodology and performance analysis. Physics in Medicine and Biology, 1996, 41, 1777-1807.	3.0	209
32	Performance evaluation of microPET: a high-resolution lutetium oxyorthosilicate PET scanner for animal imaging. Journal of Nuclear Medicine, 1999, 40, 1164-75.	5.0	205
33	Multimodality Imaging: Beyond PET/CT and SPECT/CT. Seminars in Nuclear Medicine, 2009, 39, 348-353.	4.6	199
34	Application of Silicon Photomultipliers to Positron Emission Tomography. Annals of Biomedical Engineering, 2011, 39, 1358-1377.	2.5	197
35	MULTIMODALITY IN VIVO IMAGING SYSTEMS: Twice the Power or Double the Trouble?. Annual Review of Biomedical Engineering, 2006, 8, 35-62.	12.3	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.	17.5	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.	5.0	178
38	Total-body imaging: Transforming the role of positron emission tomography. <i>Science Translational Medicine</i> , 2017, 9, .	12.4	175
39	Development of a PET detector system compatible with MRI/NMR systems. <i>IEEE Transactions on Nuclear Science</i> , 1997, 44, 1167-1171.	2.0	174
40	Small-Animal X-ray Dose from Micro-CT. <i>Molecular Imaging</i> , 2004, 3, 149-158.	1.4	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.	7.3	165
42	3D PET using a Conventional Multislice Tomograph without Septa. <i>Journal of Computer Assisted Tomography</i> , 1991, 15, 655-668.	0.9	160
43	Cerenkov luminescence tomography for small-animal imaging. <i>Optics Letters</i> , 2010, 35, 1109.	3.3	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.	3.4	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.	3.0	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.	3.0	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.	4.3	140
48	NaGdF ₄ :Eu ³⁺ Nanoparticles for Enhanced X-ray Excited Optical Imaging. <i>Chemistry of Materials</i> , 2014, 26, 1881-1888.	6.7	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.	3.0	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.	5.0	132
51	Fully 3D Bayesian image reconstruction for the ECAT EXACT HR+. <i>IEEE Transactions on Nuclear Science</i> , 1998, 45, 1096-1103.	2.0	131
52	Total-Body Dynamic Reconstruction and Parametric Imaging on the uEXPLORER. <i>Journal of Nuclear Medicine</i> , 2020, 61, 285-291.	5.0	129
53	High-resolution PET detector design: modelling components of intrinsic spatial resolution. <i>Physics in Medicine and Biology</i> , 2005, 50, 179-195.	3.0	127
54	Fundamentals of Positron Emission Tomography and Applications in Preclinical Drug Development. <i>Journal of Clinical Pharmacology</i> , 2001, 41, 482-491.	2.0	126

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55	Small-Animal Preclinical Nuclear Medicine Instrumentation and Methodology. <i>Seminars in Nuclear Medicine</i> , 2008, 38, 209-222.	4.6	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.	3.0	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.	8.9	113
58	Initial Characterization of a Dedicated Breast PET/CT Scanner During Human Imaging. <i>Journal of Nuclear Medicine</i> , 2009, 50, 1401-1408.	5.0	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.	6.4	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.	3.0	107
61	Design and evaluation of an LSO PET detector for breast cancer imaging. <i>Medical Physics</i> , 2000, 27, 1535-1543.	3.0	106
62	Detector development for microPET II: a 1.141 resolution PET scanner for small animal imaging. <i>Physics in Medicine and Biology</i> , 2001, 46, 2899-2910.	3.0	106
63	Joint L_1 and total variation regularization for fluorescence molecular tomography. <i>Physics in Medicine and Biology</i> , 2012, 57, 1459-1476.	3.0	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.	2.9	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.	4.2	103
66	A Prototype PET Scanner with DOI-Encoding Detectors. <i>Journal of Nuclear Medicine</i> , 2008, 49, 1132-1140.	5.0	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.	3.0	98
68	Design studies of a high resolution PET detector using APD arrays. <i>IEEE Transactions on Nuclear Science</i> , 2000, 47, 1051-1057.	2.0	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.	5.0	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.	0.7	92
71	Neural correlates of pair-bonding in a monogamous primate. <i>Brain Research</i> , 2007, 1184, 245-253.	2.2	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.	7.1	91

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73	PET imaging of transgene expression. <i>Biological Psychiatry</i> , 2000, 48, 337-348.	1.3	89
74	Attenuation correction using count-limited transmission data in positron emission tomography. <i>Journal of Nuclear Medicine</i> , 1993, 34, 143-50.	5.0	89
75	Simultaneous molecular and anatomical imaging of the mouse in vivo. <i>Physics in Medicine and Biology</i> , 2002, 47, 4315-4328.	3.0	86
76	Applications for Preclinical PET/MRI. <i>Seminars in Nuclear Medicine</i> , 2013, 43, 19-29.	4.6	86
77	Collection of scintillation light from small BGO crystals. <i>IEEE Transactions on Nuclear Science</i> , 1995, 42, 1058-1063.	2.0	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.	2.0	85
79	Innovations in Instrumentation for Positron Emission Tomography. <i>Seminars in Nuclear Medicine</i> , 2018, 48, 311-331.	4.6	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.	2.0	84
81	Complementary emerging techniques: high-resolution PET and MRI. <i>Current Opinion in Neurobiology</i> , 2001, 11, 621-629.	4.2	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.	3.4	83
83	PET and NMR dual acquisition (PANDA): applications to isolated, perfused rat hearts. <i>NMR in Biomedicine</i> , 1997, 10, 138-142.	2.8	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.	0.6	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.	2.0	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.	3.0	74
87	Machine Learning in PET: From Photon Detection to Quantitative Image Reconstruction. <i>Proceedings of the IEEE</i> , 2020, 108, 51-68.	21.3	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.	3.0	71
89	Persistent neuroinflammation and cognitive impairment in a rat model of acute diisopropylfluorophosphate intoxication. <i>Journal of Neuroinflammation</i> , 2016, 13, 267.	7.2	71
90	Design of a small animal MR compatible PET scanner. <i>IEEE Transactions on Nuclear Science</i> , 1999, 46, 565-570.	2.0	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.	2.0	69
92	The Integration of Positron Emission Tomography With Magnetic Resonance Imaging. Proceedings of the IEEE, 2008, 96, 416-438.	21.3	69
93	Bismuth germanate coupled to near ultraviolet silicon photomultipliers for time-of-flight PET. Physics in Medicine and Biology, 2016, 61, L38-L47.	3.0	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.	3.0	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.	4.1	66
96	On the assessment of spatial resolution of PET systems with iterative image reconstruction. Physics in Medicine and Biology, 2016, 61, N193-N202.	3.0	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.	5.0	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.	3.0	65
100	Computed Cerenkov luminescence yields for radionuclides used in biology and medicine. Physics in Medicine and Biology, 2015, 60, 4263-4280.	3.0	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.	4.3	64
102	A microPET/CT system for in vivo small animal imaging. Physics in Medicine and Biology, 2007, 52, 3881-3894.	3.0	64
103	Design and development of an MR-compatible PET scanner for imaging small animals. IEEE Transactions on Nuclear Science, 2005, 52, 1376-1380.	2.0	63
104	Continuous depth-of-interaction encoding using phosphor-coated scintillators. Physics in Medicine and Biology, 2009, 54, 1757-1771.	3.0	62
105	X-ray luminescence optical tomography imaging: experimental studies. Optics Letters, 2013, 38, 2339.	3.3	62
106	Design features and performance of a PET system for animal research. Journal of Nuclear Medicine, 1992, 33, 595-604.	5.0	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.	7.1	61
108	Infection-induced type I interferons activate CD11b on B-1 cells for subsequent lymph node accumulation. Nature Communications, 2015, 6, 8991.	12.8	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.	3.0	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.	4.3	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.	3.0	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.	5.0	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.	2.7	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.	3.0	55
115	Position Sensitive APDs for Small Animal PET Imaging. <i>IEEE Transactions on Nuclear Science</i> , 2004, 51, 91-95.	2.0	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.	7.1	55
117	A hyperspectral fluorescence system for 3D in vivo optical imaging. <i>Physics in Medicine and Biology</i> , 2006, 51, 2029-2043.	3.0	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.	3.0	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.	5.0	55
120	Cardiac PET imaging in mice with simultaneous cardiac and respiratory gating. <i>Physics in Medicine and Biology</i> , 2005, 50, 2979-2989.	3.0	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.	2.0	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.	6.4	53
123	Tapered LSO arrays for small animal PET. <i>Physics in Medicine and Biology</i> , 2011, 56, 139-153.	3.0	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.	5.0	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.	3.0	51
126	Total-Body Quantitative Parametric Imaging of Early Kinetics of ¹⁸ F-FDG. <i>Journal of Nuclear Medicine</i> , 2021, 62, 738-744.	5.0	50

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127	High-Throughput Imaging of Brain Gene Expression. <i>Genome Research</i> , 2002, 12, 244-254.	5.5	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.	1.4	49
129	Ultrafast timing enables reconstruction-free positron emission imaging. <i>Nature Photonics</i> , 2021, 15, 914-918.	31.4	49
130	PET characteristics of a dedicated breast PET/CT scanner prototype. <i>Physics in Medicine and Biology</i> , 2009, 54, 4273-4287.	3.0	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.	3.0	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.	5.5	47
133	Characterization of Large-Area SiPM Array for PET Applications. <i>IEEE Transactions on Nuclear Science</i> , 2016, 63, 8-16.	2.0	47
134	Simultaneous PET and Multispectral 3-Dimensional Fluorescence Optical Tomography Imaging System. <i>Journal of Nuclear Medicine</i> , 2011, 52, 1268-1275.	5.0	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.	1.2	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.	6.4	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.	3.0	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.	1.4	42
140	Evaluation of a 3D reconstruction algorithm for multi-slice PET scanners. <i>Physics in Medicine and Biology</i> , 1992, 37, 779-790.	3.0	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.	2.1	41
142	Three-dimensional fluorescence optical tomography in small-animal imaging using simultaneous positron-emission-tomography priors. <i>Optics Letters</i> , 2009, 34, 2933.	3.3	41
143	Observations regarding scatter fraction and NEC measurements for small animal PET. <i>IEEE Transactions on Nuclear Science</i> , 2006, 53, 127-132.	2.0	40
144	PET Performance Evaluation of an MR-Compatible PET Insert. <i>IEEE Transactions on Nuclear Science</i> , 2009, 56, 574-580.	2.0	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.	2.0	40
146	A comparison of x-ray detectors for mouse CT imaging. <i>Physics in Medicine and Biology</i> , 2004, 49, 5251-5265.	3.0	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.	5.0	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.	3.0	39
149	Towards time-of-flight PET with a semiconductor detector. <i>Physics in Medicine and Biology</i> , 2018, 63, 04LT01.	3.0	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.	5.0	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.	3.0	38
152	Methods for improving image quality in whole body PET scanning. <i>IEEE Transactions on Nuclear Science</i> , 1992, 39, 1079-1083.	2.0	36
153	Small-Animal X-ray Dose from Micro-CT. <i>Molecular Imaging</i> , 2004, 3, 153535002004041.	1.4	36
154	Imaging, Behavior and Endocrine Analysis of Jealousy in a Monogamous Primate. <i>Frontiers in Ecology and Evolution</i> , 2017, 5, .	2.2	36
155	Quantitative PET in the 2020s: a roadmap. <i>Physics in Medicine and Biology</i> , 2021, 66, 06RM01.	3.0	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.	4.2	35
157	Numerical simulation of x-ray luminescence optical tomography for small-animal imaging. <i>Journal of Biomedical Optics</i> , 2014, 19, 046002.	2.6	35
158	Compton PET: a layered structure PET detector with high performance. <i>Physics in Medicine and Biology</i> , 2019, 64, 10LT01.	3.0	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.	6.4	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.	3.0	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.	6.7	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.	2.9	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.	2.0	33
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