

Steven Staelens

List of Publications by Year in descending order

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198
papers

5,877
citations

126907

33
h-index

91884

69
g-index

202
all docs

202
docs citations

202
times ranked

6737
citing authors

#	ARTICLE	IF	CITATIONS
1	GATE: a simulation toolkit for PET and SPECT. <i>Physics in Medicine and Biology</i> , 2004, 49, 4543-4561.	3.0	1,765
2	U-SPECT-II: An Ultra-High-Resolution Device for Molecular Small-Animal Imaging. <i>Journal of Nuclear Medicine</i> , 2009, 50, 599-605.	5.0	265
3	A20 (TNFAIP3) deficiency in myeloid cells triggers erosive polyarthritis resembling rheumatoid arthritis. <i>Nature Genetics</i> , 2011, 43, 908-912.	21.4	250
4	Ictal onset localization through connectivity analysis of intracranial <sc>EEG</sc> signals in patients with refractory epilepsy. <i>Epilepsia</i> , 2013, 54, 1409-1418.	5.1	116
5	Association of short-term cognitive decline and MCI-to-AD dementia conversion with CSF, MRI, amyloid- and 18F-FDG-PET imaging. <i>NeuroImage: Clinical</i> , 2019, 22, 101771.	2.7	108
6	Monte Carlo simulations of a scintillation camera using GATE: validation and application modelling. <i>Physics in Medicine and Biology</i> , 2003, 48, 3021-3042.	3.0	103
7	Influence of Skull Modeling Approaches on EEG Source Localization. <i>Brain Topography</i> , 2014, 27, 95-111.	1.8	88
8	The Cerebrospinal Fluid $A\beta_{42}/A\beta_{40}$ Ratio Improves Concordance with Amyloid-PET for Diagnosing Alzheimer's Disease in a Clinical Setting. <i>Journal of Alzheimer's Disease</i> , 2017, 60, 561-576.	2.6	82
9	Monte Carlo simulation in PET and SPECT instrumentation using GATE. <i>Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment</i> , 2004, 527, 180-189.	1.6	80
10	Validation of the GATE Monte Carlo simulation platform for modelling a CsI(Tl) scintillation camera dedicated to small-animal imaging. <i>Physics in Medicine and Biology</i> , 2004, 49, 271-285.	3.0	79
11	^{89}Zr PET imaging of the pharmacokinetic behavior of medium and high molar mass ^{89}Zr -labeled poly(2-ethyl-2-oxazoline) in comparison to poly(ethylene glycol). <i>Journal of Controlled Release</i> , 2016, 235, 63-71.	9.9	76
12	Accurate epileptogenic focus localization through time-variant functional connectivity analysis of intracranial electroencephalographic signals. <i>NeuroImage</i> , 2011, 56, 1122-1133.	4.2	75
13	Brain inflammation in a chronic epilepsy model: Evolving pattern of the translocator protein during epileptogenesis. <i>Neurobiology of Disease</i> , 2015, 82, 526-539.	4.4	69
14	Performance evaluation of small-animal multipinhole ^{18}F -PET scanners for mouse imaging. <i>European Journal of Nuclear Medicine and Molecular Imaging</i> , 2013, 40, 744-758.	6.4	68
15	Iterative CT Reconstruction Using Shearlet-Based Regularization. <i>IEEE Transactions on Nuclear Science</i> , 2013, 60, 3305-3317.	2.0	55
16	Comparison of Image Quality of Different Iodine Isotopes (I-123, I-124, and I-131). <i>Cancer Biotherapy and Radiopharmaceuticals</i> , 2007, 22, 423-430.	1.0	49
17	^{18}F -PBR111 PET Imaging in Healthy Controls and Schizophrenia: Test-Retest Reproducibility and Quantification of Neuroinflammation. <i>Journal of Nuclear Medicine</i> , 2018, 59, 1267-1274.	5.0	47
18	Hybrid scatter correction applied to quantitative holmium-166 SPECT. <i>Physics in Medicine and Biology</i> , 2006, 51, 4773-4787.	3.0	44

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19	Imaging brain inflammation in epilepsy. <i>Neuroscience</i> , 2014, 279, 238-252.	2.3	44
20	Use of the GATE Monte Carlo package for dosimetry applications. <i>Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment</i> , 2006, 569, 335-340.	1.6	43
21	An Integrated Framework to Quantitatively Link Mouse-Specific Hemodynamics to Aneurysm Formation in Angiotensin II-infused ApoE $\alpha\alpha$ mice. <i>Annals of Biomedical Engineering</i> , 2011, 39, 2430-2444.	2.5	43
22	Characterization of [^{99m}Tc]Duramycin as a SPECT Imaging Agent for Early Assessment of Tumor Apoptosis. <i>Molecular Imaging and Biology</i> , 2015, 17, 838-847.	2.6	43
23	^{99m}Tc -(CO) $_3$ His-Annexin A5 Micro-SPECT Demonstrates Increased Cell Death by Irinotecan During the Vascular Normalization Window Caused by Bevacizumab. <i>Journal of Nuclear Medicine</i> , 2011, 52, 1786-1794.	5.0	41
24	Replacing Vascular Corrosion Casting by In Vivo Micro-CT Imaging for Building 3D Cardiovascular Models in Mice. <i>Molecular Imaging and Biology</i> , 2011, 13, 78-86.	2.6	40
25	Development of a novel antibody-tetrazine conjugate for bioorthogonal pretargeting. <i>Organic and Biomolecular Chemistry</i> , 2016, 14, 7544-7551.	2.8	38
26	^{99m}Tc -Duramycin SPECT Imaging of Early Tumor Response to Targeted Therapy: A Comparison with ^{18}F -FDG PET. <i>Journal of Nuclear Medicine</i> , 2017, 58, 665-670.	5.0	38
27	Fast and memory-efficient Monte Carlo-based image reconstruction for whole-body PET. <i>Medical Physics</i> , 2010, 37, 3667-3676.	3.0	37
28	Hippocampal deep brain stimulation induces decreased rCBF in the hippocampal formation of the rat. <i>NeuroImage</i> , 2010, 52, 55-61.	4.2	37
29	Towards a reproducible protocol for repetitive and semi-quantitative rat brain imaging with ^{18}F -FDG: Exemplified in a memantine pharmacological challenge. <i>NeuroImage</i> , 2014, 96, 276-287.	4.2	37
30	Kinetics of angiogenic changes in a new mouse model for hepatocellular carcinoma. <i>Molecular Cancer</i> , 2010, 9, 219.	19.2	36
31	Acceleration of GATE SPECT simulations. <i>Medical Physics</i> , 2008, 35, 1476-1485.	3.0	35
32	Performance Characterization of an Actively Cooled Repetitive Transcranial Magnetic Stimulation Coil for the Rat. <i>Neuromodulation</i> , 2016, 19, 459-468.	0.8	35
33	State-associated changes in longitudinal [^{18}F]-PBR111 TSPO PET imaging of psychosis patients: Evidence for the accelerated ageing hypothesis?. <i>Brain, Behavior, and Immunity</i> , 2019, 77, 46-54.	4.1	35
34	Evaluation of 3D Monte Carlo-Based Scatter Correction for ^{201}Tl Cardiac Perfusion SPECT. <i>Journal of Nuclear Medicine</i> , 2007, 48, 637-644.	5.0	34
35	$\text{N}^{\text{Acetyl}}\text{cysteine}$ and MK-801-Induced Changes in Glutamate Levels Do Not Affect In Vivo Binding of Metabotropic Glutamate 5 Receptor Radioligand ^{11}C -ABP688 in Rat Brain. <i>Journal of Nuclear Medicine</i> , 2013, 54, 1954-1961.	5.0	34
36	^{18}F -FDG PET, the early phases and the delivery rate of ^{18}F -AV45 PET as proxies of cerebral blood flow in Alzheimer's disease: Validation against ^{15}O -H $_2$ O PET. <i>Alzheimer's and Dementia</i> , 2019, 15, 1172-1182.	0.8	33

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37	A three-dimensional theoretical model incorporating spatial detection uncertainty in continuous detector PET. <i>Physics in Medicine and Biology</i> , 2004, 49, 2337-2350.	3.0	32
38	The Label Matters: ^{18}F PET Imaging of the Biodistribution of Low Molar Mass ^{89}Zr and ^{18}F -Labeled Poly(2-ethyl-2-oxazoline). <i>Biomacromolecules</i> , 2017, 18, 96-102.	5.4	32
39	Neuroimaging of Subacute Brain Inflammation and Microstructural Changes Predicts Long-Term Functional Outcome after Experimental Traumatic Brain Injury. <i>Journal of Neurotrauma</i> , 2019, 36, 768-788.	3.4	32
40	Validation and noninvasive kinetic modeling of [^{11}C]UCB-J PET imaging in mice. <i>Journal of Cerebral Blood Flow and Metabolism</i> , 2020, 40, 1351-1362.	4.3	32
41	Reconstruction of 2D PET data with Monte Carlo generated system matrix for generalized natural pixels. <i>Physics in Medicine and Biology</i> , 2006, 51, 3105-3125.	3.0	31
42	In vivo evaluation of ^{18}F -labeled TCO for pre-targeted PET imaging in the brain. <i>Nuclear Medicine and Biology</i> , 2014, 41, 513-523.	0.6	31
43	Early Prediction of Tumor Response to Treatment: Preclinical Validation of $^{99\text{m}}\text{Tc}$ -Duramycin. <i>Journal of Nuclear Medicine</i> , 2016, 57, 805-811.	5.0	30
44	Non-invasive PET imaging of brain inflammation at disease onset predicts spontaneous recurrent seizures and reflects comorbidities. <i>Brain, Behavior, and Immunity</i> , 2017, 61, 69-79.	4.1	30
45	Accurate Monte Carlo modelling of the back compartments of SPECT cameras. <i>Physics in Medicine and Biology</i> , 2011, 56, 87-104.	3.0	29
46	Validation of the Semiquantitative Static SUVR Method for ^{18}F -AV45 PET by Pharmacokinetic Modeling with an Arterial Input Function. <i>Journal of Nuclear Medicine</i> , 2017, 58, 1483-1489.	5.0	29
47	In vivo molecular neuroimaging of glucose utilization and its association with fibrillar amyloid- β^2 load in aged APPS1-21 mice. <i>Alzheimer's Research and Therapy</i> , 2015, 7, 76.	6.2	27
48	Longitudinal quantification of inflammation in the murine dextran sodium sulfate-induced colitis model using ^{18}F PET/CT1. <i>Inflammatory Bowel Diseases</i> , 2011, 17, 2058-2064.	1.9	26
49	Noninvasive Relative Quantification of [^{11}C]ABP688 PET Imaging in Mice Versus an Input Function Measured Over an Arteriovenous Shunt. <i>Frontiers in Neurology</i> , 2018, 9, 516.	2.4	26
50	Fast hybrid SPECT simulation including efficient septal penetration modelling (SP-PSF). <i>Physics in Medicine and Biology</i> , 2007, 52, 3027-3043.	3.0	24
51	Resting-state functional MRI and [^{18}F]-FDG PET demonstrate differences in neuronal activity between commonly used mouse strains. <i>NeuroImage</i> , 2016, 125, 571-577.	4.2	24
52	Evaluation of Small-Animal PET Outcome Measures to Detect Disease Modification Induced by BACE Inhibition in a Transgenic Mouse Model of Alzheimer Disease. <i>Journal of Nuclear Medicine</i> , 2017, 58, 1977-1983.	5.0	24
53	Dipole estimation errors due to not incorporating anisotropic conductivities in realistic head models for EEG source analysis. <i>Physics in Medicine and Biology</i> , 2009, 54, 6079-6093.	3.0	23
54	Fast simulation of yttrium-90 bremsstrahlung photons with GATE . <i>Medical Physics</i> , 2010, 37, 2943-2950.	3.0	23

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55	Synthesis and Evaluation of a Zr-89-Labeled Monoclonal Antibody for Immuno-PET Imaging of Amyloid- β Deposition in the Brain. <i>Molecular Imaging and Biology</i> , 2016, 18, 598-605.	2.6	23
56	Awake ^{18}F -FDG PET Imaging of Memantine-Induced Brain Activation and Test-Retest in Freely Running Mice. <i>Journal of Nuclear Medicine</i> , 2019, 60, 844-850.	5.0	23
57	Single-Photon Emission Computed Tomographic Imaging of the Early Time Course of Therapy-Induced Cell Death Using Technetium 99m Tricarbonyl His-Annexin A5 in a Colorectal Cancer Xenograft Model. <i>Molecular Imaging</i> , 2012, 11, 7290.2011.00034.	1.4	22
58	The Effects of Physiological and Methodological Determinants on ^{18}F -FDG Mouse Brain Imaging Exemplified in a Double Transgenic Alzheimer Model. <i>Molecular Imaging</i> , 2016, 15, 153601211562491.	1.4	21
59	Comparing planar image quality of rotating slit and parallel hole collimation: influence of system modeling. <i>Physics in Medicine and Biology</i> , 2008, 53, 1989-2002.	3.0	20
60	Influence of skull conductivity perturbations on EEG dipole source analysis. <i>Medical Physics</i> , 2010, 37, 4475-4484.	3.0	20
61	Fast and Accurate Rat Head Motion Tracking With Point Sources for Awake Brain PET. <i>IEEE Transactions on Medical Imaging</i> , 2017, 36, 1573-1582.	8.9	20
62	^{18}F -Flortanidazole Hypoxia PET Holds Promise as a Prognostic and Predictive Imaging Biomarker in a Lung Cancer Xenograft Model Treated with Metformin and Radiotherapy. <i>Journal of Nuclear Medicine</i> , 2019, 60, 34-40.	5.0	20
63	In vitro and in vivo evaluation of $^{99\text{m}}\text{Tc}$ -labeled tricarbonyl His-annexin A5 as an imaging agent for the detection of phosphatidylserine-expressing cells. <i>Nuclear Medicine and Biology</i> , 2010, 37, 965-975.	0.6	19
64	Small-animal repetitive transcranial magnetic stimulation combined with ^{18}F -FDG microPET to quantify the neuromodulation effect in the rat brain. <i>Neuroscience</i> , 2014, 275, 436-443.	2.3	19
65	Accelerated high-frequency repetitive transcranial magnetic stimulation enhances motor activity in rats. <i>Neuroscience</i> , 2017, 347, 103-110.	2.3	19
66	PET imaging of freely moving interacting rats. <i>NeuroImage</i> , 2019, 191, 560-567.	4.2	19
67	An investigation of temporal regularization techniques for dynamic PET reconstructions using temporal splines. <i>Medical Physics</i> , 2007, 34, 1766-1778.	3.0	18
68	Cluster computing software for GATE simulations. <i>Medical Physics</i> , 2007, 34, 1926-1933.	3.0	18
69	Noninvasive Whole-Body Imaging of Phosphatidylethanolamine as a Cell Death Marker Using $^{99\text{m}}\text{Tc}$ -Duramycin During TNF-Induced SIRS. <i>Journal of Nuclear Medicine</i> , 2018, 59, 1140-1145.	5.0	18
70	Longitudinal Characterization of mGluR5 Using ^{11}C -ABP688 PET Imaging in the Q175 Mouse Model of Huntington Disease. <i>Journal of Nuclear Medicine</i> , 2018, 59, 1722-1727.	5.0	18
71	Synaptic Vesicle Glycoprotein 2A Is Affected in the Central Nervous System of Mice with Huntington Disease and in the Brain of a Human with Huntington Disease Postmortem. <i>Journal of Nuclear Medicine</i> , 2022, 63, 942-947.	5.0	18
72	Development of a ligand for in vivo imaging of mutant huntingtin in Huntington's disease. <i>Science Translational Medicine</i> , 2022, 14, eabm3682.	12.4	18

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73	System characteristics of SPECT with a slat collimated strip detector. Physics in Medicine and Biology, 2006, 51, 391-405.	3.0	17
74	Reconstruction for Gated Dynamic Cardiac PET Imaging Using a Tensor Product Spline Basis. IEEE Transactions on Nuclear Science, 2007, 54, 80-91.	2.0	17
75	MR-based spatial normalization improves [18F]MNI-659 PET regional quantification and detectability of disease effect in the Q175 mouse model of Huntington's disease. PLoS ONE, 2018, 13, e0206613.	2.5	17
76	Caspase-3 probes for PET imaging of apoptotic tumor response to anticancer therapy. Organic and Biomolecular Chemistry, 2019, 17, 4801-4824.	2.8	17
77	GATE simulations for optimization of pinhole imaging. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 2006, 569, 359-363.	1.6	16
78	Physics process level discrimination of detections for <sc>GATE</sc>: Assessment of contamination in SPECT and spurious activity in PET. Medical Physics, 2009, 36, 1053-1060.	3.0	16
79	Effect of the static magnetic field of the MR-scanner on ERPs: Evaluation of visual, cognitive and motor potentials. Clinical Neurophysiology, 2010, 121, 672-685.	1.5	16
80	Synthesis and in vivo preclinical evaluation of an 18F labeled uPA inhibitor as a potential PET imaging agent. Nuclear Medicine and Biology, 2014, 41, 477-487.	0.6	16
81	Evaluation of [18F]CP18 as a Substrate-Based Apoptosis Imaging Agent for the Assessment of Early Treatment Response in Oncology. Molecular Imaging and Biology, 2017, 19, 560-569.	2.6	16
82	Improved stability of a novel fluorine-18 labeled TCO analogue for pretargeted PET imaging. Nuclear Medicine and Biology, 2019, 76-77, 36-42.	0.6	16
83	Single-photon emission computed tomographic imaging of the early time course of therapy-induced cell death using technetium 99m tricarbonyl His-annexin A5 in a colorectal cancer xenograft model. Molecular Imaging, 2012, 11, 135-47.	1.4	16
84	SPECT imaging of high energy isotopes and isotopes with high energy contaminants with rotating slat collimators. Medical Physics, 2009, 36, 4257-4267.	3.0	15
85	Colonoscopy and μ PET/CT are Valid Techniques to Monitor Inflammation in the Adoptive Transfer Colitis Model in Mice. Inflammatory Bowel Diseases, 2013, 19, 967-976.	1.9	15
86	Longitudinal Characterization of [18F]-FDG and [18F]-AV45 Uptake in the Double Transgenic TASTPM Mouse Model. Journal of Alzheimer's Disease, 2016, 55, 1537-1548.	2.6	15
87	Preclinical molecular imaging of glutamatergic and dopaminergic neuroreceptor kinetics in obsessive compulsive disorder. Progress in Neuro-Psychopharmacology and Biological Psychiatry, 2017, 77, 90-98.	4.8	15
88	In vitro and In vivo Assessment of Suitable Reference Region and Kinetic Modelling for the mGluR1 Radioligand [11C]ITDM in Mice. Molecular Imaging and Biology, 2020, 22, 854-863.	2.6	15
89	Validation of a spatially variant resolution model for small animal brain PET studies. Biomedical Physics and Engineering Express, 2020, 6, 045001.	1.2	15
90	Evolution of the GATE project: new results and developments. Nuclear Physics, Section B, Proceedings Supplements, 2007, 172, 101-103.	0.4	14

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91	Quantifying the Effect of Repetitive Transcranial Magnetic Stimulation in the Rat Brain by ^{18}F SPECT CBF Scans. <i>Brain Stimulation</i> , 2013, 6, 554-562.	1.6	14
92	A simulation study on the impact of the blood flow-dependent component in ^{18}F AV45 SUVR in Alzheimer's disease. <i>PLoS ONE</i> , 2017, 12, e0189155.	2.5	14
93	Quantitative ^{18}F PET Imaging of Cerebral Glucose Metabolism and Amyloidosis in the TASTPM Double Transgenic Mouse Model of Alzheimer's Disease. <i>Current Alzheimer Research</i> , 2015, 12, 694-703.	1.4	14
94	Preclinical Evaluation of Monoclonal Antibody 14C5 for Targeting Pancreatic Cancer. <i>Cancer Biotherapy and Radiopharmaceuticals</i> , 2010, 25, 193-205.	1.0	13
95	Radiosynthesis and in vivo evaluation of ^{11}C -labelled pyrrole-2-carboxamide derivatives as novel radioligands for PET imaging of monoamine oxidase A. <i>Nuclear Medicine and Biology</i> , 2010, 37, 459-467.	0.6	13
96	Antitumour Efficacy of Two Paclitaxel Formulations for Hyperthermic Intraperitoneal Chemotherapy (HIPEC) in an In Vivo Rat Model. <i>Pharmaceutical Research</i> , 2011, 28, 1653-1660.	3.5	13
97	Rat Brain Normalization Templates for Robust Regional Analysis of ^{11}C ABP688 Positron Emission Tomography/Computed Tomography. <i>Molecular Imaging</i> , 2015, 14, 7290.2014.00037.	1.4	13
98	Efficacy Screening of <i>Gloriosa Superba</i> Extracts in a Murine Pancreatic Cancer Model Using ^{18}F -FDG PET/CT for Monitoring Treatment Response. <i>Cancer Biotherapy and Radiopharmaceuticals</i> , 2016, 31, 99-109.	1.0	13
99	Multiprobe molecular imaging of an NMDA receptor hypofunction rat model for glutamatergic dysfunction. <i>Psychiatry Research - Neuroimaging</i> , 2016, 248, 1-11.	1.8	13
100	The effect of occipital nerve field stimulation on the descending pain pathway in patients with fibromyalgia: a water PET and EEG imaging study. <i>BMC Neurology</i> , 2018, 18, 191.	1.8	13
101	Acute Ketamine Infusion in Rat Does Not Affect In Vivo ^{11}C ABP688 Binding to Metabotropic Glutamate Receptor Subtype 5. <i>Molecular Imaging</i> , 2018, 17, 153601211878863.	1.4	13
102	Removal of the ballistocardiographic artifact from EEG-fMRI data: a canonical correlation approach. <i>Physics in Medicine and Biology</i> , 2009, 54, 1673-1689.	3.0	12
103	Design of a high resolution scintillator based SPECT detector (SPECTatress). <i>Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment</i> , 2011, 648, S107-S110.	1.6	12
104	The ^{18}F -FDG ^{18}F PET Readout of a Brain Activation Model to Evaluate the Metabotropic Glutamate Receptor 2 Positive Allosteric Modulator JNJ-42153605. <i>Journal of Pharmacology and Experimental Therapeutics</i> , 2014, 350, 375-386.	2.5	12
105	Deep Brain Stimulation of the Prelimbic Medial Prefrontal Cortex: Quantification of the Effect on Glucose Metabolism in the Rat Brain Using ^{18}F -FDG MicroPET. <i>Molecular Imaging and Biology</i> , 2014, 16, 838-845.	2.6	12
106	Synthesis and preclinical evaluation of an ^{18}F labeled PDE7 inhibitor for PET neuroimaging. <i>Nuclear Medicine and Biology</i> , 2015, 42, 975-981.	0.6	12
107	Preclinical Evaluation of a Novel ^{18}F -Labeled dTCO-Amide Derivative for Bioorthogonal Pretargeted Positron Emission Tomography Imaging. <i>ACS Omega</i> , 2020, 5, 4449-4456.	3.5	12
108	Sapap3 deletion causes dynamic synaptic density abnormalities: a longitudinal ^{11}C UCB-J PET study in a model of obsessive-compulsive disorder-like behaviour. <i>EJNMMI Research</i> , 2020, 10, 140.	2.5	12

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109	Effect of cyclosporin A administration on the biodistribution and multipinhole $\frac{1}{4}$ SPECT imaging of [123I]R91150 in rodent brain. <i>European Journal of Nuclear Medicine and Molecular Imaging</i> , 2009, 36, 446-453.	6.4	11
110	[18F]-FDG PET neuroimaging in rats with quinpirole-induced checking behavior as a model for obsessive compulsive disorder. <i>Psychiatry Research - Neuroimaging</i> , 2016, 257, 31-38.	1.8	11
111	Coadministration of a <i>Gloriosa superba</i> extract improves the in vivo antitumoural activity of gemcitabine in a murine pancreatic tumour model. <i>Phytomedicine</i> , 2016, 23, 1434-1440.	5.3	11
112	Preclinical evaluation of [^{111}In]MICA-401, an activity-based probe for SPECT imaging of α -in vivo uPA activity. <i>Contrast Media and Molecular Imaging</i> , 2016, 11, 448-458.	0.8	11
113	Baseline [18F]FMISO $\frac{1}{4}$ PET as a Predictive Biomarker for Response to HIF-1 α Inhibition Combined with 5-FU Chemotherapy in a Human Colorectal Cancer Xenograft Model. <i>Molecular Imaging and Biology</i> , 2016, 18, 606-616.	2.6	11
114	Markerless rat head motion tracking using structured light for brain PET imaging of unrestrained awake small animals. <i>Physics in Medicine and Biology</i> , 2017, 62, 1744-1758.	3.0	11
115	[$^{99\text{m}}\text{Tc}$]duramycin for cell death imaging: Impact of kit formulation, purification and species difference. <i>Nuclear Medicine and Biology</i> , 2018, 56, 1-9.	0.6	11
116	Effects of metformin on tumor hypoxia and radiotherapy efficacy: a [18F]HX4 PET imaging study in colorectal cancer xenografts. <i>EJNMMI Research</i> , 2019, 9, 74.	2.5	11
117	Translation of Preclinical PET Imaging Findings: Challenges and Motion Correction to Overcome the Confounding Effect of Anesthetics. <i>Frontiers in Medicine</i> , 2021, 8, 753977.	2.6	11
118	GATE: Improving the computational efficiency. <i>Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment</i> , 2006, 569, 341-345.	1.6	10
119	Neural Substrates of Conversion Deafness in a Cochlear Implant Patient. <i>Otology and Neurotology</i> , 2014, 35, 1780-1784.	1.3	10
120	Use of a Ray-Based Reconstruction Algorithm to Accurately Quantify Preclinical MicroSPECT Images. <i>Molecular Imaging</i> , 2014, 13, 7290.2014.00007.	1.4	10
121	Absence of Cardiovascular Manifestations in a Haploinsufficient <i>Tgfr1</i> Mouse Model. <i>PLoS ONE</i> , 2014, 9, e89749.	2.5	9
122	TSPO PET upregulation predicts epileptic phenotype at disease onset independently from chronic TSPO expression in a rat model of temporal lobe epilepsy. <i>NeuroImage: Clinical</i> , 2021, 31, 102701.	2.7	9
123	The geometric transfer function for a slat collimator mounted on a strip detector. <i>IEEE Transactions on Nuclear Science</i> , 2005, 52, 708-713.	2.0	8
124	In vivo evaluation of [123I]-4-(2-(bis(4-fluorophenyl)methoxy)ethyl)-1-(4-iodobenzyl)piperidine, an iodinated SPECT tracer for imaging the P-gp transporter. <i>Nuclear Medicine and Biology</i> , 2010, 37, 469-477.	0.6	8
125	Low-Dose Micro-CT Imaging for Vascular Segmentation and Analysis Using Sparse-View Acquisitions. <i>PLoS ONE</i> , 2013, 8, e68449.	2.5	8
126	Preclinical Comparison of the Amyloid- β Radioligands [11C]Pittsburgh compound B and [18F]florbetaben in Aged APPPS1-21 and BRI1-42 Mouse Models of Cerebral Amyloidosis. <i>Molecular Imaging and Biology</i> , 2015, 17, 688-696.	2.6	8

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127	Evaluation of [¹⁸ F]BR420 and [¹⁸ F]BR351 as radiotracers for MMP α 9 imaging in colorectal cancer. Journal of Labelled Compounds and Radiopharmaceuticals, 2017, 60, 69-79.	1.0	8
128	Elevated Type 1 Metabotropic Glutamate Receptor Availability in a Mouse Model of Huntington α ™s Disease: a Longitudinal PET Study. Molecular Neurobiology, 2020, 57, 2038-2047.	4.0	8
129	Progression of obsessive compulsive disorder-like grooming in Sapap3 knockout mice: A longitudinal [11C]ABP688 PET study. Neuropharmacology, 2020, 177, 108160.	4.1	8
130	Motion Dependent and Spatially Variant Resolution Modeling for PET Rigid Motion Correction. IEEE Transactions on Medical Imaging, 2020, 39, 2518-2530.	8.9	8
131	Longitudinal preclinical evaluation of the novel radioligand [11C]CHDI-626 for PET imaging of mutant huntingtin aggregates in Huntington α ™s disease. European Journal of Nuclear Medicine and Molecular Imaging, 2022, 49, 1166-1175.	6.4	8
132	Validation, kinetic modeling, and test-retest reproducibility of [¹⁸ F]SynVesT-1 for PET imaging of synaptic vesicle glycoprotein 2A in mice. Journal of Cerebral Blood Flow and Metabolism, 2022, 42, 1867-1878.	4.3	8
133	Optimization of temporal basis functions in dynamic PET imaging. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 2006, 569, 425-428.	1.6	7
134	Automated identification of ERP peaks through Dynamic Time Warping: An application to developmental dyslexia. Clinical Neurophysiology, 2009, 120, 1819-1827.	1.5	7
135	Characterization of the ringing artifacts in rotator α -based reconstruction with Monte Carlo α -based resolution compensation for PET. Medical Physics, 2010, 37, 4648-4660.	3.0	7
136	In Vivo Preclinical Molecular Imaging of Repeated Exposure to an <i>N</i> -methyl-d-aspartate Antagonist and a Glutaminase Inhibitor as Potential Glutamatergic Modulators. Journal of Pharmacology and Experimental Therapeutics, 2019, 368, 382-390.	2.5	7
137	Fast 3D iterative image reconstruction for SPECT with rotating slat collimators. Physics in Medicine and Biology, 2009, 54, 715-729.	3.0	6
138	Measurement of porto-systemic shunting in mice by novel three-dimensional micro-single photon emission computed tomography imaging enabling longitudinal follow-up. Liver International, 2010, 30, 1211-1220.	3.9	6
139	Subspace electrode selection methodology for the reduction of the effect of uncertain conductivity values in the EEG dipole localization: a simulation study using a patient-specific head model. Physics in Medicine and Biology, 2012, 57, 1963-1986.	3.0	6
140	Iterative CT reconstruction using shearlet-based regularization. , 2012, , .		6
141	Continuous Flushing of the Bladder in Rodents Reduces Artifacts and Improves Quantification in Molecular Imaging. Molecular Imaging, 2014, 13, 7290.2014.00013.	1.4	6
142	Prelimbic Cortical Injections of a GABA Agonist and Antagonist: In Vivo Quantification of the Effect in the Rat Brain Using [18F] FDG MicroPET. Molecular Imaging and Biology, 2015, 17, 856-864.	2.6	6
143	Characterization of an Orthotopic Colorectal Cancer Mouse Model and Its Feasibility for Accurate Quantification in Positron Emission Tomography. Molecular Imaging and Biology, 2017, 19, 762-771.	2.6	6
144	How to Modulate Tumor Hypoxia for Preclinical In Vivo Imaging Research. Contrast Media and Molecular Imaging, 2018, 2018, 1-17.	0.8	6

#	ARTICLE	IF	CITATIONS
145	Neural Substrates of Tinnitus in an Auditory Brainstem Implant Patient: A Preliminary Molecular Imaging Study Using H ₂ ¹⁵ O-PET Including a 5-year Follow-up of Auditory Performance and Tinnitus Perception. <i>Otology and Neurotology</i> , 2020, 41, e15-e20.	1.3	6
146	[¹⁸ F]ZCDD083: A PFKFB3-Targeted PET Tracer for Atherosclerotic Plaque Imaging. <i>ACS Medicinal Chemistry Letters</i> , 2020, 11, 933-939.	2.8	6
147	Decreased levels of active uPA and KLK ₈ assessed by [¹¹¹ In]MICA- ⁴⁰¹ binding correlate with the seizure burden in an animal model of temporal lobe epilepsy. <i>Epilepsia</i> , 2017, 58, 1615-1625.	5.1	5
148	Kinetic Modelling and Test-Retest Reproducibility for the Dopamine D ₁ R Radioligand [¹¹ C]SCH23390 in Healthy and Diseased Mice. <i>Molecular Imaging and Biology</i> , 2021, 23, 208-219.	2.6	5
149	Degradation of myocardial perfusion SPECT images caused by contaminants in thallous (201Tl) chloride. <i>European Journal of Nuclear Medicine and Molecular Imaging</i> , 2008, 35, 922-932.	6.4	4
150	Monte Carlo Simulations in Nuclear Medicine Imaging. , 2009, , 177-209.		4
151	Longitudinal follow-up of ascending versus abdominal aortic aneurysm formation in angiotensin II-infused ApoE ^{-/-} mice. <i>Artery Research</i> , 2014, 8, 16.	0.6	4
152	Glutaminase activity in GLS1 Het mouse brain compared to putative pharmacological inhibition by ebisen using ex vivo MRS. <i>Neurochemistry International</i> , 2019, 129, 104508.	3.8	4
153	FIRST RESULTS WITH THE CLEARPET SMALL ANIMAL PET SCANNERS. , 2006, , 149-164.		4
154	Sensitivity of SPECT with rotating slat collimators. , 0, , .		3
155	The Heterozygous Lemd3 +/CT Mouse Is Not a Murine Model for Osteopoikilosis in Humans. <i>Calcified Tissue International</i> , 2009, 85, 546-551.	3.1	3
156	Tomographic image quality of rotating slat versus parallel hole-collimated SPECT. <i>Physics in Medicine and Biology</i> , 2011, 56, 7205-7222.	3.0	3
157	O2-07-05: Investigations of brain glucose utilization in three transgenic mouse strains that develop neuropathological features of Alzheimer's disease. , 2013, 9, P329-P329.		3
158	In Vivo Amyloid- β Imaging in the APPPS1 ⁻²¹ Transgenic Mouse Model with a ⁸⁹ Zr-Labeled Monoclonal Antibody. <i>Frontiers in Aging Neuroscience</i> , 2016, 8, 67.	3.4	3
159	Early Changes in [¹⁸ F]FDG Uptake as a Readout for PI3K/Akt/mTOR Targeted Drugs in HER-2-Positive Cancer Xenografts. <i>Molecular Imaging</i> , 2021, 2021, 1-14.	1.4	3
160	Simulation study comparing the imaging performance of a solid state detector with a rotating slat collimator versus parallel beam collimator setups. , 2004, , .		2
161	Transmission imaging with a moving point source: influence of crystal thickness and collimator type. <i>IEEE Transactions on Nuclear Science</i> , 2005, 52, 166-173.	2.0	2
162	PET Reconstruction Using Generalized Natural Pixels and a Monte Carlo Generated System Matrix. , 2006, , .		2

#	ARTICLE	IF	CITATIONS
163	Comparison of 3D SPECT imaging with a rotating slit collimator and a parallel hole collimator. , 2008, , .		2
164	Fan beam forced detection in Gate. , 2009, , .		2
165	Simulation of complex geometries in GATE. , 2009, , .		2
166	A high resolution scintillator based SPECT detector with digital pulse processing (SPECTatress). , 2010, , .		2
167	Influence of skull inhomogeneities on EEG source localization. , 2011, , .		2
168	Evaluation of [18F]Fluorothymidine as a Biomarker for Early Therapy Response in a Mouse Model of Colorectal Cancer. Molecular Imaging and Biology, 2017, 19, 109-119.	2.6	2
169	Neuroreceptor kinetics in rats repeatedly exposed to quinpirole as a model for OCD. PLoS ONE, 2019, 14, e0213313.	2.5	2
170	Low activity [11C]raclopride kinetic modeling in the mouse brain using the spatiotemporal kernel method. Physics in Medicine and Biology, 2021, 66, 115005.	3.0	2
171	Estimation of the net influx rate Ki and the cerebral metabolic rate of glucose MRglc using a single static [18F]FDG PET scan in rats. NeuroImage, 2021, 233, 117961.	4.2	2
172	Compression and reconstruction of sorted PET listmode data. Nuclear Medicine Communications, 2005, 26, 819-825.	1.1	1
173	A penalized Algebraic Reconstruction Technique (pART) for PET image reconstruction. , 2007, , .		1
174	Contrast noise behaviour of a rotating slit collimated gamma camera. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 2007, 571, 274-277.	1.6	1
175	Monte-Carlo system modeling for PET reconstruction: A rotator approach. , 2008, , .		1
176	Using GATE as a forward projector in iterative SPECT reconstruction. , 2008, , .		1
177	Scatter effects of MR components in PET-MR inserts. , 2009, , .		1
178	Effect of geometrical constraints on PET performance in whole body simultaneous PET-MR. , 2009, , .		1
179	IC-P-044: LONGITUDINAL MONITORING OF β -AMYLOID PATHOLOGY AND CEREBRAL HYPOMETABOLISM IN A DOUBLE TRANSGENIC MOUSE MODEL OF ALZHEIMER'S DISEASE. , 2014, 10, P27-P27.		1
180	MicroPET Outperforms Beta-Microprobes in Determining Neuroreceptor Availability under Pharmacological Restriction for Cold Mass Occupancy. Frontiers in Neuroscience, 2017, 11, 47.	2.8	1

#	ARTICLE	IF	CITATIONS
181	Spatially variant point spread function for PET rigid motion correction. , 2019, , .		1
182	Molecular Imaging of mGluR5 Availability with [11C]ABP68 in Glutaminase Heterozygous Mice. Cellular and Molecular Neurobiology, 2019, 39, 255-263.	3.3	1
183	Quantification of Metabotropic Glutamate Receptor 5 Availability With Both [11C]ABP688 and [18F]FPEB Positron Emission Tomography in the Sapap3 Knockout Mouse Model for Obsessive-Compulsive-like Behavior. Biological Psychiatry: Cognitive Neuroscience and Neuroimaging, 2022, 7, 607-615.	1.5	1
184	Correction for partial volume effects in brain perfusion ECT imaging. , 2003, , .		0
185	Theoretical LOR model incorporating spatial uncertainty in continuous detector PET. , 2003, , .		0
186	Transmission imaging with a moving point source: influence of crystal thickness and collimator type. , 0, , .		0
187	Analytical model for Solstice detector response. , 0, , .		0
188	Optimizing the Scalability of Parallelized GATE Simulations. , 2006, , .		0
189	LROC assessment of non-linear filtering methods in Ga-67 SPECT imaging. , 2006, 6146, 106.		0
190	Acceleration of GATE SPECT simulations. , 2007, , .		0
191	High resolution μSPECT for brain activation analysis in small animals. , 2009, , .		0
192	Epileptogenic focus localization through connectivity analysis of the intracranial EEG: A retrospective study in 2 patients. , 2011, , .		0
193	A20 (TNFAIP3) deficiency in myeloid cells triggers rheumatoid arthritis. Annals of the Rheumatic Diseases, 2011, 70, A39-A40.	0.9	0
194	Su1934 Activation Status of the Central Nervous System and Lumbar Dorsal Root Ganglia in a Mouse Model of Polymicrobial Abdominal Septic Ileus. Gastroenterology, 2016, 150, S592-S593.	1.3	0
195	Abstract 3910: Targeting urokinase plasminogen activator: evaluation of activity-based imaging probes in an orthotopic breast cancer model.. , 2013, , .		0
196	Small Animal Molecular Imaging Through 1/4PET and 1/4SPECT. , 2014, , 47-84.		0
197	Abstract 1875: [18F]HX4 shows potential as a predictive biomarker for the radiosensitizing capacities of metformin in a NSCLC xenograft model. , 2017, , .		0
198	Spatiotemporal Kernel Reconstruction for Linear Parametric Neurotransmitter PET Kinetic Modeling in Motion Correction Brain PET of Awake Rats. Frontiers in Neuroscience, 2022, 16, .	2.8	0