Roger N Gunn

List of Publications by Year in descending order

Source: https://exaly.com/author-pdf/7746487/publications.pdf

Version: 2024-02-01

247 papers

19,268 citations

65 h-index 131 g-index

272 all docs

272 docs citations

times ranked

272

15156 citing authors

#	Article	IF	CITATIONS
1	Consensus Nomenclature for in vivo Imaging of Reversibly Binding Radioligands. Journal of Cerebral Blood Flow and Metabolism, 2007, 27, 1533-1539.	4.3	1,840
2	Evidence for striatal dopamine release during a video game. Nature, 1998, 393, 266-268.	27.8	1,079
3	Parametric Imaging of Ligand-Receptor Binding in PET Using a Simplified Reference Region Model. Neurolmage, 1997, 6, 279-287.	4.2	998
4	In-vivo measurement of activated microglia in dementia. Lancet, The, 2001, 358, 461-467.	13.7	983
5	Dopamine release from nigral transplants visualized in vivo in a Parkinson's patient. Nature Neuroscience, 1999, 2, 1137-1140.	14.8	663
6	An 18-kDa Translocator Protein (TSPO) Polymorphism Explains Differences in Binding Affinity of the PET Radioligand PBR28. Journal of Cerebral Blood Flow and Metabolism, 2012, 32, 1-5.	4.3	642
7	Brain Serotonin1A Receptor Binding Measured by Positron Emission Tomography With [11C]WAY-100635. Archives of General Psychiatry, 2000, 57, 174.	12.3	597
8	Positron Emission Tomography Compartmental Models. Journal of Cerebral Blood Flow and Metabolism, 2001, 21, 635-652.	4.3	470
9	Imaging dopamine receptors in humans with $[11C]$ -(+)-PHNO: Dissection of D3 signal and anatomy. NeuroImage, 2011 , 54 , 264 - 277 .	4.2	359
10	Mixed-Affinity Binding in Humans with 18-kDa Translocator Protein Ligands. Journal of Nuclear Medicine, 2011, 52, 24-32.	5.0	330
11	Connectivity-Based Functional Analysis of Dopamine Release in the Striatum Using Diffusion-Weighted MRI and Positron Emission Tomography. Cerebral Cortex, 2014, 24, 1165-1177.	2.9	276
12	Tracer Kinetic Modeling of the 5-HT1AReceptor Ligand [carbonyl-11C]WAY-100635 for PET. NeuroImage, 1998, 8, 426-440.	4.2	267
13	Positron emission tomography molecular imaging for drug development. British Journal of Clinical Pharmacology, 2012, 73, 175-186.	2.4	263
14	Modeling Sensitization to Stimulants in Humans. Archives of General Psychiatry, 2006, 63, 1386-95.	12.3	255
15	Measuring Drug Occupancy in the Absence of a Reference Region: The Lassen Plot Re-Visited. Journal of Cerebral Blood Flow and Metabolism, 2010, 30, 46-50.	4.3	231
16	Dopamine Transmission in the Human Striatum during Monetary Reward Tasks. Journal of Neuroscience, 2004, 24, 4105-4112.	3.6	210
17	Pharmacological constraints associated with positron emission tomographic scanning of small laboratory animals. European Journal of Nuclear Medicine and Molecular Imaging, 1998, 25, 173-176.	6.4	198
18	Huntington's disease progression. Brain, 1999, 122, 2353-2363.	7.6	193

#	Article	IF	CITATIONS
19	Two Binding Sites for [³ H]PBR28 in Human Brain: Implications for TSPO PET Imaging of Neuroinflammation. Journal of Cerebral Blood Flow and Metabolism, 2010, 30, 1608-1618.	4.3	187
20	Positron Emission Tomography Compartmental Models: A Basis Pursuit Strategy for Kinetic Modeling. Journal of Cerebral Blood Flow and Metabolism, 2002, 22, 1425-1439.	4.3	181
21	Assessment of Spatial Normalization of PET Ligand Images Using Ligand-Specific Templates. NeuroImage, 1999, 9, 545-553.	4.2	165
22	Positron Emission Tomography Partial Volume Correction: Estimation and Algorithms. Journal of Cerebral Blood Flow and Metabolism, 2002, 22, 1019-1034.	4.3	161
23	In vivo visualization of activated glia by $[11C]$ (R)-PK11195-PET following herpes encephalitis reveals projected neuronal damage beyond the primary focal lesion. Brain, 2001, 124, 2014-2027.	7.6	153
24	Within-Subject Comparison of [$<$ sup>11 $<$ /sup>C]-(+)-PHNO and [$<$ sup>11 $<$ /sup>C]raclopride Sensitivity to Acute Amphetamine Challenge in Healthy Humans. Journal of Cerebral Blood Flow and Metabolism, 2012, 32, 127-136.	4.3	150
25	Synaptic density marker SV2A is reduced in schizophrenia patients and unaffected by antipsychotics in rats. Nature Communications, 2020, 11 , 246.	12.8	148
26	Minocycline reduces chronic microglial activation after brain trauma but increases neurodegeneration. Brain, 2018, 141, 459-471.	7.6	143
27	Imaging Dopamine D3 Receptors in the Human Brain with Positron Emission Tomography, [11C]PHNO, and a Selective D3 Receptor Antagonist. Biological Psychiatry, 2010, 68, 392-399.	1.3	140
28	Neuroinflammation in treated HIV-positive individuals. Neurology, 2016, 86, 1425-1432.	1.1	136
29	A Database of [11C]WAY-100635 Binding to 5-HT1A Receptors in Normal Male Volunteers: Normative Data and Relationship to Methodological, Demographic, Physiological, and Behavioral Variables. Neurolmage, 2002, 15, 620-632.	4.2	133
30	Positron emission tomography imaging of amphetamineâ€induced dopamine release in the human cortex: A comparative evaluation of the high affinity dopamine D _{2/3} radiotracers [¹¹ C]FLB 457 and [¹¹ C]fallypride. Synapse, 2009, 63, 447-461.	1.2	127
31	In vivo quantification of regional dopamineâ€D3 receptor binding potential of (+)â€PHNO: Studies in nonâ€human primates and transgenic mice. Synapse, 2009, 63, 782-793.	1.2	127
32	Reduced dopamine D1 receptor binding in the ventral striatum of cigarette smokers. Synapse, 2001, 42, 48-53.	1.2	118
33	Glucagon increases energy expenditure independently of brown adipose tissue activation in humans. Diabetes, Obesity and Metabolism, 2016, 18, 72-81.	4.4	118
34	Determination of [¹¹ C]PBR28 Binding Potential <i>in vivo:</i> A First Human TSPO Blocking Study. Journal of Cerebral Blood Flow and Metabolism, 2014, 34, 989-994.	4.3	117
35	Long-term trans-synaptic glial responses in the human thalamus after peripheral nerve injury. NeuroReport, 2001, 12, 3439-3442.	1.2	108
36	Toward an improved prediction of human <i>in vivo</i> brain penetration. Xenobiotica, 2008, 38, 1518-1535.	1.1	105

#	Article	IF	CITATIONS
37	Quantification of the Specific Translocator Protein Signal of ¹⁸ F-PBR111 in Healthy Humans: A Genetic Polymorphism Effect on In Vivo Binding. Journal of Nuclear Medicine, 2013, 54, 1915-1923.	5.0	105
38	Endogenous Opioid Release in the Human Brain Reward System Induced by Acute Amphetamine Administration. Biological Psychiatry, 2012, 72, 371-377.	1.3	104
39	Pittsburgh Compound B (11C-PIB) and Fluorodeoxyglucose (18 F-FDG) PET in Patients With Alzheimer Disease, Mild Cognitive Impairment, and Healthy Controls. Journal of Geriatric Psychiatry and Neurology, 2010, 23, 185-198.	2.3	103
40	Hippocampal Neuroinflammation, Functional Connectivity, and Depressive Symptoms in Multiple Sclerosis. Biological Psychiatry, 2016, 80, 62-72.	1.3	103
41	Loss of phosphodiesterase 10A expression is associated with progression and severity in Parkinson's disease. Brain, 2015, 138, 3003-3015.	7.6	100
42	Blunted Endogenous Opioid Release Following an Oral Amphetamine Challenge in Pathological Gamblers. Neuropsychopharmacology, 2016, 41, 1742-1750.	5.4	96
43	Characterisation of the Appearance of Radioactive Metabolites in Monkey and Human Plasma from the 5-HT1A Receptor Radioligand, [carbonyl-11C]WAY-100635â€"Explanation of High Signal Contrast in PET and an Aid to Biomathematical Modelling. Nuclear Medicine and Biology, 1998, 25, 215-223.	0.6	91
44	Altered PDE10A expression detectable early before symptomatic onset in Huntington's disease. Brain, 2015, 138, 3016-3029.	7.6	90
45	PET-SORTEO: A Monte Carlo-Based Simulator With High Count Rate Capabilities. IEEE Transactions on Nuclear Science, 2004, 51, 46-52.	2.0	89
46	Pharmacological differentiation of opioid receptor antagonists by molecular and functional imaging of target occupancy and food reward-related brain activation in humans. Molecular Psychiatry, 2011 , 16 , 826 - 835 .	7.9	89
47	Decreasing Amphetamine-Induced Dopamine Release by Acute Phenylalanine/Tyrosine Depletion: A PET/[11C]Raclopride Study in Healthy Men. Neuropsychopharmacology, 2004, 29, 427-432.	5.4	87
48	Amphetamine induced endogenous opioid release in the human brain detected with [11C]carfentanil PET: replication in an independent cohort. International Journal of Neuropsychopharmacology, 2014, 17, 2069-2074.	2.1	85
49	Kinetic Modeling of ¹¹ C-SB207145 Binding to 5-HT ₄ Receptors in the Human Brain In Vivo. Journal of Nuclear Medicine, 2009, 50, 900-908.	5.0	84
50	In Vivo Assessment of Brain White Matter Inflammation in Multiple Sclerosis with ¹⁸ F-PBR111 PET. Journal of Nuclear Medicine, 2014, 55, 1112-1118.	5.0	82
51	Pindolol Augmentation of Selective Serotonin Reuptake Inhibitors: PET Evidence That the Dose Used in Clinical Trials Is Too Low. American Journal of Psychiatry, 2001, 158, 2080-2082.	7.2	80
52	Comparison of four 11C-labeled PET ligands to quantify translocator protein 18ÂkDa (TSPO) in human brain: (R)-PK11195, PBR28, DPA-713, and ER176—based on recent publications that measured specific-to-non-displaceable ratios. EJNMMI Research, 2017, 7, 84.	2.5	80
53	Positron Emission Tomography Compartmental Models: A Basis Pursuit Strategy for Kinetic Modeling. Journal of Cerebral Blood Flow and Metabolism, 2002, , 1425-1439.	4.3	79
54	A Statistical Method for the Analysis of Positron Emission Tomography Neuroreceptor Ligand Data. Neurolmage, 2000, 12, 245-256.	4.2	78

#	Article	IF	Citations
55	The Simplified Reference Tissue Model: Model Assumption Violations and Their Impact on Binding Potential. Journal of Cerebral Blood Flow and Metabolism, 2015, 35, 304-311.	4.3	77
56	Neuroinflammation and its relationship to changes in brain volume and white matter lesions in multiple sclerosis. Brain, 2017, 140, 2927-2938.	7.6	75
57	Affinity and selectivity of [¹¹ C]â€(+)â€PHNO for the D3 and D2 receptors in the rhesus monkey brain in vivo. Synapse, 2012, 66, 489-500.	1.2	74
58	Identifying improved TSPO PET imaging probes through biomathematics: The impact of multiple TSPO binding sites in vivo. Neurolmage, 2012, 60, 902-910.	4.2	73
59	Imidazoline 2 binding sites reflecting astroglia pathology in Parkinson's disease: an in vivo11C-BU99008 PET study. Brain, 2019, 142, 3116-3128.	7.6	73
60	\hat{l}^2 -blocker Binding to Human 5-HT1A Receptors in vivo and in vitro Implications for Antidepressant Therapy. Neuropsychopharmacology, 2000, 23, 285-293.	5.4	70
61	Kinetic analysis of the translocator protein positron emission tomography ligand [18F]GE-180 in the human brain. European Journal of Nuclear Medicine and Molecular Imaging, 2016, 43, 2201-2210.	6.4	70
62	Serotonergic pathology and disease burden in the premotor and motor phase of A53T α-synuclein parkinsonism: a cross-sectional study. Lancet Neurology, The, 2019, 18, 748-759.	10.2	70
63	Estimation of serotonin transporter parameters with 11C-DASB in healthy humans: reproducibility and comparison of methods. Journal of Nuclear Medicine, 2006, 47, 815-26.	5.0	69
64	A Biomathematical Modeling Approach to Central Nervous System Radioligand Discovery and Development. Journal of Nuclear Medicine, 2009, 50, 1715-1723.	5.0	68
65	Evaluation of 11C-GSK189254 as a Novel Radioligand for the H3 Receptor in Humans Using PET. Journal of Nuclear Medicine, 2010, 51, 1021-1029.	5.0	68
66	2-[11C]Thymidine Positron Emission Tomography as an Indicator of Thymidylate Synthase Inhibition in Patients Treated With AG337. Journal of the National Cancer Institute, 2003, 95, 675-682.	6.3	67
67	PET Tau and Amyloid-β Burden in Mild Alzheimer's Disease: Divergent Relationship with Age, Cognition, and Cerebrospinal Fluid Biomarkers. Journal of Alzheimer's Disease, 2017, 60, 283-293.	2.6	67
68	Drug action at the 5-HT1A receptor in vivo: autoreceptor and postsynaptic receptor occupancy examined with PET and [carbonyl-11C]WAY-100635. Nuclear Medicine and Biology, 2000, 27, 509-513.	0.6	63
69	Orbitofrontal Connectivity with Resting-State Networks Is Associated with Midbrain Dopamine D3 Receptor Availability. Cerebral Cortex, 2012, 22, 2784-2793.	2.9	62
70	Quantitative imaging of protein targets in the human brain with PET. Physics in Medicine and Biology, 2015, 60, R363-R411.	3.0	61
71	Evaluation of ¹¹ C-BU99008, a PET Ligand for the Imidazoline ₂ Binding Site in Human Brain. Journal of Nuclear Medicine, 2018, 59, 1597-1602.	5.0	61
72	Assessment of proliferation in vivo using 2-[(11)C]thymidine positron emission tomography in advanced intra-abdominal malignancies. Cancer Research, 2002, 62, 5698-702.	0.9	60

#	Article	IF	CITATIONS
73	Prediction of Repeat-Dose Occupancy from Single-Dose Data: Characterisation of the Relationship between Plasma Pharmacokinetics and Brain Target Occupancy. Journal of Cerebral Blood Flow and Metabolism, 2011, 31, 944-952.	4.3	59
74	¹¹ C-PBR28 and ¹⁸ F-PBR111 Detect White Matter Inflammatory Heterogeneity in Multiple Sclerosis. Journal of Nuclear Medicine, 2017, 58, 1477-1482.	5.0	57
75	Decreased hippocampal translocator protein (18 kDa) expression in alcohol dependence: a [11C]PBR28 PET study. Translational Psychiatry, 2017, 7, e996-e996.	4.8	56
76	In vivo detection of cerebral tau pathology in long-term survivors of traumatic brain injury. Science Translational Medicine, 2019, 11, .	12.4	56
77	Quantification of Lung PET Images: Challenges and Opportunities. Journal of Nuclear Medicine, 2017, 58, 201-207.	5.0	55
78	Modeling Dynamic PET-SPECT Studies in the Wavelet Domain. Journal of Cerebral Blood Flow and Metabolism, 2000, 20, 879-893.	4.3	54
79	Analyses of [18F]altanserin bolus injection PET data. II: Consideration of radiolabeled metabolites in humans. Synapse, 2001, 41, 11-21.	1.2	54
80	PET Parametric Imaging: Past, Present, and Future. IEEE Transactions on Radiation and Plasma Medical Sciences, 2020, 4, 663-675.	3.7	54
81	Radiosynthesis and Characterization of $\langle \sup 11 \rangle C$ -GSK215083 as a PET Radioligand for the 5-HT6 Receptor. Journal of Nuclear Medicine, 2012, 53, 295-303.	5.0	53
82	Combining PET Biodistribution and Equilibrium Dialysis Assays to Assess the Free Brain Concentration and BBB Transport of CNS Drugs. Journal of Cerebral Blood Flow and Metabolism, 2012, 32, 874-883.	4.3	53
83	In Vivo Imaging of Cerebral Dopamine D3 Receptors in Alcoholism. Neuropsychopharmacology, 2014, 39, 1703-1712.	5.4	53
84	Characterization of 3 PET Tracers for Quantification of Mitochondrial and Synaptic Function in Healthy Human Brain: $\langle \sup 18 \langle \sup F-BCPP-EF, \langle \sup 11 \langle \sup C-SA-4503, $ and $\langle \sup 11 \langle \sup C-UCB-J, \bigcup 11 \langle \sup 11 \rangle $ Journal of Nuclear Medicine, 2020, 61, 96-103.	5.0	53
85	¹¹ C-DPA-713 has much greater specific binding to translocator protein 18 kDa (TSPO) in human brain than ¹¹ C-(<i>R</i>)-PK11195. Journal of Cerebral Blood Flow and Metabolism, 2018, 38, 393-403.	4.3	51
86	Thermal Imaging Is a Noninvasive Alternative to PET/CT for Measurement of Brown Adipose Tissue Activity in Humans. Journal of Nuclear Medicine, 2018, 59, 516-522.	5.0	51
87	Phosphodiesterase 10A PET Radioligand Development Program: From Pig to Human. Journal of Nuclear Medicine, 2014, 55, 595-601.	5.0	50
88	Relationship between neuromelanin and dopamine terminals within the Parkinson's nigrostriatal system. Brain, 2019, 142, 2023-2036.	7.6	48
89	Mitochondrial Complex 1, Sigma 1, and Synaptic Vesicle <scp>2A</scp> in Early <scp>Drugâ€Naive</scp> Parkinson's Disease. Movement Disorders, 2020, 35, 1416-1427.	3.9	48
90	Guidelines for the content and format of PET brain data in publications and archives: A consensus paper. Journal of Cerebral Blood Flow and Metabolism, 2020, 40, 1576-1585.	4.3	47

#	Article	IF	CITATIONS
91	Quantitative analysis of [carbonyl-11C]WAY-100635 PET studies. Nuclear Medicine and Biology, 2000, 27, 477-482.	0.6	46
92	Kinetic modelling of [123I]CNS 1261â€"a potential SPET tracer for the NMDA receptor. Nuclear Medicine and Biology, 2003, 30, 441-454.	0.6	46
93	Translational characterization of [¹¹ C]GSK931145, a PET ligand for the glycine transporter type 1. Synapse, 2011, 65, 1319-1332.	1.2	46
94	Translocator Protein as an Imaging Marker of Macrophage and Stromal Activation in Rheumatoid Arthritis Pannus. Journal of Nuclear Medicine, 2018, 59, 1125-1132.	5.0	46
95	Benzodiazepine Site Pharmacokinetic/Pharmacodynamic Quantification in Man: Direct Measurement of Drug Occupancy and Effects on the Human Brain In Vivo. Neuropharmacology, 1996, 35, 1483-1491. 5-Hydroxytryptamine1A Receptor Occupancy by Novel Full Antagonist	4.1	45
96	2-[4-[4-(7-Chloro-2,3-dihydro-1,4-benzdioxyn-5-yl)-1-piperazinyl]butyl]-1,2-benzisothiazol-3-(2H)-one-1,1-dioxide: A [11C][O-methyl-3H]-N-(2-(4-(2-methoxyphenyl)-1-piperazinyl)ethyl)-N-(2-pyridinyl)cyclohexanecarboxamide Trihydrochloride (WAY-100635) Positron Emission Tomography Study in Humans. Journal of	2.5	44
97	Pharmacology and Experimental Therapeutics, 2002, 301, 1144-1156. Spatiotemporal Distribution of β-Amyloid in Alzheimer Disease Is the Result of Heterogeneous Regional Carrying Capacities. Journal of Nuclear Medicine, 2018, 59, 822-827.	5.0	44
98	Pindolol occupancy of 5-HT1A receptors measured in vivo using small animal positron emission tomography with carbon-11 labeled WAY 100635., 2000, 36, 330-341.		43
99	Clinical quantification of the integrin $\hat{l}\pm\nu\hat{l}^26$ by [18F]FB-A20FMDV2 positron emission tomography in healthy and fibrotic human lung (PETAL Study). European Journal of Nuclear Medicine and Molecular Imaging, 2020, 47, 967-979.	6.4	43
100	Astrocyte reactivity with late-onset cognitive impairment assessed in vivo using 11C-BU99008 PET and its relationship with amyloid load. Molecular Psychiatry, 2021, 26, 5848-5855.	7.9	43
101	A procedure for generating locally identifiable reparameterisations of unidentifiable non-linear systems by the similarity transformation approach. Mathematical Biosciences, 1998, 148, 21-41.	1.9	42
102	11C-GSK189254: A Selective Radioligand for In Vivo Central Nervous System Imaging of Histamine H3 Receptors by PET. Journal of Nuclear Medicine, 2009, 50, 2064-2072.	5.0	42
103	Radiosynthesis and in vivo evaluation of [11C]MP-10 as a positron emission tomography radioligand for phosphodiesterase 10A. Nuclear Medicine and Biology, 2011, 38, 875-884.	0.6	42
104	Gait in Mild Alzheimer's Disease: Feasibility of Multi-Center Measurement in the Clinic and Home with Body-Worn Sensors: A Pilot Study. Journal of Alzheimer's Disease, 2018, 63, 331-341.	2.6	42
105	Optimal design of pulsed arterial spin labeling MRI experiments. Magnetic Resonance in Medicine, 2008, 59, 826-834.	3.0	41
106	Voxel-Based Analysis of ¹¹ C-PIB Scans for Diagnosing Alzheimer's Disease. Journal of Nuclear Medicine, 2008, 49, 1262-1269.	5.0	41
107	In Vivo Binding of Antipsychotics to D3 and D2 Receptors: A PET Study in Baboons with [11C]-(+)-PHNO. Neuropsychopharmacology, 2011, 36, 887-895.	5.4	41
108	Evaluation of EMD 128 130 occupancy of the 5-HT1A and the D2 receptor: a human PET study with [11]WAY-100635 and [11C]raclopride. Journal of Psychopharmacology, 2002, 16, 195-199.	4.0	40

#	Article	IF	CITATIONS
109	Amyloid Load: A More Sensitive Biomarker for Amyloid Imaging. Journal of Nuclear Medicine, 2019, 60, 536-540.	5.0	40
110	A Graphical Method to Compare the <i>in vivo</i> Binding Potential of PET Radioligands in the Absence of a Reference Region: Application to [¹¹ C]PBR28 and [¹⁸ F]PBR111 for TSPO Imaging. Journal of Cerebral Blood Flow and Metabolism, 2014, 34, 1162-1168.	4.3	38
111	Brain lesion segmentation through image synthesis and outlier detection. NeuroImage: Clinical, 2017, 16, 643-658.	2.7	38
112	Imaging in Central Nervous System Drug Discovery. Seminars in Nuclear Medicine, 2017, 47, 89-98.	4.6	38
113	PDE10A and ADCY5 mutations linked to molecular and microstructural basal ganglia pathology. Movement Disorders, 2018, 33, 1961-1965.	3.9	38
114	Loss of extra-striatal phosphodiesterase 10A expression in early premanifest Huntington's disease gene carriers. Journal of the Neurological Sciences, 2016, 368, 243-248.	0.6	37
115	Rank-shaping regularization of exponential spectral analysis for application to functional parametric mapping. Physics in Medicine and Biology, 2003, 48, 3819-3841.	3.0	36
116	Markov Random Field Models for Segmentation of PET Images. Lecture Notes in Computer Science, 2001, , 468-474.	1.3	36
117	PET studies in drug development: Methodological considerations. Drug Discovery Today: Technologies, 2005, 2, 311-315.	4.0	34
118	Serotonin release measured in the human brain: a PET study with [11C]CIMBI-36 and d-amphetamine challenge. Neuropsychopharmacology, 2020, 45, 804-810.	5.4	34
119	Tau pathology in early Alzheimer's disease is linked to selective disruptions in neurophysiological network dynamics. Neurobiology of Aging, 2020, 92, 141-152.	3.1	34
120	Preferential 5-HT1A Autoreceptor Occupancy by Pindolol is Attenuated in Depressed Patients: Effect of Treatment or an Endophenotype of Depression?. Neuropsychopharmacology, 2004, 29, 1688-1698.	5.4	33
121	Within-subject comparison of striatal D2 receptor occupancy measurements using [1231]IBZM SPECT and [11C]Raclopride PET. Neurolmage, 2009, 46, 447-458.	4.2	33
122	Identification and evaluation of [$<$ sup $>$ 11 $<$ /sup $>$ C]GSK931145 as a novel ligand for imaging the type 1 glycine transporter with positron emission tomography. Synapse, 2010, 64, 542-549.	1.2	33
123	Mathematical modelling of [11C]-(+)-PHNO human competition studies. NeuroImage, 2013, 68, 119-132.	4.2	33
124	Phosphodiesterase 10A in Schizophrenia: A PET Study Using [¹¹ C]IMA107. American Journal of Psychiatry, 2016, 173, 714-721.	7.2	33
125	Quantification in positron emission tomography for research in pharmacology and drug development. Nuclear Medicine Communications, 2004, 25, 643-646.	1.1	32
126	Non-invasive imaging in experimental medicine for drug development. Current Opinion in Pharmacology, 2011, 11, 501-507.	3.5	32

#	Article	IF	CITATIONS
127	Unexpectedly high affinity of a novel histamine <scp>H₃</scp> receptor antagonist, <scp>GSK239512</scp> , <i>in vivo</i> in human brain, determined using <scp>PET</scp> . British Journal of Pharmacology, 2014, 171, 1241-1249.	5.4	32
128	Confirmation of Specific Binding of the 18-kDa Translocator Protein (TSPO) Radioligand [18F]GE-180: a Blocking Study Using XBD173 in Multiple Sclerosis Normal Appearing White and Grey Matter. Molecular Imaging and Biology, 2019, 21, 935-944.	2.6	32
129	The PET radioligand [carbonyl- (11) C]desmethyl-WAY-100635 binds to 5-HT(1A) receptors and provides a higher radioactive signal than [carbonyl- (11) C]WAY-100635 in the human brain. Journal of Nuclear Medicine, 2002, 43, 292-303.	5.0	32
130	A bolus/infusion paradigm for the novel NMDA receptor SPET tracer [123i]CNS 1261. Nuclear Medicine and Biology, 2004, 31, 155-164.	0.6	30
131	Behaviour of $[11C]R(?)$ - and $[11C]S(+)$ -rolipram in vitro and in vivo, and their use as PET radiotracers for the quantificative assay of PDE4. Synapse, 2005, 55, 270-279.	1.2	30
132	Loss of phosphodiesterase 4 in Parkinson disease. Neurology, 2017, 89, 586-593.	1.1	30
133	Non-invasive measurement of left ventricular volumes and function by gated positron emission tomography. European Journal of Nuclear Medicine and Molecular Imaging, 1996, 23, 1594-1602.	2.1	29
134	Adaptive-Optimal Design in PET Occupancy Studies. Clinical Pharmacology and Therapeutics, 2010, 87, 563-571.	4.7	29
135	Characterization of in vivo pharmacological properties and sensitivity to endogenous serotonin of [¹¹ C] P943: A positron emission tomography study in <i>Papio anubis</i> . Synapse, 2011, 65, 1119-1127.	1.2	28
136	A pharmacokinetic PET study of NK1 receptor occupancy. European Journal of Nuclear Medicine and Molecular Imaging, 2012, 39, 226-235.	6.4	28
137	The impact of the rs6971 polymorphism in TSPO for quantification and study design. Clinical and Translational Imaging, 2015, 3, 417-422.	2.1	28
138	Statistical Maps for EEG Dipolar Source Localization. IEEE Transactions on Biomedical Engineering, 2005, 52, 401-413.	4.2	27
139	Imaging Cortical Dopamine D1 Receptors Using [11C]NNC112 and Ketanserin Blockade of the 5-HT2A Receptors. Journal of Cerebral Blood Flow and Metabolism, 2010, 30, 985-993.	4.3	27
140	The relationship between synaptic density marker SV2A, glutamate and N-acetyl aspartate levels in healthy volunteers and schizophrenia: a multimodal PET and magnetic resonance spectroscopy brain imaging study. Translational Psychiatry, 2021, 11, 393.	4.8	27
141	Quantification of [11C]Ro15-4513 GABAAα5 specific binding and regional selectivity in humans. Journal of Cerebral Blood Flow and Metabolism, 2017, 37, 2137-2148.	4.3	26
142	Disease-related patterns of in vivo pathology in Corticobasal syndrome. European Journal of Nuclear Medicine and Molecular Imaging, 2018, 45, 2413-2425.	6.4	26
143	Imaging of Chemotherapy-Induced Acute Cardiotoxicity with ¹⁸ F-Labeled Lipophilic Cations. Journal of Nuclear Medicine, 2019, 60, 1750-1756.	5.0	26
144	PET measurement of the influence of corticosteroids on serotonin-1A receptor number. Biological Psychiatry, 2001, 50, 668-676.	1.3	25

#	Article	IF	CITATIONS
145	Evaluation of Novel $\langle i \rangle N \langle i \rangle \langle sup \rangle 1 \langle sup \rangle Methyl-2-phenylindol-3-ylglyoxylamides as a New Chemotype of 18 kDa Translocator Protein-Selective Ligand Suitable for the Development of Positron Emission Tomography Radioligands. Journal of Medicinal Chemistry, 2011, 54, 366-373.$	6.4	25
146	Measuring Neurotransmitter Release with PET: Methodological Issues 1 1Transcripts of the BRAINPET97 discussion of this chapter can be found in Section VIII , 1998, , 449-454.		24
147	Dynamic Positron Emission Tomography Data-Driven Analysis Using Sparse Bayesian Learning. IEEE Transactions on Medical Imaging, 2008, 27, 1356-1369.	8.9	24
148	Dopamine D3 receptor antagonists: The quest for a potentially selective PET ligand. Part 3: Radiosynthesis and in vivo studies. Bioorganic and Medicinal Chemistry Letters, 2009, 19, 5056-5059.	2.2	24
149	Human Kinetic Modeling of the 5HT6 PET Radioligand $<$ sup $>$ 11 $<$ /sup $>$ C-GSK215083 and Its Utility for Determining Occupancy at Both 5HT6 and 5HT2A Receptors by SB742457 as a Potential Therapeutic Mechanism of Action in Alzheimer Disease. Journal of Nuclear Medicine, 2015, 56, 1901-1909.	5.0	24
150	Evidence for GABAâ€A receptor dysregulation in gambling disorder: correlation with impulsivity. Addiction Biology, 2017, 22, 1601-1609.	2.6	24
151	An evaluation of the brain distribution of [11C]GSK1034702, a muscarinic-1 (M1) positive allosteric modulator in the living human brain using positron emission tomography. EJNMMI Research, 2014, 4, 66.	2.5	23
152	Translocator positron-emission tomography and magnetic resonance spectroscopic imaging of brain glial cell activation in multiple sclerosis. Multiple Sclerosis Journal, 2017, 23, 1469-1478.	3.0	23
153	Quantitative analysis of dynamic 18F-FDG PET/CT for measurement of lung inflammation. EJNMMI Research, 2017, 7, 47.	2.5	23
154	Blunted endogenous opioid release following an oral dexamphetamine challenge in abstinent alcohol-dependent individuals. Molecular Psychiatry, 2020, 25, 1749-1758.	7.9	23
155	Nonlinear biomarker interactions in conversion from mild cognitive impairment to Alzheimer's disease. Human Brain Mapping, 2020, 41, 4406-4418.	3.6	23
156	Modelling the progression of Alzheimer's disease in MRI using generative adversarial networks. , 2018, , .		23
157	Relationship Between Glycine Transporter 1 Inhibition as Measured with Positron Emission Tomography and Changes in Cognitive Performances in Nonhuman Primates. Neuropsychopharmacology, 2014, 39, 2742-2749.	5.4	22
158	PET quantification of muscarinic cholinergic receptors with [N-11C-methyl]-benztropine and application to studies of propofol-induced unconsciousness in healthy human volunteers. Synapse, 2004, 51, 91-101.	1.2	21
159	Parametrically defined cerebral blood vessels as non-invasive blood input functions for brain PET studies. Physics in Medicine and Biology, 2004, 49, 1033-1054.	3.0	21
160	Evaluation of [O-methyl - 11 C]RS-15385-197 as a positron emission tomography radioligand for central \hat{l}_{\pm} 2 -adrenoceptors. European Journal of Nuclear Medicine and Molecular Imaging, 2000, 27, 475-484.	6.4	20
161	2-[11C]Thymidine Positron Emission Tomography Reproducibility in Humans. Clinical Cancer Research, 2005, 11, 4341-4347.	7.0	19
162	Characterising the plasma-target occupancy relationship of the neurokinin antagonist GSK1144814 with PET. Journal of Psychopharmacology, 2014, 28, 244-253.	4.0	19

#	Article	IF	CITATIONS
163	Pseudo-healthy Image Synthesis for White Matter Lesion Segmentation. Lecture Notes in Computer Science, 2016, , 87-96.	1.3	19
164	Relationship between astrocyte reactivity, using novel 11C-BU99008 PET, and glucose metabolism, grey matter volume and amyloid load in cognitively impaired individuals. Molecular Psychiatry, 2022, 27, 2019-2029.	7.9	19
165	Wavelet variance components in image space for spatiotemporal neuroimaging data. NeuroImage, 2005, 25, 159-168.	4.2	18
166	Further evaluation of [11C]MP-10 as a radiotracer for phosphodiesterase 10A: PET imaging study in rhesus monkeys and brain tissue metabolite analysis. Synapse, 2015, 69, 86-95.	1.2	18
167	Evidence of Brain Inflammation in Patients with Human T-Lymphotropic Virus Type 1–Associated Myelopathy (HAM): A Pilot, Multimodal Imaging Study Using ¹¹ C-PBR28 PET, MR T1-Weighted, and Diffusion-Weighted Imaging. Journal of Nuclear Medicine, 2016, 57, 1905-1912.	5.0	18
168	Accuracy and reliability of [11C]PBR28 specific binding estimated without the use of a reference region. Neurolmage, 2019, 188, 102-110.	4.2	18
169	Deep and Frequent Phenotyping study protocol: an observational study in prodromal Alzheimer's disease. BMJ Open, 2019, 9, e024498.	1.9	18
170	DREADD Activation of Pedunculopontine Cholinergic Neurons Reverses Motor Deficits and Restores Striatal Dopamine Signaling in Parkinsonian Rats. Neurotherapeutics, 2020, 17, 1120-1141.	4.4	18
171	Parametric Imaging of Ligand-Receptor Interactions Using a Reference Tissue Model and Cluster Analysis., 1998,, 401-406.		17
172	Monoamine Transporter Occupancy of a Novel Triple Reuptake Inhibitor in Baboons and Humans Using Positron Emission Tomography. Journal of Pharmacology and Experimental Therapeutics, 2013, 346, 311-317.	2.5	16
173	Effect of chronic antipsychotic treatment on striatal phosphodiesterase 10A levels: a [11C]MP-10 PET rodent imaging study with ex vivo confirmation. Translational Psychiatry, 2014, 4, e376-e376.	4.8	16
174	Building a database for brain 18 kDa translocator protein imaged using [¹¹ C]PBR28 in healthy subjects. Journal of Cerebral Blood Flow and Metabolism, 2019, 39, 1138-1147.	4.3	16
175	PET image reconstruction using physical and mathematical modelling for time of flight PET-MR scanners in the STIR library. Methods, 2021, 185, 110-119.	3.8	16
176	A multisite analysis of the concordance between visual image interpretation and quantitative analysis of [18F]flutemetamol amyloid PET images. European Journal of Nuclear Medicine and Molecular Imaging, 2021, 48, 2183-2199.	6.4	16
177	Dopamine D2/D3 receptor abnormalities after traumatic brain injury and their relationship to post-traumatic depression. Neurolmage: Clinical, 2019, 24, 101950.	2.7	15
178	Comparison of phosphodiesterase 10A and dopamine transporter levels as markers of disease burden in early Parkinson's disease. Movement Disorders, 2019, 34, 1505-1515.	3.9	15
179	Test–retest variability and reference region-based quantification of ¹⁸ F-BCPP-EF for imaging mitochondrial complex I in the human brain. Journal of Cerebral Blood Flow and Metabolism, 2021, 41, 771-779.	4.3	15
180	A new human (psycho)pharmacology tool: the multiple organs coincidences counter (MOCC). Journal of Psychopharmacology, 1995, 9, 294-306.	4.0	14

#	Article	lF	Citations
181	Bootstrapped DEPICT for error estimation in PET functional imaging. NeuroImage, 2004, 21, 1096-1104.	4.2	14
182	Realâ€time adaptive sequential design for optimal acquisition of arterial spin labeling MRI data. Magnetic Resonance in Medicine, 2010, 64, 203-210.	3.0	14
183	Imaging Aβ and tau in early stage Alzheimer's disease with [18F]AV45 and [18F]AV1451. EJNMMI Research, 2018, 8, 19.	2.5	14
184	Evaluation of NMDA Receptorsin Vivoin Schizophrenic Patients with [123I]CNS 1261 and SPET. Annals of the New York Academy of Sciences, 2003, 1003, 364-367.	3.8	13
185	Evaluation of the novel 5-HT6 receptor radioligand, [11C]GSK-215083 in human. NeuroImage, 2008, 41, T20.	4.2	13
186	Biodistribution and Radiation Dosimetry of the Glycine Transporter-1 Ligand 11C-GSK931145 Determined from Primate and Human Whole-Body PET. Molecular Imaging and Biology, 2011, 13, 776-784.	2.6	13
187	Kinetic Analysis of Drug–Target Interactions with PET for Characterization of Pharmacological Hysteresis. Journal of Cerebral Blood Flow and Metabolism, 2013, 33, 700-707.	4.3	13
188	Tau ^{IQ} : A Canonical Image Based Algorithm to Quantify Tau PET Scans. Journal of Nuclear Medicine, 2021, 62, 1292-1300.	5.0	13
189	Impact of scatter correction on D2 receptor occupancy measurements using 123I-IBZM SPECT: Comparison to 11C-Raclopride PET. NeuroImage, 2010, 50, 1511-1518.	4.2	12
190	Making drug development visible – and viable. Drug Discovery Today, 2014, 19, 1-3.	6.4	12
191	Spatio-temporal pharmacokinetic model based registration of 4D PET neuroimaging data. Neurolmage, 2014, 84, 225-235.	4.2	12
192	Role of 18F-fluorodeoxyglucose Positron Emission Tomography in the Monitoring of Inflammatory Activity in Crohn $\hat{E}\frac{1}{4}$ s Disease. Inflammatory Bowel Diseases, 2016, 22, 2619-2629.	1.9	12
193	First evaluation of PET-based human biodistribution and radiation dosimetry of 11C-BU99008, a tracer for imaging the imidazoline2 binding site. EJNMMI Research, 2018, 8, 71.	2.5	12
194	Impact of image-based motion correction on dopamine D3/D2 receptor occupancyâ€"comparison of groupwise and frame-by-frame registration approaches. EJNMMI Physics, 2015, 2, 15.	2.7	11
195	PET-MR Attenuation Correction in Dynamic Brain PET Using [¹¹ C]Cimbi-36: A Direct Comparison With PET-CT. IEEE Transactions on Radiation and Plasma Medical Sciences, 2018, 2, 483-489.	3.7	11
196	The role of phosphodiesterase 4 in excessive daytime sleepiness in Parkinson's disease. Parkinsonism and Related Disorders, 2020, 77, 163-169.	2.2	11
197	Molecular and functional neuroimaging of human opioid receptor pharmacology. Molecular Psychiatry, 2011, 16, 785-785.	7.9	10
198	Reproducibility of findings in modern PET neuroimaging: insight from the NRM2018 grand challenge. Journal of Cerebral Blood Flow and Metabolism, 2021, 41, 2778-2796.	4.3	10

#	Article	IF	Citations
199	Demonstration of clomipramine and venlafaxine occupation at serotonin reuptake sites in man in vivo. Journal of Psychopharmacology, 1997, 11, 279-281.	4.0	9
200	Endogenous dopamine release in the human brain as a pharmacodynamic biomarker: evaluation of the new GPR139 agonist TAK-041 with [11C]PHNO PET. Neuropsychopharmacology, 2022, 47, 1405-1412.	5.4	9
201	Longitudinal (¹⁸ F)AV-1451 PET imaging in a patient with frontotemporal dementia due to a Q351R MAPT mutation. Journal of Neurology, Neurosurgery and Psychiatry, 2020, 91, 106-108.	1.9	8
202	Consensus Recommendations on the Use of 18F-FDG PET/CT in Lung Disease. Journal of Nuclear Medicine, 2020, 61, 1701-1707.	5.0	8
203	Adenosine A2A receptor in schizophrenia: an in vivo brain PET imaging study. Psychopharmacology, 2022, 239, 3439-3445.	3.1	8
204	Kinetic analysis of neuroreceptor binding using PET. International Congress Series, 2004, 1265, 12-24.	0.2	7
205	Advances in biomathematical modeling for PET neuroreceptor imaging. Drug Discovery Today: Technologies, 2011, 8, e45-e51.	4.0	7
206	A non-linear mixed effect modelling approach for metabolite correction of the arterial input function in PET studies. Neurolmage, 2013, 66, 611-622.	4.2	7
207	[11C]GSK931145: A new pet ligand for glycine transporter 1. Neurolmage, 2008, 41, T21.	4.2	6
208	Quantification of human brain PDE4 occupancy by GSK356278: A [11C](R)-rolipram PET study. Journal of Cerebral Blood Flow and Metabolism, 2018, 38, 2033-2040.	4.3	6
209	Preclinical evaluation of [18F]FB-A20FMDV2 as a selective marker for measuring $\hat{l}\pm V\hat{l}^26$ integrin occupancy using positron emission tomography in rodent lung. European Journal of Nuclear Medicine and Molecular Imaging, 2020, 47, 958-966.	6.4	5
210	Statistical estimation with Kronecker products in positron emission tomography. Linear Algebra and Its Applications, 2005, 398, 25-36.	0.9	4
211	Non linear mixed effects analysis in PET PK-receptor occupancy studies. Neurolmage, 2013, 76, 155-166.	4.2	4
212	Suppression of Noise Artifacts in Spectral Analysis of Dynamic PET Data 1 1Transcripts of the BRAINPET97 discussion of this chapter can be found in Section VIII, 1998, , 329-334.		4
213	Tracer Kinetic Modeling via Basis Pursuit. , 2002, , 115-121.		4
214	Imaging Activated Microglia in the Aging Human Brain., 2001,, 361-367.		4
215	Joint estimation of subject motion and tracer kinetic parameters of dynamic PET data in an EM framework. , 2012, , .		3
216	PET neuroimaging: The elephant unpacks his trunk. NeuroImage, 2014, 94, 408-410.	4.2	3

#	Article	IF	Citations
217	Acute acetate administration increases endogenous opioid levels in the human brain: A [¹¹ C]carfentanil molecular imaging study. Journal of Psychopharmacology, 2021, 35, 606-610.	4.0	3
218	A Generalised Spatio-Temporal Registration Framework for Dynamic PET Data: Application to Neuroreceptor Imaging. Lecture Notes in Computer Science, 2013, 16, 211-218.	1.3	3
219	Imaging the Dopamine D3 Receptor In Vivo. , 2014, , 265-287.		3
220	Reparameterisation of Unidentifiable Systems using the Taylor Series Approach. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 1997, 30, 247-252.	0.4	2
221	Steps to a neurochemistry of personality. Behavioral and Brain Sciences, 1999, 22, 528-529.	0.7	2
222	Kinetic analysis of [11C]GSK189254, a novel radioligand for the H3 receptor in humans using positron emission tomography (PET). Neurolmage, 2008, 41, T14.	4.2	2
223	MR-DTI and PET multimodal imaging of dopamine release within subdivisions of basal ganglia. Journal of Physics: Conference Series, 2011, 317, 012005.	0.4	2
224	Simultaneous multiple kinect v2 for extended field of view motion tracking. , 2015, , .		2
225	Implementation of Image Reconstruction for GE SIGNA PET/MR PET Data in the STIR Library. , 2018, , .		2
226	Imaging Type 1 Glycine Transporters in the CNS Using Positron Emission Tomography., 2014, , 321-330.		2
227	Small Animal PET Enables Parametric Mapping of Saturation Kinetics at the 5-HT1A Receptor. , 2001, , 171-176.		2
228	Spatial-temporal Pharmacokinetic Model Based Registration of 4D Brain PET Data. Lecture Notes in Computer Science, 2012, , 100-112.	1.3	2
229	[11C]raclopride pet detects dopamine release induced by behavioural manipulation. Schizophrenia Research, 1998, 29, 94.	2.0	1
230	Awake nonhuman primate brain PET imaging without head restraint. Neurolmage, 2010, 52, S18.	4.2	1
231	Evaluation of the in vivo ED50 for the PET Radioligand, [11C]GSK-215083, in Papio anubis. NeuroImage, 2010, 52, S37.	4.2	1
232	Abstract 1144: Imaging radiotherapy induced pulmonary fibrogenic changes with integrin-PET. , 2019, , .		1
233	Kinetic modelling of dissolution dynamic nuclear polarisation ¹³ C magnetic resonance spectroscopy data for analysis of pyruvate delivery and fate in tumours. NMR in Biomedicine, 2022, 35, e4650.	2.8	1
234	S54.02 Using pet to study dopamine release in vivo. European Psychiatry, 2000, 15, 317s-318s.	0.2	0

#	Article	IF	CITATIONS
235	Wavelet variance components in image space for spatio-temporal neuroimaging data., 2003,,.		O
236	Bayesian kinetic modelling. NeuroImage, 2006, 31, T71.	4.2	0
237	[11C](+)RX-821024: A novel tracer for imaging α2-adrenoceptors. Neurolmage, 2008, 41, T98.	4.2	0
238	Gender and cognitive performance: Correlations to 5-HT4 receptors in the human brain: A 11C-SB207145-PET study. NeuroImage, 2008, 41, T160.	4.2	0
239	Differentiation of the Mu-opioid ligand GSK1521498 from naltrexone using [11C]carfentanil PET and fMRI. Neurolmage, 2010, 52, S78.	4.2	O
240	PET evaluation of the TSPO ligands [F-18]FEPPA, [F-18]PRB06, and [F-18]PBR111 in nonhuman primate. NeuroImage, 2010, 52, S147.	4.2	0
241	Effect of cellular compartments on the binding of [3H](+)PhNO to the porcine D2/D3-DAR. NeuroImage, 2010, 52, S167.	4.2	O
242	A combined diffusion tensor imaging (DTI) and [11C]-(+)-PHNO positron emission tomography (PET) study to quantify dopamine D3/D2 receptors in pallidum. NeuroImage, 2010, 52, S23.	4.2	0
243	PBR28, PBR06 and PBR111 bind two distinct TSPO sites in human brain tissue. NeuroImage, 2010, 52, S30-S31.	4.2	O
244	[P4â€"529]: AMYLOID LOAD: A NOVEL BIOMARKER WITH INCREASED SENSITIVITY FOR βâ€AMYLOID. Alzheimer' and Dementia, 2017, 13, P1551.	S _{0.8}	0
245	Analysis of Functional Imaging Data Sets via Functional Segmentation. , 2001, , 45-50.		O
246	Investigation of acute modulation of cAMP in vivo with PET using [11C]rolipram. Journal of Cerebral Blood Flow and Metabolism, 2005, 25, S663-S663.	4.3	0
247	POSITRON EMISSION TOMOGRAPHY - TRACER KINETIC MODELLING IN DRUG DEVELOPMENT. , 2006, , .		0