Claus Svarer

List of Publications by Year
in descending order

126	6,103	76294	82499
papers	citations	40 h-index	72 g-index

132	132	132	6362
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	MR-based automatic delineation of volumes of interest in human brain PET images using probability maps. NeuroImage, 2005, 24, 969-979.	2.1	327
2	A High-ResolutionIn VivoAtlas of the Human Brain's Serotonin System. Journal of Neuroscience, 2017, 37, 120-128.	1.7	262
3	Psychedelic effects of psilocybin correlate with serotonin 2A receptor occupancy and plasma psilocin levels. Neuropsychopharmacology, 2019, 44, 1328-1334.	2.8	259
4	Different partial volume correction methods lead to different conclusions: An 18F-FDG-PET study of aging. NeuroImage, 2016, 132, 334-343.	2.1	216
5	Frontolimbic Serotonin 2A Receptor Binding in Healthy Subjects Is Associated with Personality Risk Factors for Affective Disorder. Biological Psychiatry, 2008, 63, 569-576.	0.7	213
6	Cortical surface-based analysis reduces bias and variance in kinetic modeling of brain PET data. NeuroImage, 2014, 92, 225-236.	2.1	179
7	Integrated software for the analysis of brain PET/SPECT studies with partial-volume-effect correction. Journal of Nuclear Medicine, 2004, 45, 192-201.	2.8	161
8	Rate Dependence of Regional Cerebral Activation during Performance of a Repetitive Motor Task: A PET Study. Journal of Cerebral Blood Flow and Metabolism, 1996, 16, 794-803.	2.4	147
9	Generalizable Patterns in Neuroimaging: How Many Principal Components?. NeuroImage, 1999, 9, 534-544.	2.1	143
10	The personality trait openness is related to cerebral 5-HTT levels. NeuroImage, 2009, 45, 280-285.	2.1	131
11	Cluster analysis in kinetic modelling of the brain: a noninvasive alternative to arterial sampling. NeuroImage, 2004, 21, 483-493.	2.1	123
12	Patients with obsessiveâ€“compulsive disorder have increased 5-HT2A receptor binding in the caudate nuclei. International Journal of Neuropsychopharmacology, 2005, 8, 391-401.	1.0	123
13	A database of [18F]-altanserin binding to 5-HT2A receptors in normal volunteers: normative data and relationship to physiological and demographic variables. NeuroImage, 2004, 21, 1105-1113.	2.1	111
14	Role of Serotonin Transporter Changes in Depressive Responses to Sex-Steroid Hormone Manipulation: A Positron Emission Tomography Study. Biological Psychiatry, 2015, 78, 534-543.	0.7	108
15	Reduced 5-HT2A receptor binding in patients with mild cognitive impairment. Neurobiology of Aging, 2008, 29, 1830-1838.	1.5	107
16	Decreased Frontal Serotonin2A Receptor Binding in Antipsychotic-Naive Patients With First-Episode Schizophrenia. Archives of General Psychiatry, 2010, 67, 9.	13.8	105
17	Cerebral serotonin transporter binding is inversely related to body mass index. NeuroImage, 2010, 52, 284-289.	2.1	96
18	The Center for Integrated Molecular Brain Imaging (Cimbi) database. NeuroImage, 2016, 124, 1213-1219.	2.1	95

#	Article	IF	Citations
19	Quantification of 5-HT2A Receptors in the Human Brain Using [18F]Altanserin-PET and the Bolus/Infusion Approach. Journal of Cerebral Blood Flow and Metabolism, 2003, 23, 985-996.	2.4	91
20	Regional brain volumes, diffusivity, and metabolite changes after electroconvulsive therapy for severe depression. Acta Psychiatrica Scandinavica, 2016, 133, 154-164.	2.2	89
21	Frontal Dopamine D2/3 Receptor Binding in Drug-Naive First-Episode Schizophrenic Patients Correlates with Positive Psychotic Symptoms and Gender. Biological Psychiatry, 2006, 60, 621-629.	0.7	88
22	Serotonin 2A Receptor Agonist Binding in the Human Brain with [¹¹C]Cimbi-36. Journal of Cerebral Blood Flow and Metabolism, 2014, 34, 1188-1196.	2.4	88
23	A single psilocybin dose is associated with long-term increased mindfulness, preceded by a proportional change in neocortical 5-HT2A receptor binding. European Neuropsychopharmacology, 2020, 33, 71-80.	0.3	88
24	Brain serotonin 2A receptor binding: Relations to body mass index, tobacco and alcohol use. NeuroImage, 2009, 46, 23-30.	2.1	87
25	Automatic semi-quantification of [123I]FP-CIT SPECT scans in healthy volunteers using BasGan version 2: results from the ENC-DAT database. European Journal of Nuclear Medicine and Molecular Imaging, 2013, 40, 565-573.	3.3	86
26	Functional connectivity of the dorsal and median raphe nuclei at rest. NeuroImage, 2015, 116, 187-195.	2.1	85
27	Kinetic Modeling of ¹¹C-SB207145 Binding to 5-HT₄ Receptors in the Human Brain In Vivo. Journal of Nuclear Medicine, 2009, 50, 900-908.	2.8	84
28	Brain imaging of serotonin 4 receptors in humans with [11C]SB207145-PET. NeuroImage, 2010, 50, 855-861.	2.1	79
29	In Vivo Imaging of Cerebral Serotonin Transporter and Serotonin2A Receptor Binding in 3,4-Methylenedioxymethamphetamine (MDMA or â€œEcstasyâ€) and Hallucinogen Users. Archives of General Psychiatry, 2011, 68, 562.	13.8	76
30	Age and sex effects on 5-HT₄ receptors in the human brain: A [¹¹C]SB207145 PET study. Journal of Cerebral Blood Flow and Metabolism, 2011, 31, 1475-1481.	2.4	72
31	Quantitation of Regional Cerebral Blood Flow Corrected for Partial Volume Effect Using O-15 Water and PET: I. Theory, Error Analysis, and Stereologic Comparison. Journal of Cerebral Blood Flow and Metabolism, 2000, 20, 1237-1251.	2.4	70
32	Cortical and Subcortical 5-HT2A Receptor Binding in Neuroleptic-Naive First-Episode Schizophrenic Patients. Neuropsychopharmacology, 2008, 33, 2435-2441.	2.8	64
33	Cerebral 5-HT2A receptor binding is increased in patients with Tourette's syndrome. International Journal of Neuropsychopharmacology, 2007, 10, 245.	1.0	61
34	Serotonin 2A receptor agonist binding in the human brain with [11C]Cimbi-36: Testâ€“retest reproducibility and head-to-head comparison with the antagonist [18F]altanserin. NeuroImage, 2016, 130, 167-174.	2.1	61
35	Seasonal difference in brain serotonin transporter binding predicts symptom severity in patients with seasonal affective disorder. Brain, 2016, 139, 1605-1614.	3.7	60
36	Quantitation of Regional Cerebral Blood Flow Corrected for Partial Volume Effect Using O-15 Water and PET: II. Normal Values and Gray Matter Blood Flow Response to Visual Activation. Journal of Cerebral Blood Flow and Metabolism, 2000, 20, 1252-1263.	2.4	59

#	Article	IF	Citations
37	Attenuation Correction for the HRRT PET-Scanner Using Transmission Scatter Correction and Total Variation Regularization. IEEE Transactions on Medical Imaging, 2013, 32, 1611-1621.	5.4	57
38	A Nonlinear Relationship between Cerebral Serotonin Transporter and 5-HT_{2A}Receptor Binding: AnIn VivoMolecular Imaging Study in Humans. Journal of Neuroscience, 2010, 30, 3391-3397.	1.7	52
39	High familial risk for mood disorder is associated with low dorsolateral prefrontal cortex serotonin transporter binding. NeuroImage, 2009, 46, 360-366.	2.1	50
40	A high-resolution in vivo atlas of the human brain's benzodiazepine binding site of GABAA receptors. NeuroImage, 2021, 232, 117878.	2.1	47
41	Preclinical Safety Assessment of the 5-HT2A Receptor Agonist PET Radioligand [11C]Cimbi-36. Molecular Imaging and Biology, 2013, 15, 376-383.	1.3	43
42	Covariance statistics and network analysis of brain PET imaging studies. Scientific Reports, 2019, 9, 2496.	1.6	42
43	TSPO Imaging in Glioblastoma Multiforme: A Direct Comparison Between ¹²³I-CLINDE SPECT, ¹⁸F-FET PET, and Gadolinium-Enhanced MR Imaging. Journal of Nuclear Medicine, 2015, 56, 1386-1390.	2.8	41
44	Serotonin 1B Receptor Binding Is Associated With Trait Anger and Level of Psychopathy in Violent Offenders. Biological Psychiatry, 2017, 82, 267-274.	0.7	41
45	Molecular imaging of neuroinflammation in patients after mild traumatic brain injury: a longitudinal ¹²³Iâ€CLINDE single photon emission computed tomography study. European Journal of Neurology, 2019, 26, 1426-1432.	1.7	41
46	Measuring endogenous changes in serotonergic neurotransmission with [11C]Cimbi-36 positron emission tomography in humans. Translational Psychiatry, 2019, 9, 134.	2.4	40
47	Cluster analysis of activity-time series in motor learning. Human Brain Mapping, 2002, 15, 135-145.	1.9	39
48	Reproducibility of 5-HT2A receptor measurements and sample size estimations with [18F]altanserin PET using a bolus/infusion approach. European Journal of Nuclear Medicine and Molecular Imaging, 2007, 34, 910-915.	3.3	39
49	Serotonin2A receptor blockade and clinical effect in first-episode schizophrenia patients treated with quetiapine. Psychopharmacology, 2011, 213, 583-592.	1.5	38
50	Methods for Motion Correction Evaluation Using 18F-FDG Human Brain Scans on a High-Resolution PET Scanner. Journal of Nuclear Medicine, 2012, 53, 495-504.	2.8	38
51	Correlations of brain MRI parameters to disability in multiple sclerosis. Acta Neurologica Scandinavica, 2001, 104, 24-30.	1.0	37
52	Central 5-HT Neurotransmission Modulates Weight Loss following Gastric Bypass Surgery in Obese Individuals. Journal of Neuroscience, 2015, 35, 5884-5889.	1.7	36
53	Endogenous plasma estradiol in healthy men is positively correlated with cerebral cortical serotonin 2A receptor binding. Psychoneuroendocrinology, 2010, 35, 1311-1320.	1.3	35
54	High trait aggression in men is associated with low 5-HT levels, as indexed by 5-HT 4 receptor binding. Social Cognitive and Affective Neuroscience, 2016, 11, 548-555.	1.5	35

#	Article	IF	Citations
55	Reduction in camera-specific variability in [123I]FP-CIT SPECT outcome measures by image reconstruction optimized for multisite settings: impact on age-dependence of the specific binding ratio in the ENC-DAT database of healthy controls. European Journal of Nuclear Medicine and Molecular Imaging, 2016, 43, 1323-1336.	3.3	35
56	Prefrontal serotonin transporter availability is positively associated with the cortisol awakening response. European Neuropsychopharmacology, 2013, 23, 285-294.	0.3	34
57	Striatal D_{2/3}Binding Potential Values in Drug-NaÃ¯ve First-Episode Schizophrenia Patients Correlate With Treatment Outcome. Schizophrenia Bulletin, 2015, 41, 1143-1152.	2.3	34
58	No change in [¹¹C]CUMIâ€101 binding to 5â€HT_{1A} receptors after intravenous citalopram in human. Synapse, 2012, 66, 880-884.	0.6	33
59	Brain Activation during Word Identification and Word Recognition. NeuroImage, 1998, 8, 93-105.	2.1	32
60	The 5-HT2A receptor binding pattern in the human brain is strongly genetically determined. NeuroImage, 2008, 40, 1175-1180.	2.1	32
61	The 18F-fluorodeoxyglucose Lumped Constant Determined in Human Brain from Extraction Fractions of 18F-fluorodeoxyglucose and Glucose. Journal of Cerebral Blood Flow and Metabolism, 2001, 21, 995-1002.	2.4	31
62	Evaluation of the Serotonin Transporter Ligand 123I-ADAM for SPECT Studies on Humans. Journal of Nuclear Medicine, 2008, 49, 247-254.	2.8	31
63	Pharmacologically Induced Sex Hormone Fluctuation Effects on Resting-State Functional Connectivity in a Risk Model for Depression: A Randomized Trial. Neuropsychopharmacology, 2017, 42, 446-453.	2.8	31
64	Spatial resolution of the HRRT PET scanner using 3D-OSEM PSF reconstruction. , 2009, , .		29
65	Motion correction in simultaneous PET/MR brain imaging using sparsely sampled MR navigators: a clinically feasible tool. EJNMMI Physics, 2015, 2, 14.	1.3	28
66	Testosterone levels in healthy men correlate negatively with serotonin 4 receptor binding. Psychoneuroendocrinology, 2017, 81, 22-28.	1.3	28
67	Automatic delineation of brain regions on MRI and PET images from the pig. Journal of Neuroscience Methods, 2018, 294, 51-58.	1.3	27
68	Low 5-HT_{1B} receptor binding in the migraine brain: A PET study. Cephalalgia, 2018, 38, 519-527.	1.8	26
69	Cerebral serotonin transporter measurements with [¹¹C]DASB: A review on acquisition and preprocessing across 21 PET centres. Journal of Cerebral Blood Flow and Metabolism, 2019, 39, 210-222.	2.4	25
70	BDNF Val66met and 5-HTTLPR polymorphisms predict a human in vivo marker for brain serotonin levels. Human Brain Mapping, 2015, 36, 313-323.	1.9	24
71	The importance of small polar radiometabolites in molecular neuroimaging: A PET study with [¹¹C]Cimbi-36 labeled in two positions. Journal of Cerebral Blood Flow and Metabolism, 2018, 38, 659-668.	2.4	23
72	The relation between dopamine D₂ receptor blockade and the brain reward system: a longitudinal study of first-episode schizophrenia patients. Psychological Medicine, 2020, 50, 220-228.	2.7	22

#	Article	IF	Citations
73	Optimization of preprocessing strategies in Positron Emission Tomography (PET) neuroimaging: A [11C]DASB PET study. NeuroImage, 2019, 199, 466-479.	2.1	21
74	BDNF val66met association with serotonin transporter binding in healthy humans. Translational Psychiatry, 2017, 7, e1029-e1029.	2.4	20
75	Quantification of 123I-PE2I binding to dopamine transporter with SPECT after bolus and bolus/infusion. Journal of Nuclear Medicine, 2005, 46, 1119-27.	2.8	20
76	Reproducibility of [123I]PE2I binding to dopamine transporters with SPECT. European Journal of Nuclear Medicine and Molecular Imaging, 2007, 34, 101-109.	3.3	18
77	Relationship of frontal D2/3 binding potentials to cognition: a study of antipsychotic-naive schizophrenia patients. International Journal of Neuropsychopharmacology, 2013, 16, 23-36.	1.0	18
78	Safety and EEG data quality of concurrent high-density EEG and high-speed fMRI at 3 Tesla. PLoS ONE, 2017, 12, e0178409.	1.1	18
79	Assessment of the precision in co-registration of structural MR images and PET images with localized binding. International Congress Series, 2004, 1265, 275-280.	0.2	17
80	Frontal D2/3Receptor Availability in Schizophrenia Patients Before and After Their First Antipsychotic Treatment: Relation to Cognitive Functions and Psychopathology. International Journal of Neuropsychopharmacology, 2016, 19, pyw006.	1.0	17
81	Brain serotonin 4 receptor binding is associated with the cortisol awakening response. Psychoneuroendocrinology, 2016, 67, 124-132.	1.3	17
82	The structure of the serotonin system: A PET imaging study. NeuroImage, 2020, 205, 116240.	2.1	17
83	In Vivo Quantification of Cerebral Translocator Protein Binding in Humans Using 6-Chloro-2-(4â€²-¹²³I-Iodophenyl)-3-(N,N-Diethyl)-Imidazo[1,2-a]Pyridine-3-Acetamide SPECT. Journal of Nuclear Medicine, 2014, 55, 1966-1972.	2.8	16
84	In abstinent MDMA users the cortisol awakening response is off-set but associated with prefrontal serotonin transporter binding as in non-users. International Journal of Neuropsychopharmacology, 2014, 17, 1119-1128.	1.0	16
85	Parkinson patients have a presynaptic serotonergic deficit: A dynamic deep brain stimulation PET study. Journal of Cerebral Blood Flow and Metabolism, 2021, 41, 0271678X2098238.	2.4	16
86	Dorsal striatal dopamine induces fronto-cortical hypoactivity and attenuates anxiety and compulsive behaviors in rats. Neuropsychopharmacology, 2022, 47, 454-464.	2.8	16
87	Striatal Volume Increase After Six Weeks of Selective Dopamine D2/3 Receptor Blockade in First-Episode, Antipsychotic-NaÃ¯ve Schizophrenia Patients. Frontiers in Neuroscience, 2020, 14, 484.	1.4	15
88	Quantification of [123I]PE2I binding to dopamine transporters with SPET. European Journal of Nuclear Medicine and Molecular Imaging, 2002, 29, 623-631.	3.3	13
89	Validation of a Method for Accurate and Highly Reproducible Quantification of Brain Dopamine Transporter SPECT Studies. Journal of Nuclear Medicine Technology, 2011, 39, 271-278.	0.4	13
90	Cerebral serotonin release correlates with [¹¹C]AZ10419369 PET measures of 5-HT_{1B} receptor binding in the pig brain. Journal of Cerebral Blood Flow and Metabolism, 2018, 38, 1243-1252.	2.4	13

#	Article	IF	Citations
91	Cerebellar heterogeneity and its impact on PET data quantification of 5-HT receptor radioligands. Journal of Cerebral Blood Flow and Metabolism, 2017, 37, 3243-3252.	2.4	12
92	Migraine is associated with high brain 5-HT levels as indexed by 5-HT₄receptor binding. Cephalalgia, 2019, 39, 526-532.	1.8	12
93	MRI-Guided Region-of-Interest Delineation Is Comparable to Manual Delineation in Dopamine Transporter SPECT Quantification in Patients: A Reproducibility Study. Journal of Nuclear Medicine Technology, 2010, 38, 61-68.	0.4	11
94	Cerebral metabolism, magnetic resonance spectroscopy and cognitive dysfunction in early multiple sclerosis: an exploratory study. Neurological Research, 2012, 34, 52-58.	0.6	11
95	Experimental determination of the weighting factor for the energy window subtraction-based downscatter correction for I-123 in brain SPECT studies. Journal of Medical Physics, 2010, 35, 215.	0.1	11
96	Seasonality-resilient individuals downregulate their cerebral 5-HT transporter binding in winter â€“ A longitudinal combined 11C-DASB and 11C-SB207145 PET study. European Neuropsychopharmacology, 2018, 28, 1151-1160.	0.3	10
97	Different preprocessing strategies lead to different conclusions: A [11C]DASB-PET reproducibility study. Journal of Cerebral Blood Flow and Metabolism, 2020, 40, 1902-1911.	2.4	10
98	Nondisplaceable Binding Is a Potential Confounding Factor in ¹¹C-PBR28 Translocator Protein PET Studies. Journal of Nuclear Medicine, 2021, 62, 412-417.	2.8	10
99	Required time delay from 99mTc-HMPAO injection to SPECT data acquisition: healthy subjects and patients with rCBF pattern. European Journal of Nuclear Medicine and Molecular Imaging, 2008, 35, 2212-2219.	3.3	9
100	A Probabilistic Approach to Delineating Functional Brain Regions. Journal of Nuclear Medicine Technology, 2009, 37, 91-95.	0.4	9
101	A regularized full reference tissue model for PET neuroreceptor mapping. NeuroImage, 2016, 139, 405-414.	2.1	9
102	Brain Networks Implicated in Seasonal Affective Disorder: A Neuroimaging PET Study of the Serotonin Transporter. Frontiers in Neuroscience, 2017, 11, 614.	1.4	9
103	A comparison of different energy window subtraction methods to correct for scatter and downscatter in I-123 SPECT imaging. Nuclear Medicine Communications, 2012, 33, 708-718.	0.5	8
104	A High-Resolution In Vivo Atlas of the Human Brain's Serotonin System. Journal of Neuroscience, 2017, 37, 120-128.	1.7	8
105	A Movable Phantom Design for Quantitative Evaluation of Motion Correction Studies on High Resolution PET Scanners. IEEE Transactions on Nuclear Science, 2010, 57, 1116-1124.	1.2	7
106	The Variability of Translocator Protein Signal in Brain and Blood of Genotyped Healthy Humans Using In Vivo ¹²³I-CLINDE SPECT Imaging: A Testâ€“Retest Study. Journal of Nuclear Medicine, 2017, 58, 989-995.	2.8	7
107	Visual stimuli induce serotonin release in occipital cortex: A simultaneous positron emission tomography/magnetic resonance imaging study. Human Brain Mapping, 2020, 41, 4753-4763.	1.9	7
108	Concurrent anxiety in patients with major depression and cerebral serotonin 4 receptor binding. A NeuroPharm-1 study. Translational Psychiatry, 2022, 12, .	2.4	7

#	Article	IF	Citations
109	NMF on Positron Emission Tomography. , 2007, , .		6
110	New attenuation correction for the HRRT using transmission scatter correction and total variation regularization. , 2009, , .		6
111	Anti-NMDAR encephalitis. Neurology, 2015, 84, 859-859.	1.5	6
112	Design of Infusion Schemes for Neuroreceptor Imaging: Application to [¹¹C]Flumazenil-PET Steady-State Study. BioMed Research International, 2016, 2016, 1-8.	0.9	6
113	False positive rates in positron emission tomography (PET) voxelwise analyses. Journal of Cerebral Blood Flow and Metabolism, 2020, 41, 0271678X2097496.	2.4	5
114	The Impact of Hormonal Contraceptive Use on Serotonergic Neurotransmission and Antidepressant Treatment Response: Results From the NeuroPharm 1 Study. Frontiers in Endocrinology, 2022, 13, 799675.	1.5	5
115	Extrastriatal dopamine D2/3 receptors and cortical grey matter volumes in antipsychotic-naÃ¯ve schizophrenia patients before and after initial antipsychotic treatment. World Journal of Biological Psychiatry, 2017, 18, 539-549.	1.3	4
116	Sparsely sampled MR navigators as a practical tool for quality control and correction of head motion in simultaneous PET/MR. EJNMMI Physics, 2014, 1, A36.	1.3	3
117	An in vivo Pig Model for Testing Novel Positron Emission Tomography Radioligands Targeting Cerebral Protein Aggregates. Frontiers in Neuroscience, 2022, 16, 847074.	1.4	3
118	The Impact of Preprocessing Pipeline Choice in Univariate and Multivariate Analyses of PET Data. , 2018, , .		1
119	Preprocessing, Prediction and Significance: Framework and Application to Brain Imaging. Lecture Notes in Computer Science, 2019, , 196-204.	1.0	1
120	Automatic extraction of VOI data from functional images. NeuroImage, 2006, 31, T91.	2.1	0
121	EXTRASTRIATAL DOPAMINE D2 RECEPTOR BINDING POTENTIALS IN ANTIPSYCHOTIC-NAÃ¥VE FIRST-EPISODE SCHIZOPHRENIC PATIENTS. Schizophrenia Research, 2008, 102, 42.	1.1	0
122	Improved resolution and reliability in dynamic PET using Bayesian regularization of MRTM2. , 2014, , .		0
123	Validation of scatter simulation in 3D and count-rate dependent component-based normalization for the HRRT. , 2014, , .		0
124	Heatâ€washout measurements compared to distal blood pressure and perfusion in orthopaedic patients with foot ulcers. Clinical Physiology and Functional Imaging, 2017, 37, 79-83.	0.5	0
125	Impact of Î¼-map Processing and Transmission Scan Count Statistics on Quantification of PET Pig Brain Scans - and Temporal Variation of Scatter Correction Induced by Î¼-map Mismatch. , 2017, , .		0
126	Serotonin 2A receptor binding in healthy twins genetically predisposed to major depression in comparison with undisposed controls. Journal of Cerebral Blood Flow and Metabolism, 2005, 25, S583-S583.	2.4	0