Thomas Wanek

List of Publications by Year
in descending order

74 papers	1,844 citations	304602 22 h-index	289141 40 g-index
74 all docs	74 docs citations	74 times ranked	2222 citing authors

#	Article	IF	Citations
1	PET imaging to assess the impact of P-glycoprotein on pulmonary drug delivery in rats. Journal of Controlled Release, 2022, 342, 44-52.	4.8	11
2	Use of PET Imaging to Assess the Efficacy of Thiethylperazine to Stimulate Cerebral MRP1 Transport Activity in Wild-Type and APP/PS1-21 Mice. International Journal of Molecular Sciences, 2022, 23, 6514.	1.8	2
3	Impact of P-gp and BCRP on pulmonary drug disposition assessed by PET imaging in rats. Journal of Controlled Release, 2022, 349, 109-117.	4.8	5
4	Complete inhibition of ABCB1 and ABCG2 at the bloodâ€“brain barrier by co-infusion of erlotinib and tariquidar to improve brain delivery of the model ABCB1/ABCG2 substrate [¹¹C]erlotinib. Journal of Cerebral Blood Flow and Metabolism, 2021, 41, 1634-1646.	2.4	17
5	Lipophilicity and Click Reactivity Determine the Performance of Bioorthogonal Tetrazine Tools in Pretargeted <i>In Vivo</i> Chemistry. ACS Pharmacology and Translational Science, 2021, 4, 824-833.	2.5	45
6	Assessing the Functional Redundancy between P-gp and BCRP in Controlling the Brain Distribution and Biliary Excretion of Dual Substrates with PET Imaging in Mice. Pharmaceutics, 2021, 13, 1286.	2.0	7
7	Influence of ABC transporters on the excretion of ciprofloxacin assessed with PET imaging in mice. European Journal of Pharmaceutical Sciences, 2021, 163, 105854.	1.9	7
8	Characterization of an APP/tau rat model of Alzheimerâ€™s disease by positron emission tomography and immunofluorescent labeling. Alzheimer's Research and Therapy, 2021, 13, 175.	3.0	8
9	Age dependency of cerebral P-glycoprotein function in wild-type and APPPS1 mice measured with PET. Journal of Cerebral Blood Flow and Metabolism, 2020, 40, 150-162.	2.4	20
10	Measurement of cerebral ABCC1 transport activity in wild-type and APP/PS1-21 mice with positron emission tomography. Journal of Cerebral Blood Flow and Metabolism, 2020, 40, 954-965.	2.4	14
11	In vivo characterization of [18F]AVT-011 as a radiotracer for PET imaging of multidrug resistance. European Journal of Nuclear Medicine and Molecular Imaging, 2020, 47, 2026-2035.	3.3	3
12	Imaging P-Glycoprotein Induction at the Bloodâ€“Brain Barrier of a Î²-Amyloidosis Mouse Model with ¹¹C-Metoclopramide PET. Journal of Nuclear Medicine, 2020, 61, 1050-1057.	2.8	21
13	Measurement of Hepatic ABCB1 and ABCG2 Transport Activity with [11C]Tariquidar and PET in Humans and Mice. Molecular Pharmaceutics, 2020, 17, 316-326.	2.3	15
14	Brain Distribution of Dual ABCB1/ABCG2 Substrates Is Unaltered in a Beta-Amyloidosis Mouse Model. International Journal of Molecular Sciences, 2020, 21, 8245.	1.8	4
15	Impact of Attenuation Correction on Quantification Accuracy in Preclinical Whole-Body PET Images. Frontiers in Physics, 2020, 8, .	1.0	0
16	Plasma pharmacokinetic and metabolism of [18F]THK-5317 are dependent on sex. Nuclear Medicine and Biology, 2020, 84-85, 28-32.	0.3	5
17	Correlated Multimodal Imaging in Life Sciences: Expanding the Biomedical Horizon. Frontiers in Physics, 2020, 8, .	1.0	61
18	Assessing the Activity of Multidrug Resistanceâ€“Associated Protein 1 at the Lung Epithelial Barrier. Journal of Nuclear Medicine, 2020, 61, 1650-1657.	2.8	16

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19	Inhibition of ABCB1 and ABCG2 at the Mouse Bloodâ€“Brain Barrier with Marketed Drugs To Improve Brain Delivery of the Model ABCB1/ABCG2 Substrate [¹¹C]erlotinib. Molecular Pharmaceutics, 2019, 16, 1282-1293.	2.3	20
20	Generation and Characterization of an<i>Abcc1</i>Humanized Mouse Model (<i>hABCC1^{flx/flx}</i>) with Knockout Capability. Molecular Pharmacology, 2019, 96, 138-147.	1.0	4
21	Reproducibility and Comparability of Preclinical PET Imaging Data: A Multicenter Small-Animal PET Study. Journal of Nuclear Medicine, 2019, 60, 1483-1491.	2.8	20
22	Crossâ€Isotopic Bioorthogonal Tools as Molecular Twins for Radiotheranostic Applications. ChemBioChem, 2019, 20, 1530-1535.	1.3	6
23	PET imaging of the mouse brain reveals a dynamic regulation of SERT density in a chronic stress model. Translational Psychiatry, 2019, 9, 80.	2.4	7
24	Influence of Multidrug Resistance-Associated Proteins on the Excretion of the ABCC1 Imaging Probe 6-Bromo-7-[11C]Methylpurine in Mice. Molecular Imaging and Biology, 2019, 21, 306-316.	1.3	15
25	Influence of breast cancer resistance protein and P-glycoprotein on tissue distribution and excretion of Ko143 assessed with PET imaging in mice. European Journal of Pharmaceutical Sciences, 2018, 115, 212-222.	1.9	4
26	Comparison of fully-automated radiosyntheses of [11C]erlotinib for preclinical and clinical use starting from in target produced [11C]CO2 or [11C]CH4. EJNMMI Radiopharmacy and Chemistry, 2018, 3, 8.	1.8	10
27	EGFR is required for FOSâ€dependent bone tumor development via RSK2/CREB signaling. EMBO Molecular Medicine, 2018, 10, .	3.3	24
28	Humanization of the bloodâ€"brain barrier transporter ABCB1 in mice disrupts genomic locus â€" lessons from three unsuccessful approaches. European Journal of Microbiology and Immunology, 2018, 8, 78-86.	1.5	2
29	Effect of Rifampicin on the Distribution of [¹¹C]Erlotinib to the Liver, a Translational PET Study in Humans and in Mice. Molecular Pharmaceutics, 2018, 15, 4589-4598.	2.3	17
30	Hepatocyte-Specific Deletion of EGFR in Mice Reduces Hepatic Abcg2 Transport Activity Measured by [11C]erlotinib and Positron Emission Tomography. Drug Metabolism and Disposition, 2017, 45, 1093-1100.	1.7	11
31	[18F]Fluoroalkyl azides for rapid radiolabeling and (Re)investigation of their potential towards in vivo click chemistry. Organic and Biomolecular Chemistry, 2017, 15, 5976-5982.	1.5	13
32	On the applicability of [18F]FBPA to predict L-BPA concentration after amino acid preloading in HuH-7 liver tumor model and the implication for liver boron neutron capture therapy. Nuclear Medicine and Biology, 2017, 44, 83-89.	0.3	14
33	Strategies to Inhibit ABCB1- and ABCG2-Mediated Efflux Transport of Erlotinib at the Bloodâ€“Brain Barrier: A PET Study on Nonhuman Primates. Journal of Nuclear Medicine, 2017, 58, 117-122.	2.8	43
34	[11 C]Erlotinib PET cannot detect acquired erlotinib resistance in NSCLC tumor xenografts in mice. Nuclear Medicine and Biology, 2017, 52, 7-15.	0.3	6
35	32nd International Austrian Winter Symposium. EJNMMI Research, 2016, 6, 32.	1.1	0
36	Synthesis and preclinical characterization of 1-(6â€²-deoxy-6â€²-[18 F]fluoro-Î²- d) Tj ETQq0 0 0 rgBT /Overlock 10 Tf 50 67 Td (-allofura assess tumor hypoxia. Bioorganic and Medicinal Chemistry, 2016, 24, 5326-5339.	1.4	13

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37	Preloading with L-BPA, L-tyrosine and L-DOPA enhances the uptake of [18F]FBPA in human and mouse tumour cell lines. Applied Radiation and Isotopes, 2016, 118, 67-72.	0.7	12
38	Design, Synthesis, and Evaluation of a Low-Molecular-Weight ¹¹C-Labeled Tetrazine for Pretargeted PET Imaging Applying Bioorthogonal in Vivo Click Chemistry. Bioconjugate Chemistry, 2016, 27, 1707-1712.	1.8	73
39	Influence of 24-Nor-Ursodeoxycholic Acid on Hepatic Disposition of [18F]Ciprofloxacin, a Positron Emission Tomography Study in Mice. Journal of Pharmaceutical Sciences, 2016, 105, 106-112.	1.6	5
40	Generation and Characterization of a Breast Cancer Resistance Protein Humanized Mouse Model. Molecular Pharmacology, 2016, 89, 492-504.	1.0	23
41	[18F]FE@SUPPY: a suitable PET tracer for the adenosine A3 receptor? An in vivo study in rodents. European Journal of Nuclear Medicine and Molecular Imaging, 2015, 42, 741-749.	3.3	5
42	Factors Governing P-Glycoprotein-Mediated Drugâ€“Drug Interactions at the Bloodâ€“Brain Barrier Measured with Positron Emission Tomography. Molecular Pharmaceutics, 2015, 12, 3214-3225.	2.3	39
43	[18F]FDG is not transported by P-glycoprotein and breast cancer resistance protein at the rodent bloodâ€“brain barrier. Nuclear Medicine and Biology, 2015, 42, 585-589.	0.3	2
44	Development of Fluorine-18 Labeled Metabolically Activated Tracers for Imaging of Drug Efflux Transporters with Positron Emission Tomography. Journal of Medicinal Chemistry, 2015, 58, 6058-6080.	2.9	18
45	Automated electrophilic radiosynthesis of [18F]FBPA using a modified nucleophilic GE TRACERlab FXFDG. Applied Radiation and Isotopes, 2015, 104, 124-127.	0.7	9
46	Development and performance test of an online blood sampling system for determination of the arterial input function in rats. EJNMMI Physics, 2015, 2, 1.	1.3	22
47	Automated radiosynthesis of [18F]ciprofloxacin. Applied Radiation and Isotopes, 2015, 99, 133-137.	0.7	5
48	Breast Cancer Resistance Protein and P-Glycoprotein Influence In Vivo Disposition of ¹¹C-Erlotinib. Journal of Nuclear Medicine, 2015, 56, 1930-1936.	2.8	52
49	Development of a ¹⁸Fâ€Labeled Tetrazine with Favorable Pharmacokinetics for Bioorthogonal PET Imaging. Angewandte Chemie - International Edition, 2014, 53, 9655-9659.	7.2	108
50	Radiosynthesis of [124I]Iodometomidate and Biological Evaluation Using Small-Animal PET. Molecular Imaging and Biology, 2014, 16, 317-321.	1.3	5
51	Preclinical in vitro & in vivo evaluation of [11C]SNAP-7941 â€“ the first PET tracer for the melanin concentrating hormone receptor 1. Nuclear Medicine and Biology, 2013, 40, 919-925.	0.3	20
52	(R)-[11C]verapamil is selectively transported by murine and human P-glycoprotein at the bloodâ€“brain barrier, and not by MRP1 and BCRP. Nuclear Medicine and Biology, 2013, 40, 873-878.	0.3	67
53	Tariquidar and Elacridar Are Dose-Dependently Transported by P-Glycoprotein and Bcrp at the Blood-Brain Barrier: A Small-Animal Positron Emission Tomography and In Vitro Study. Drug Metabolism and Disposition, 2013, 41, 754-762.	1.7	79
54	Assessment of cerebral P-glycoprotein expression and function with PET by combined [11C]inhibitor and [11C]substrate scans in rats. Nuclear Medicine and Biology, 2013, 40, 755-763.	0.3	15

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55	Radioligands targeting Pâ€glycoprotein and other drug efflux proteins at the bloodâ€“brain barrier. Journal of Labelled Compounds and Radiopharmaceuticals, 2013, 56, 68-77.	0.5	45
56	A Novel PET Protocol for Visualization of Breast Cancer Resistance Protein Function at the Bloodâ€“Brain Barrier. Journal of Cerebral Blood Flow and Metabolism, 2012, 32, 2002-2011.	2.4	46
57	Interaction of HM30181 with P-glycoprotein at the murine bloodâ€“brain barrier assessed with positron emission tomography. European Journal of Pharmacology, 2012, 696, 18-27.	1.7	9
58	Synthesis and preclinical evaluation of the radiolabeled P-glycoprotein inhibitor [11C]MC113. Nuclear Medicine and Biology, 2012, 39, 1219-1225.	0.3	17
59	The antiepileptic drug mephobarbital is not transported by P-glycoprotein or multidrug resistance protein 1 at the bloodâ€“brain barrier: A positron emission tomography study. Epilepsy Research, 2012, 100, 93-103.	0.8	12
60	A comparative small-animal PET evaluation of [11C]tariquidar, [11C]elacridar and (R)-[11C]verapamil for detection of P-glycoprotein-expressing murine breast cancer. European Journal of Nuclear Medicine and Molecular Imaging, 2012, 39, 149-159.	3.3	23
61	Radiosynthesis and Assessment of Ocular Pharmacokinetics of 124I-Labeled Chitosan in Rabbits Using Small-Animal PET. Molecular Imaging and Biology, 2011, 13, 222-226.	1.3	19
62	Radiosynthesis and in vivo evaluation of 1-[18F]fluoroelacridar as a positron emission tomography tracer for P-glycoprotein and breast cancer resistance protein. Bioorganic and Medicinal Chemistry, 2011, 19, 2190-2198.	1.4	30
63	Gastric Cancer Growth Control by BEZ235<i>In Vivo</i>Does Not Correlate with PI3K/mTOR Target Inhibition but with [18F]FLT Uptake. Clinical Cancer Research, 2011, 17, 5322-5332.	3.2	33
64	A Novel Positron Emission Tomography Imaging Protocol Identifies Seizure-Induced Regional Overactivity of P-Glycoprotein at the Blood-Brain Barrier. Journal of Neuroscience, 2011, 31, 8803-8811.	1.7	58
65	Dose-response assessment of tariquidar and elacridar and regional quantification of P-glycoprotein inhibition at the rat blood-brain barrier using (R)-[11C]verapamil PET. European Journal of Nuclear Medicine and Molecular Imaging, 2010, 37, 942-953.	3.3	102
66	Synthesis and in vivo evaluation of [11C]tariquidar, a positron emission tomography radiotracer based on a third-generation P-glycoprotein inhibitor. Bioorganic and Medicinal Chemistry, 2010, 18, 5489-5497.	1.4	73
67	Small-animal PET evaluation of [11C]MC113 as a PET tracer for P-glycoprotein. BMC Pharmacology, 2010, 10, .	0.4	0
68	Evaluation of [11C]elacridar and [11C]tariquidar in transporter knockout mice using small-animal PET. NeuroImage, 2010, 52, S25.	2.1	3
69	Synthesis and in vivo evaluation of the putative breast cancer resistance protein inhibitor [11C]methyl 4-((4-(2-(6,7-dimethoxy-1,2,3,4-tetrahydroisoquinolin-2-yl)ethyl)phenyl)amino-carbonyl)-2-(quinoline-2-carbonylamino)benzoate. Nuclear Medicine and Biology, 2010, 37, 637-644.	0.3	12
70	Limitations of Small Animal PET Imaging with [18F]FDDNP and FDG for Quantitative Studies in a Transgenic Mouse Model of Alzheimerâ€™s Disease. Molecular Imaging and Biology, 2009, 11, 236-240.	1.3	87
71	Synthesis and Small-Animal Positron Emission Tomography Evaluation of [11C]-Elacridar As a Radiotracer to Assess the Distribution of P-Glycoprotein at the Bloodâ˜'Brain Barrier. Journal of Medicinal Chemistry, 2009, 52, 6073-6082.	2.9	71
72	Synthesis of a [¹⁸F]fluorobenzothiazole as potential amyloid imaging agent. Journal of Labelled Compounds and Radiopharmaceuticals, 2008, 51, 137-145.	0.5	14

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73	Tariquidar-Induced P-Glycoprotein Inhibition at the Rat Bloodâ€“Brain Barrier Studied with (<i>R</i>)-¹¹C-Verapamil and PET. Journal of Nuclear Medicine, 2008, 49, 1328-1335.	2.8	104
74	Pre vivo, ex vivo and in vivo evaluations of [68Ga]-EDTMP. Nuclear Medicine and Biology, 2007, 34, 391-397.	0.3	37