Bernd J Pichler

List of Publications by Citations

110 papers	7,495 citations	43 h-index	86 g-index
116 ext. papers	8,371 ext. citations	8.7 avg, IF	5.5 L-index

#	Paper	IF	Citations
110	Simultaneous PET-MRI: a new approach for functional and morphological imaging. *Nature Medicine*, **2008**, 14, 459-65	50.5	829
109	MRI-based attenuation correction for PET/MRI: a novel approach combining pattern recognition and atlas registration. *Journal of Nuclear Medicine*, **2008**, 49, 1875-83	8.9	384
108	Simultaneous MR/PET imaging of the human brain: feasibility study. *Radiology*, **2008**, 248, 1028-35	20.5	382
107	PET/MRI: paving the way for the next generation of clinical multimodality imaging applications. *Journal of Nuclear Medicine*, **2010**, 51, 333-6	8.9	348
106	Towards quantitative PET/MRI: a review of MR-based attenuation correction techniques. *European Journal of Nuclear Medicine and Molecular Imaging*, **2009**, 36 Suppl 1, S93-104	8.8	278
105	Performance test of an LSO-APD detector in a 7-T MRI scanner for simultaneous PET/MRI. *Journal of Nuclear Medicine*, **2006**, 47, 639-47	8.9	253
104	Simultaneous in vivo positron emission tomography and magnetic resonance imaging. *Proceedings of the National Academy of Sciences of the United States of America*, **2008**, 105, 3705-10	11.5	250
103	Simultaneous acquisition of multislice PET and MR images: initial results with a MR-compatible PET scanner. *Journal of Nuclear Medicine*, **2006**, 47, 1968-76	8.9	235
102	TNFR1 signaling and IFN-gamma signaling determine whether T cells induce tumor dormancy or promote multistage carcinogenesis. *Cancer Cell*, **2008**, 13, 507-18	24.3	234
101	MRI-based attenuation correction for whole-body PET/MRI: quantitative evaluation of segmentation- and atlas-based methods. *Journal of Nuclear Medicine*, **2011**, 52, 1392-9	8.9	230
100	Hybrid PET/MRI of intracranial masses: initial experiences and comparison to PET/CT. *Journal of Nuclear Medicine*, **2010**, 51, 1198-205	8.9	194
99	Positron emission tomography/magnetic resonance imaging: the next generation of multimodality imaging?. *Seminars in Nuclear Medicine*, **2008**, 38, 199-208	5.4	172
98	Latest advances in molecular imaging instrumentation. *Journal of Nuclear Medicine*, **2008**, 49 Suppl 2, 5S-23S	8.9	165
97	Cell tracking with optical imaging. *European Radiology*, **2008**, 18, 2021-32	8	155
96	PET/MR images acquired with a compact MR-compatible PET detector in a 7-T magnet. *Radiology*, **2007**, 244, 807-14	20.5	148
95	Pre-clinical PET/MR: technological advances and new perspectives in biomedical research. *European Journal of Nuclear Medicine and Molecular Imaging*, **2009**, 36 Suppl 1, S56-68	8.8	132
94	MR-Based PET attenuation correction for PET/MR imaging. *Seminars in Nuclear Medicine*, **2013**, 43, 45-59	5.4	129

93	A prototype high-resolution animal positron tomograph with avalanche photodiode arrays and LSO crystals. *European Journal of Nuclear Medicine and Molecular Imaging*, **2001**, 28, 136-43		129
92	Simultaneous PET-MRI reveals brain function in activated and resting state on metabolic, hemodynamic and multiple temporal scales. *Nature Medicine*, **2013**, 19, 1184-9	50.5	119
91	Technical performance evaluation of a human brain PET/MRI system. *European Radiology*, **2012**, 22, 1776-888		119
90	Combined PET/MRI: one step further in multimodality imaging. *Trends in Molecular Medicine*, **2010**, 16, 508-15	11.5	106
89	SOX2 expression associates with stem cell state in human ovarian carcinoma. *Cancer Research*, **2013**, 73, 5544-55	10.1	104
88	ImmunoPET/MR imaging allows specific detection of Aspergillus fumigatus lung infection in vivo. *Proceedings of the National Academy of Sciences of the United States of America*, **2016**, 113, E1026-33	11.5	97
87	Multimodal imaging approaches: PET/CT and PET/MRI. *Handbook of Experimental Pharmacology*, **2008**, 109-32	3.2	93
86	PET/MRI hybrid imaging: devices and initial results. *European Radiology*, **2008**, 18, 1077-86	8	89
85	Longitudinal PET-MRI reveals β-amyloid deposition and rCBF dynamics and connects vascular amyloidosis to quantitative loss of perfusion. *Nature Medicine*, **2014**, 20, 1485-92	50.5	87
84	PET imaging of prostate cancer xenografts with a highly specific antibody against the prostate-specific membrane antigen. *Journal of Nuclear Medicine*, **2009**, 50, 606-11	8.9	83
83	Targeted mast cell silencing protects against joint destruction and angiogenesis in experimental arthritis in mice. *Arthritis and Rheumatism*, **2007**, 56, 1806-16		71
82	Evaluation of Geiger-mode APDs for PET block detector designs. *Physics in Medicine and Biology*, **2010**, 55, 1815-32	3.8	67
81	Simultaneous 68Ga-DOTATOC-PET/MRI for IMRT treatment planning for meningioma: first experience. *International Journal of Radiation Oncology Biology Physics*, **2011**, 81, 277-83	4	65
80	Combined PET/MR: a technology becomes mature. *Journal of Nuclear Medicine*, **2015**, 56, 165-8	8.9	61
79	Principles of PET/MR Imaging. *Journal of Nuclear Medicine*, **2014**, 55, 2S-10S	8.9	60
78	64Cu antibody-targeting of the T-cell receptor and subsequent internalization enables in vivo tracking of lymphocytes by PET. *Proceedings of the National Academy of Sciences of the United States of America*, **2015**, 112, 1161-6	11.5	58
77	An integrated MR/PET system: prospective applications. *Abdominal Imaging*, **2009**, 34, 668-74		58
76	PI3K Pathway Inhibition Achieves Potent Antitumor Activity in Melanoma Brain Metastases In Vitro and In Vivo. *Clinical Cancer Research*, **2016**, 22, 5818-5828	12.9	53

75	Preclinical and Translational PET/MR Imaging. *Journal of Nuclear Medicine*, **2014**, 55, 11S-18S	8.9	51
74	Imaging of delayed-type hypersensitivity reaction by PET and 18F-galacto-RGD. *Journal of Nuclear Medicine*, **2005**, 46, 184-9	8.9	50
73	Hybrid cardiac imaging using PET/MRI: a joint position statement by the European Society of Cardiovascular Radiology (ESCR) and the European Association of Nuclear Medicine (EANM). *European Radiology*, **2018**, 28, 4086-4101	8	48
72	In vivo tracking of Th1 cells by PET reveals quantitative and temporal distribution and specific homing in lymphatic tissue. *Journal of Nuclear Medicine*, **2014**, 55, 301-7	8.9	47
71	Assessment of MR compatibility of a PET insert developed for simultaneous multiparametric PET/MR imaging on an animal system operating at 7 T. *Magnetic Resonance in Medicine*, **2011**, 65, 269-79	4.4	46
70	MR-based attenuation correction methods for improved PET quantification in lesions within bone and susceptibility artifact regions. *Journal of Nuclear Medicine*, **2013**, 54, 1768-74	8.9	45
69	A hyperspectral fluorescence system for 3D in vivo optical imaging. *Physics in Medicine and Biology*, **2006**, 51, 2029-43	3.8	45
68	A decade of combined imaging: from a PET attached to a CT to a PET inside an MR. *European Journal of Nuclear Medicine and Molecular Imaging*, **2009**, 36 Suppl 1, S1-2	8.8	44
67	Diffusion tensor imaging in a human PET/MR hybrid system. *Investigative Radiology*, **2010**, 45, 270-4	10.1	43
66	The immunoadhesin glycoprotein VI-Fc regulates arterial remodelling after mechanical injury in ApoE-/- mice. *Cardiovascular Research*, **2008**, 80, 131-7	9.9	43
65	Quantitative Evaluation of Segmentation- and Atlas-Based Attenuation Correction for PET/MR on Pediatric Patients. *Journal of Nuclear Medicine*, **2015**, 56, 1067-74	8.9	41
64	Towards Translational ImmunoPET/MR Imaging of Invasive Pulmonary Aspergillosis: The Humanised Monoclonal Antibody JF5 Detects Lung Infections. *Theranostics*, **2017**, 7, 3398-3414	12.1	41
63	High-resolution animal PET imaging of prostate cancer xenografts with three different 64Cu-labeled antibodies against native cell-adherent PSMA. *Prostate*, **2010**, 70, 1413-21	4.2	40
62	Assessment of murine brain tissue shrinkage caused by different histological fixatives using magnetic resonance and computed tomography imaging. *Histology and Histopathology*, **2015**, 30, 601-13	1.4	39
61	Phosphoglycerate kinase 1 promoting tumor progression and metastasis in gastric cancer - detected in a tumor mouse model using positron emission tomography/magnetic resonance imaging. *Cellular Physiology and Biochemistry*, **2010**, 26, 147-54	3.9	38
60	Assessment of PET tracer uptake in hormone-independent and hormone-dependent xenograft prostate cancer mouse models. *Journal of Nuclear Medicine*, **2011**, 52, 1654-63	8.9	36
59	Quantification accuracy and partial volume effect in dependence of the attenuation correction of a state-of-the-art small animal PET scanner. *Physics in Medicine and Biology*, **2012**, 57, 3981-93	3.8	34
58	The effect of patient positioning aids on PET quantification in PET/MR imaging. *European Journal of Nuclear Medicine and Molecular Imaging*, **2011**, 38, 920-9	8.8	33

57	Endothelial depletion of murine SRF/MRTF provokes intracerebral hemorrhagic stroke. *Proceedings of the National Academy of Sciences of the United States of America*, **2015**, 112, 9914-9	11.5	30
56	Isochronous assessment of cardiac metabolism and function in mice using hybrid PET/MRI. *Journal of Nuclear Medicine*, **2010**, 51, 1277-84	8.9	30
55	Weak Agonistic LPS Restores Intestinal Immune Homeostasis. *Molecular Therapy*, **2019**, 27, 1974-1991	11.7	29
54	Cre/lox-assisted non-invasive in vivo tracking of specific cell populations by positron emission tomography. *Nature Communications*, **2017**, 8, 444	17.4	28
53	Enhanced Central Neural Gain Compensates Acoustic Trauma-induced Cochlear Impairment, but Unlikely Correlates with Tinnitus and Hyperacusis. *Neuroscience*, **2019**, 407, 146-169	3.9	28
52	Multimodal elucidation of choline metabolism in a murine glioma model using magnetic resonance spectroscopy and 11C-choline positron emission tomography. *Cancer Research*, **2013**, 73, 1470-80	10.1	26
51	Cancer immunotherapy is accompanied by distinct metabolic patterns in primary and secondary lymphoid organs observed by non-invasive F-FDG-PET. *Theranostics*, **2020**, 10, 925-937	12.1	26
50	Decoding Intratumoral Heterogeneity of Breast Cancer by Multiparametric In Vivo Imaging: A Translational Study. *Cancer Research*, **2016**, 76, 5512-22	10.1	26
49	PET/MRI Hybrid Systems. *Seminars in Nuclear Medicine*, **2018**, 48, 332-347	5.4	25
48	Comparison of small animal CT contrast agents. *Contrast Media and Molecular Imaging*, **2016**, 11, 272-84	3.2	25
47	A Population-Based Gaussian Mixture Model Incorporating 18F-FDG PET and Diffusion-Weighted MRI Quantifies Tumor Tissue Classes. *Journal of Nuclear Medicine*, **2016**, 57, 473-9	8.9	23
46	Shine-Through in PET/MR Imaging: Effects of the Magnetic Field on Positron Range and Subsequent Image Artifacts. *Journal of Nuclear Medicine*, **2015**, 56, 951-4	8.9	21
45	Visualization and quantification of homing kinetics of myeloid-derived suppressor cells in primary and metastatic cancer. *Theranostics*, **2019**, 9, 5869-5885	12.1	19
44	Significant impact of different oxygen breathing conditions on noninvasive in vivo tumor-hypoxia imaging using [□]-fluoro-azomycinarabino-furanoside ([□]FAZA). *Radiation Oncology*, **2011**, 6, 165	4.2	17
43	Pharmacokinetics and PET imaging properties of two recombinant anti-PSMA antibody fragments in comparison to their parental antibody. *Prostate*, **2014**, 74, 743-55	4.2	16
42	Feasibility of sequential PET/MRI using a state-of-the-art small animal PET and a 1 T benchtop MRI. *Molecular Imaging and Biology*, **2013**, 15, 155-65	3.8	15
41	Oxygen breathing affects 3Sdeoxy-3S18F-fluorothymidine uptake in mouse models of arthritis and cancer. *Journal of Nuclear Medicine*, **2012**, 53, 823-30	8.9	15
40	Image-derived biomarkers and multimodal imaging strategies for lung cancer management. *European Journal of Nuclear Medicine and Molecular Imaging*, **2015**, 42, 634-43	8.8	14

39	Assessment of rodent brain activity using combined [(15)O]H2O-PET and BOLD-fMRI. *NeuroImage*, **2014**, 89, 271-9	7.9	13
38	A Comparative pO2 Probe and [18F]-Fluoro-Azomycinarabino-Furanoside ([18F]FAZA) PET Study Reveals Anesthesia-Induced Impairment of Oxygenation and Perfusion in Tumor and Muscle. *PLoS ONE*, **2015**, 10, e0124665	3.7	13
37	Janus kinase 3 regulates renal 25-hydroxyvitamin D 1-hydroxylase expression, calcitriol formation, and phosphate metabolism. *Kidney International*, **2015**, 87, 728-37	9.9	13
36	Simultaneous PET/MR imaging of the brain: feasibility of cerebral blood flow measurements with FAIR-TrueFISP arterial spin labeling MRI. *Acta Radiologica*, **2012**, 53, 1066-72	2	13
35	Quantitative Rodent Brain Receptor Imaging. *Molecular Imaging and Biology*, **2020**, 22, 223-244	3.8	13
34	Imaging fibrosis in inflammatory diseases: targeting the exposed extracellular matrix. *Theranostics*, **2019**, 9, 2868-2881	12.1	11
33	Functional resting-state brain connectivity is accompanied by dynamic correlations of application-dependent [F]FDG PET-tracer fluctuations. *NeuroImage*, **2019**, 196, 161-172	7.9	11
32	Preclinical evaluation of a novel c-Met inhibitor in a gastric cancer xenograft model using small animal PET. *Molecular Imaging and Biology*, **2013**, 15, 203-11	3.8	11
31	A Novel Unsupervised Segmentation Approach Quantifies Tumor Tissue Populations Using Multiparametric MRI: First Results with Histological Validation. *Molecular Imaging and Biology*, **2017** , 19, 391-397	3.8	11
30	PET/MR imaging and optical imaging of metastatic rhabdomyosarcoma in mice. *Journal of Nuclear Medicine*, **2014**, 55, 1545-51	8.9	10
29	An evaluation of 2-deoxy-2-[18F]fluoro-D-glucose and 3Sdeoxy-3S[18F]-fluorothymidine uptake in human tumor xenograft models. *Molecular Imaging and Biology*, **2012**, 14, 355-65	3.8	10
28	Single and dual energy attenuation correction in PET/CT in the presence of iodine based contrast agents. *Medical Physics*, **2008**, 35, 1959-69	4.4	10
27	Cysteine-type cathepsins promote the effector phase of acute cutaneous delayed-type hypersensitivity reactions. *Theranostics*, **2019**, 9, 3903-3917	12.1	9
26	Quantification of -Amyloidosis and rCBF with Dedicated PET, 7 T MR Imaging, and High-Resolution Microscopic MR Imaging at 16.4 T in APP23 Mice. *Journal of Nuclear Medicine*, **2015**, 56, 1593-9	8.9	9
25	Linking imaging to omics utilizing image-guided tissue extraction. *Proceedings of the National Academy of Sciences of the United States of America*, **2018**, 115, E2980-E2987	11.5	9
24	On the quantification accuracy, homogeneity, and stability of simultaneous positron emission tomography/magnetic resonance imaging systems. *Investigative Radiology*, **2014**, 49, 373-81	10.1	9
23	Comparison of the Accuracy of FMT/CT and PET/MRI for the Assessment of Antibody Biodistribution in Squamous Cell Carcinoma Xenografts. *Journal of Nuclear Medicine*, **2018**, 59, 44-50	8.9	8
22	Tracking the fate of adoptively transferred myeloid-derived suppressor cells in the primary breast tumor microenvironment. *PLoS ONE*, **2018**, 13, e0196040	3.7	8

21	Characterization of a novel murine model for spontaneous hemorrhagic stroke using in vivo PET and MR multiparametric imaging. *NeuroImage*, **2017**, 155, 245-256	7.9	6
20	Hybrid cardiac imaging using PET/MRI: a joint position statement by the European Society of Cardiovascular Radiology (ESCR) and the European Association of Nuclear Medicine (EANM). *European Journal of Hybrid Imaging*, **2018**, 2,	1.7	6
19	The Synergistic Effect of Selumetinib/Docetaxel Combination Therapy Monitored by [(18)F]FDG/[(18)F]FLT PET and Diffusion-Weighted Magnetic Resonance Imaging in a Colorectal Tumor Xenograft Model. *Molecular Imaging and Biology*, **2016**, 18, 249-57	3.8	6
18	Impact of the Arterial Input Function Recording Method on Kinetic Parameters in Small-Animal PET. *Journal of Nuclear Medicine*, **2018**, 59, 1159-1164	8.9	5
17	Non-invasive monitoring of pancreatic tumor progression in the RIP1-Tag2 mouse by magnetic resonance imaging. *Molecular Imaging and Biology*, **2013**, 15, 186-93	3.8	5
16	Quantitative correlation at the molecular level of tumor response to docetaxel by multimodal diffusion-weighted magnetic resonance imaging and [□□]FDG/[□□]FLT positron emission tomography. *Molecular Imaging*, **2014**, 13,	3.7	5
15	In vivo optical imaging of matrix metalloproteinase activity detects acute and chronic contact hypersensitivity reactions and enables monitoring of the antiinflammatory effects of N-acetylcysteine. *Molecular Imaging*, **2014**, 13,	3.7	4
14	Spectral Clustering Predicts Tumor Tissue Heterogeneity Using Dynamic F-FDG PET: A Complement to the Standard Compartmental Modeling Approach. *Journal of Nuclear Medicine*, **2017**, 58, 651-657	8.9	3
13	[F]Fluoro-azomycin-2□-deoxy-□-ribofuranoside - A new imaging agent for tumor hypoxia in comparison with [F]FAZA. *Nuclear Medicine and Biology*, **2016**, 43, 759-769	2.1	3
12	Elucidating the complementarity of resting-state networks derived from dynamic [F]FDG and hemodynamic fluctuations using simultaneous small-animal PET/MRI. *NeuroImage*, **2021**, 236, 118045	7.9	3
11	Machine learning identifies stroke features between species. *Theranostics*, **2021**, 11, 3017-3034	12.1	3
10	Murine Lymphocyte Labeling by 64Cu-Antibody Receptor Targeting for In Vivo Cell Trafficking by PET/CT. *Journal of Visualized Experiments*, **2017**,	1.6	2
9	The PI3K inhibitor BKM120 has potent antitumor activity in melanoma brain metastases in vitro and in vivo.. *Journal of Clinical Oncology*, **2013**, 31, e20050-e20050	2.2	2
8	The administration route of tumor-antigen-specific T-helper cells differentially modulates the tumor microenvironment and senescence. *Carcinogenesis*, **2019**, 40, 289-302	4.6	2
7	2-Nitroimidazole-Furanoside Derivatives for Hypoxia Imaging-Investigation of Nucleoside Transporter Interaction, F-Labeling and Preclinical PET Imaging. *Pharmaceuticals*, **2019**, 12,	5.2	1
6	Evaluation of positron emission tomographic tracers for imaging of papillomavirus-induced tumors in rabbits. *Molecular Imaging*, **2014**, 13,	3.7	1
5	Selective protection of murine cerebral G-proteins from inactivation by parenterally injected pertussis toxin. *Journal of Molecular Medicine*, **2020**, 98, 97-110	5.5	1
4	Molecular Imaging?. *Journal of Nuclear Medicine*, **2020**, 61, 1428-1434	8.9	1

3	Low-dose total body irradiation facilitates antitumoral Th1 immune responses. *Theranostics*, **2021**, 11, 7700-7714	12.1	1
2	Akt/PKB-sensitive proximal tubular glucose and phosphate transport. *FASEB Journal*, **2010**, 24, 606.5	0.9	
1	Targeting RANKL for Immunotherapy of Multiple Myeloma. *Blood*, **2011**, 118, 2905-2905	2.2	