Benedikt A Poser

List of Publications by Year
in descending order

87 papers	4,486 citations	147801 31 h-index	128289 60 g-index
97 all docs	97 docs citations	97 times ranked	4210 citing authors

#	Article	IF	Citations
1	Simultaneous multislice (SMS) imaging techniques. Magnetic Resonance in Medicine, 2016, 75, 63-81.	3.0	420
2	BOLD contrast sensitivity enhancement and artifact reduction with multiecho EPI: Parallel-acquired inhomogeneity-desensitized fMRI. Magnetic Resonance in Medicine, 2006, 55, 1227-1235.	3.0	399
3	Three dimensional echo-planar imaging at 7 Tesla. NeuroImage, 2010, 51, 261-266.	4.2	266
4	High-Resolution CBV-fMRI Allows Mapping of Laminar Activity and Connectivity of Cortical Input and Output in Human M1. Neuron, 2017, 96, 1253-1263.e7.	8.1	255
5	Multi-echo fMRI: A review of applications in fMRI denoising and analysis of BOLD signals. NeuroImage, 2017, 154, 59-80.	4.2	238
6	Locus coeruleus imaging as a biomarker for noradrenergic dysfunction in neurodegenerative diseases. Brain, 2019, 142, 2558-2571.	7.6	219
7	Fast quantitative susceptibility mapping using 3D EPI and total generalized variation. NeuroImage, 2015, 111, 622-630.	4.2	157
8	Investigating the benefits of multi-echo EPI for fMRI at 7ÂT. NeuroImage, 2009, 45, 1162-1172.	4.2	121
9	RF excitation using time interleaved acquisition of modes (TIAMO) to address <i>B</i>₁ inhomogeneity in highâ€field MRI. Magnetic Resonance in Medicine, 2010, 64, 327-333.	3.0	115
10	Slab-selective, BOLD-corrected VASO at 7 Tesla provides measures of cerebral blood volume reactivity with high signal-to-noise ratio. Magnetic Resonance in Medicine, 2014, 72, 137-148.	3.0	107
11	High-resolution in vivo imaging of human locus coeruleus by magnetization transfer MRI at 3T and 7T. NeuroImage, 2018, 168, 427-436.	4.2	104
12	Techniques for blood volume fMRI with VASO: From low-resolution mapping towards sub-millimeter layer-dependent applications. NeuroImage, 2018, 164, 131-143.	4.2	101
13	Sub-millimeter fMRI reveals multiple topographical digit representations that form action maps in human motor cortex. NeuroImage, 2020, 208, 116463.	4.2	88
14	Impact of acquisition and analysis strategies on cortical depth-dependent fMRI. NeuroImage, 2018, 168, 332-344.	4.2	71
15	Sub-millimeter T2 weighted fMRI at 7 T: comparison of 3D-GRASE and 2D SE-EPI. Frontiers in Neuroscience, 2015, 9, 163.	2.8	70
16	Layer-dependent functional connectivity methods. Progress in Neurobiology, 2021, 207, 101835.	5.7	67
17	LayNii: A software suite for layer-fMRI. NeuroImage, 2021, 237, 118091.	4.2	64
18	Fast spin echo sequences for BOLD functional MRI. Magnetic Resonance Materials in Physics, Biology, and Medicine, 2007, 20, 11-17.	2.0	59

#	Article	IF	Citations
19	Threeâ€dimensional Fourier encoding of simultaneously excited slices: Generalized acquisition and reconstruction framework. Magnetic Resonance in Medicine, 2014, 71, 2071-2081.	3.0	58
20	<scp>SENSE</scp> and simultaneous multislice imaging. Magnetic Resonance in Medicine, 2015, 74, 1356-1362.	3.0	57
21	A method for the dynamic correction of B 0 -related distortions in single-echo EPI at 7 T. NeuroImage, 2018, 168, 321-331.	4.2	57
22	High-resolution diffusion MRI at 7T using a three-dimensional multi-slab acquisition. NeuroImage, 2016, 143, 1-14.	4.2	55
23	The quest for the best: The impact of different EPI sequences on the sensitivity of random effect fMRI group analyses. NeuroImage, 2016, 126, 49-59.	4.2	55
24	Resolving laminar activation in human V1 using ultra-high spatial resolution fMRI at 7T. Scientific Reports, 2018, 8, 17063.	3.3	53
25	Simultaneous multislice excitation by parallel transmission. Magnetic Resonance in Medicine, 2014, 71, 1416-1427.	3.0	51
26	Design of parallel transmission pulses for simultaneous multislice with explicit control for peak power and local specific absorption rate. Magnetic Resonance in Medicine, 2015, 73, 1946-1953.	3.0	51
27	Pulse sequences and parallel imaging for high spatiotemporal resolution MRI at ultra-high field. NeuroImage, 2018, 168, 101-118.	4.2	47
28	Ultra-high resolution blood volume fMRI and BOLD fMRI in humans at 9.4â€T: Capabilities and challenges. NeuroImage, 2018, 178, 769-779.	4.2	44
29	Dynamic behavior of the locus coeruleus during arousal-related memory processing in a multi-modal 7T fMRI paradigm. ELife, 2020, 9, .	6.0	43
30	Unraveling the contributions to the neuromelanin-MRI contrast. Brain Structure and Function, 2020, 225, 2757-2774.	2.3	41
31	Rapid whole-brain resting-state fMRI at 3ÂT: Efficiency-optimized three-dimensional EPI versus repetition time-matched simultaneous-multi-slice EPI. NeuroImage, 2017, 163, 81-92.	4.2	39
32	Integrated VASO and perfusion contrast: A new tool for laminar functional MRI. NeuroImage, 2020, 207, 116358.	4.2	35
33	3D singleâ€shot VASO using a maxwell gradient compensated GRASE sequence. Magnetic Resonance in Medicine, 2009, 62, 255-262.	3.0	34
34	Comparison of 3 T and 7 T ASL techniques for concurrent functional perfusion and BOLD studies. NeuroImage, 2017, 156, 363-376.	4.2	34
35	A dual echo approach to removing motion artefacts in fMRI time series. NMR in Biomedicine, 2009, 22, 551-560.	2.8	33
36	Referenceâ€free unwarping of EPI data using dynamic offâ€resonance correction with multiecho acquisition (DOCMA). Magnetic Resonance in Medicine, 2012, 68, 1247-1254.	3.0	32

#	Article	IF	Citations
37	Using multi-echo simultaneous multi-slice (SMS) EPI to improve functional MRI of the subcortical nuclei of the basal ganglia at ultra-high field (7T). NeuroImage, 2018, 172, 886-895.	4.2	32
38	Timeâ€interleaved acquisition of modes: An analysis of SAR and image contrast implications. Magnetic Resonance in Medicine, 2012, 67, 1033-1041.	3.0	30
39	Simultaneous Multi-Slice fMRI using spiral trajectories. NeuroImage, 2014, 92, 8-18.	4.2	30
40	Sub-millimetre resolution laminar fMRI using Arterial Spin Labelling in humans at 7 T. PLoS ONE, 2021, 16, e0250504.	2.5	27
41	Optimization of simultaneous multislice EPI for concurrent functional perfusion and BOLD signal measurements at 7T. Magnetic Resonance in Medicine, 2017, 78, 121-129.	3.0	24
42	Comparison of SMS-EPI and 3D-EPI at 7T in an fMRI localizer study with matched spatiotemporal resolution and homogenized excitation profiles. PLoS ONE, 2019, 14, e0225286.	2.5	24
43	Singleâ€shot echoâ€planar imaging with Nyquist ghost compensation: Interleaved dual echo with acceleration (IDEA) echoâ€planar imaging (EPI). Magnetic Resonance in Medicine, 2013, 69, 37-47.	3.0	23
44	Memoryâ€Related Hippocampal Activity Can Be Measured Robustly Using fMRI at 7 Tesla. Journal of Neuroimaging, 2013, 23, 445-451.	2.0	23
45	Volumetric imaging with homogenised excitation and static field at 9.4 T. Magnetic Resonance Materials in Physics, Biology, and Medicine, 2016, 29, 333-345.	2.0	23
46	Echo-time dependence of the BOLD response transients â€" A window into brain functional physiology. NeuroImage, 2017, 159, 355-370.	4.2	23
47	A Specialized Multi-Transmit Head Coil for High Resolution fMRI of the Human Visual Cortex at 7T. PLoS ONE, 2016, 11, e0165418.	2.5	23
48	Measurement of activation-related changes in cerebral blood volume: VASO with single-shot HASTE acquisition. Magnetic Resonance Materials in Physics, Biology, and Medicine, 2007, 20, 63-67.	2.0	22
49	Application of wholeâ€brain CBVâ€weighted fMRI to a cognitive stimulation paradigm: Robust activation detection in a stroop task experiment using 3D GRASE VASO. Human Brain Mapping, 2011, 32, 974-981.	3.6	22
50	Prevention of motionâ€induced signal loss in diffusionâ€weighted echoâ€planar imaging by dynamic restoration of gradient moments. Magnetic Resonance in Medicine, 2014, 71, 2006-2013.	3.0	22
51	Functional cerebral blood volume mapping with simultaneous multi-slice acquisition. NeuroImage, 2016, 125, 1159-1168.	4.2	22
52	Highâ€resolution gradientâ€recalled echo imaging at 9.4T using 16â€channel parallel transmit simultaneous multislice spokes excitations with sliceâ€byâ€slice flip angle homogenization. Magnetic Resonance in Medicine, 2017, 78, 1050-1058.	3.0	22
53	The influence of spatial resolution on the spectral quality and quantification accuracy of wholeâ€brain MRSI at 1.5T, 3T, 7T, and 9.4T. Magnetic Resonance in Medicine, 2019, 82, 551-565.	3.0	22
54	Advances in High-Field BOLD fMRI. Materials, 2011, 4, 1941-1955.	2.9	21

#	Article	IF	Citations
55	BOLD fMRI signal characteristics of S1- and S2-SSFP at 7 Tesla. Frontiers in Neuroscience, 2014, 8, 49.	2.8	21
56	Magnetic field strength dependent SNR gain at the center of a spherical phantom and up to 11.<scp>7T</scp>. Magnetic Resonance in Medicine, 2022, 88, 2131-2138.	3.0	21
57	Correcting dynamic distortions in 7T echo planar imaging using a jittered echo time sequence. Magnetic Resonance in Medicine, 2016, 76, 1388-1399.	3.0	20
58	A study-specific fMRI normalization approach that operates directly on high resolution functional EPI data at 7Tesla. NeuroImage, 2014, 100, 710-714.	4.2	18
59	inhomogeneity mitigation in CEST using parallel transmission. Magnetic Resonance in Medicine, 2017, 78, 2216-2225.	3.0	18
60	Optimizing BOLD sensitivity in the 7T Human Connectome Project resting-state fMRI protocol using plug-and-play parallel transmission. NeuroImage, 2019, 195, 1-10.	4.2	18
61	In vivo imaging of the nucleus of the solitary tract with Magnetization Transfer at 7 Tesla. NeuroImage, 2019, 201, 116071.	4.2	16
62	Exploring the postâ€stimulus undershoot with spinâ€echo fMRI: Implications for models of neurovascular response. Human Brain Mapping, 2011, 32, 141-153.	3.6	15
63	The potential of MR-Encephalography for BCI/Neurofeedback applications with high temporal resolution. NeuroImage, 2019, 194, 228-243.	4.2	14
64	Estimating and eliminating the excitation errors in bipolar gradient composite excitations caused by radiofrequencyâ€gradient delay: Example of bipolar spokes pulses in parallel transmission. Magnetic Resonance in Medicine, 2017, 78, 1883-1890.	3.0	11
65	Frequency-specific attentional modulation in human primary auditory cortex and midbrain. NeuroImage, 2018, 174, 274-287.	4.2	11
66	Validating layer-specific VASO across species. NeuroImage, 2021, 237, 118195.	4.2	11
67	Phonological markers of information structure: An fMRI study. Neuropsychologia, 2014, 58, 64-74.	1.6	9
68	Simultaneous acquisition of cerebral blood volumeâ€, blood flowâ€, and blood oxygenationâ€weighted <scp>MRI</scp> signals at ultraâ€high magnetic field. Magnetic Resonance in Medicine, 2015, 74, 513-517.	3.0	9
69	Simultaneous multislice spectralâ€spatial excitations for reduced signal loss susceptibility artifact in BOLD functional MRI. Magnetic Resonance in Medicine, 2014, 72, 1342-1352.	3.0	8
70	Minimal Linear Networks for Magnetic Resonance Image Reconstruction. Scientific Reports, 2019, 9, 19527.	3.3	8
71	7T dynamic contrastâ€enhanced MRI for the detection of subtle bloodâ€“brain barrier leakage. Journal of Neuroimaging, 2021, 31, 902-911.	2.0	7
72	Evidence for engagement of the nucleus of the solitary tract in processing intestinal chemonociceptive input irrespective of conscious pain response in healthy humans. Pain, 2022, 163, 1520-1529.	4.2	7

#	Article	IF	Citations
73	Spectral decomposition of susceptibility artifacts for spectralâ€spatial radiofrequency pulse design. Magnetic Resonance in Medicine, 2012, 68, 1905-1910.	3.0	6
74	RF peak power reduction in CAIPIRINHA excitation by interslice phase optimization. NMR in Biomedicine, 2015, 28, 1393-1401.	2.8	6
75	Application of Evolution Strategies to the Design of SAR Efficient Parallel Transmit Multi-Spoke Pulses for Ultra-High Field MRI. IEEE Transactions on Medical Imaging, 2020, 39, 4225-4236.	8.9	5
76	Concurrent CBF and BOLD fMRI with dual-echo spiral simultaneous multi-slice acquisitions at 7T. NeuroImage, 2022, 247, 118820.	4.2	5
77	Variable slice thickness (VAST) EPI for the reduction of susceptibility artifacts in whole-brain GE-EPI at 7 Tesla. Magnetic Resonance Materials in Physics, Biology, and Medicine, 2017, 30, 591-607.	2.0	4
78	Transcutaneous vagus nerve stimulation increases locus coeruleus function and memory performance in older individuals. Alzheimer's and Dementia, 2020, 16, e044766.	0.8	4
79	Magnetization transfer weighted EPI facilitates cortical depth determination in native fMRI space. NeuroImage, 2021, 242, 118455.	4.2	4
80	<scp>BUDAâ€MESMERISE</scp>: Rapid acquisition and unsupervised parameter estimation for <scp>T₁</scp>, <scp>T₂</scp>, <scp>M₀</scp>, <scp>B₀</scp>, and <scp>B₁</scp> maps. Magnetic Resonance in Medicine, 2022, 88, 292-308.	3.0	4
81	Iterative projection onto convex sets for quantitative susceptibility mapping. Magnetic Resonance in Medicine, 2015, 73, 697-703.	3.0	3
82	Highly accelerated <scp>EPI</scp> with wave encoding and multiâ€shot simultaneous multislice imaging. Magnetic Resonance in Medicine, 2022, 88, 1180-1197.	3.0	3
83	Modeling and suppression of respiration induced B0-fluctuations in non-balanced steady-state free precession sequences at 7 Tesla. Magnetic Resonance Materials in Physics, Biology, and Medicine, 2013, 26, 377-387.	2.0	2
84	Rostroâ€caudal locus coeruleus integrity differences vary with age and sex using ultraâ€high field imaging. Alzheimer's and Dementia, 2020, 16, e046722.	0.8	1
85	Temporal SNR optimization through RF coil combination in fMRI: The more, the better?. PLoS ONE, 2021, 16, e0259592.	2.5	1
86	Optimization of simultaneous multislice EPI for concurrent functional perfusion and BOLD signal measurements at 7T. Magnetic Resonance in Medicine, 2017, 78, C1-C1.	3.0	0
87	Worry Modifies the Relationship between Locus Coeruleus Activity and Emotional Mnemonic Discrimination. Brain Sciences, 2022, 12, 381.	2.3	0