Matthias GÃ¼nther

List of Publications by Year
in descending order

60 papers	6,526 citations	201674 27 h-index	138484 58 g-index
63 all docs	63 docs citations	63 times ranked	8513 citing authors

#	Article	IF	Citations
1	Recommended implementation of arterial spin‐labeled perfusion MRI for clinical applications: A consensus of the ISMRM perfusion study group and the European consortium for ASL in dementia. Magnetic Resonance in Medicine, 2015, 73, 102-116.	3.0	1,663
2	Multiplexed Echo Planar Imaging for Sub-Second Whole Brain FMRI and Fast Diffusion Imaging. PLoS ONE, 2010, 5, e15710.	2.5	1,164
3	MRI-Guided Thrombolysis for Stroke with Unknown Time of Onset. New England Journal of Medicine, 2018, 379, 611-622.	27.0	912
4	Quantification of Blood Flow in Brain Tumors: Comparison of Arterial Spin Labeling and Dynamic Susceptibility-weighted Contrast-enhanced MR Imaging. Radiology, 2003, 228, 523-532.	7.3	347
5	Single-shot 3D imaging techniques improve arterial spin labeling perfusion measurements. Magnetic Resonance in Medicine, 2005, 54, 491-498.	3.0	267
6	Arterial spin labeling in combination with a look‐locker sampling strategy: Inflow turbo‐sampling EPI‐FAIR (ITS‐FAIR). Magnetic Resonance in Medicine, 2001, 46, 974-984.	3.0	209
7	Multi-delay multi-parametric arterial spin-labeled perfusion MRI in acute ischemic stroke — Comparison with dynamic susceptibility contrast enhanced perfusion imaging. NeuroImage: Clinical, 2013, 3, 1-7.	2.7	180
8	The Value of Arterial Spin-Labeled Perfusion Imaging in Acute Ischemic Stroke. Stroke, 2012, 43, 1018-1024.	2.0	151
9	Whole-Body MR Imaging in the German National Cohort: Rationale, Design, and Technical Background. Radiology, 2015, 277, 206-220.	7.3	137
10	High-intensity focused ultrasound: Principles, therapy guidance, simulations and applications. Zeitschrift Fur Medizinische Physik, 2012, 22, 311-322.	1.5	113
11	Separation of macrovascular signal in multi‐inversion time arterial spin labelling MRI. Magnetic Resonance in Medicine, 2010, 63, 1357-1365.	3.0	101
12	Assessment of Irradiated Brain Metastases by Means of Arterial Spin-Labeling and Dynamic Susceptibility-Weighted Contrast-Enhanced Perfusion MRI. Investigative Radiology, 2004, 39, 277-287.	6.2	96
13	Cerebral Blood Flow, Blood Volume, and Oxygen Metabolism Dynamics in Human Visual and Motor Cortex as Measured by Whole-Brain Multi-Modal Magnetic Resonance Imaging. Journal of Cerebral Blood Flow and Metabolism, 2009, 29, 1856-1866.	4.3	84
14	ExploreASL: An image processing pipeline for multi-center ASL perfusion MRI studies. NeuroImage, 2020, 219, 117031.	4.2	80
15	Comparison of Arterial Spin-Labeling Techniques and Dynamic Susceptibility-Weighted Contrast-Enhanced MRI in Perfusion Imaging of Normal Brain Tissue. Investigative Radiology, 2003, 38, 712-718.	6.2	75
16	Multi-vendor reliability of arterial spin labeling perfusion MRI using a near-identical sequence: Implications for multi-center studies. NeuroImage, 2015, 113, 143-152.	4.2	72
17	Effects of Nilvadipine on Cerebral Blood Flow in Patients With Alzheimer Disease. Hypertension, 2019, 74, 413-420.	2.7	54
18	Efficient visualization of vascular territories in the human brain by cycled arterial spin labeling MRI. Magnetic Resonance in Medicine, 2006, 56, 671-675.	3.0	52

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19	T2‐based arterial spin labeling measurements of blood to tissue water transfer in human brain. Journal of Magnetic Resonance Imaging, 2013, 37, 332-342.	3.4	49
20	Using simultaneous PET/MRI to compare the accuracy of diagnosing frontotemporal dementia by arterial spin labelling MRI and FDG-PET. NeuroImage: Clinical, 2018, 17, 405-414.	2.7	44
21	Vessel‐encoded dynamic magnetic resonance angiography using arterial spin labeling. Magnetic Resonance in Medicine, 2010, 64, 698-706.	3.0	43
22	3D GRASE Pulsed Arterial Spin Labeling at Multiple Inflow Times in Patients with Long Arterial Transit Times: Comparison with Dynamic Susceptibility-Weighted Contrast-Enhanced MRI at 3 Tesla. Journal of Cerebral Blood Flow and Metabolism, 2015, 35, 392-401.	4.3	43
23	Assessment of Intracranial Collateral Flow by Using Dynamic Arterial Spin Labeling MRA and Transcranial Color-Coded Duplex Ultrasound. Stroke, 2008, 39, 1894-1897.	2.0	42
24	Dynamics of brain perfusion and cognitive performance in revascularization of carotid artery stenosis. NeuroImage: Clinical, 2019, 22, 101779.	2.7	36
25	Clinical Evaluation of an Arterial-Spin-Labeling Product Sequence in Steno-Occlusive Disease of the Brain. PLoS ONE, 2014, 9, e87143.	2.5	35
26	Partial volume correction in arterial spin labeling perfusion MRI: A method to disentangle anatomy from physiology or an analysis step too far?. NeuroImage, 2021, 238, 118236.	4.2	33
27	3D GRASE arterial spin labelling reveals an inverse correlation of cortical perfusion with the white matter lesion volume in MS. Multiple Sclerosis Journal, 2012, 18, 1570-1576.	3.0	29
28	Arterial Spin Labeling Cerebral Perfusion Magnetic Resonance Imaging in Migraine Aura: An Observational Study. Journal of Stroke and Cerebrovascular Diseases, 2018, 27, 1262-1266.	1.6	28
29	Feasibility of simultaneous whole-brain imaging on an integrated PET-MRI system using an enhanced 2-point Dixon attenuation correction method. Frontiers in Neuroscience, 2015, 8, 434.	2.8	27
30	Improving magnetic resonance imaging with smart and thin metasurfaces. Scientific Reports, 2021, 11, 16179.	3.3	27
31	3D GRASE PROPELLER: Improved image acquisition technique for arterial spin labeling perfusion imaging. Magnetic Resonance in Medicine, 2011, 66, 168-173.	3.0	26
32	Intracranial Hemodynamics Is Altered by Carotid Artery Disease and After Endarterectomy. Stroke, 2011, 42, 979-984.	2.0	21
33	Prediction of Early Reperfusion From Repeated Arterial Spin Labeling Perfusion Magnetic Resonance Imaging During Intravenous Thrombolysis. Stroke, 2016, 47, 247-250.	2.0	20
34	Vessel‐encoded dynamic magnetic resonance angiography using arterial spin labeling. Magnetic Resonance in Medicine, 2010, 64, 430-438.	3.0	18
35	Quantitative, Organ-Specific Interscanner and Intrascanner Variability for 3 T Whole-Body Magnetic Resonance Imaging in a Multicenter, Multivendor Study. Investigative Radiology, 2016, 51, 255-265.	6.2	17
36	Prospective motion correction in functional MRI using simultaneous multislice imaging and multislice-to-volume image registration. NeuroImage, 2019, 200, 159-173.	4.2	16

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37	Assessment of Perfusion Deficits in Ischemic Stroke Using 3D‐GRASE Arterial Spin Labeling Magnetic Resonance Imaging with Multiple Inflow Times. Journal of Neuroimaging, 2014, 24, 453-459.	2.0	15
38	Correction for Susceptibility Distortions Increases the Performance of Arterial Spin Labeling in Patients with Cerebrovascular Disease. Journal of Neuroimaging, 2016, 26, 436-444.	2.0	15
39	Portable and platform‐independent MR pulse sequence programs. Magnetic Resonance in Medicine, 2020, 83, 1277-1290.	3.0	15
40	Robust Multi-TE ASL-Based Blood–Brain Barrier Integrity Measurements. Frontiers in Neuroscience, 2021, 15, 719676.	2.8	14
41	Perfusion Imaging. Journal of Magnetic Resonance Imaging, 2014, 40, 269-279.	3.4	12
42	Improving perfusion quantification in arterial spin labeling for delayed arrival times by using optimized acquisition schemes. Zeitschrift Fur Medizinische Physik, 2015, 25, 221-229.	1.5	11
43	Mapping Long-Term Functional Changes in Cerebral Blood Flow by Arterial Spin Labeling. PLoS ONE, 2016, 11, e0164112.	2.5	11
44	Ultrahigh-field MPRAGE Magnetic Resonance Angiography at 7.0T in patients with cerebrovascular disease. European Journal of Radiology, 2015, 84, 2613-2617.	2.6	10
45	Sensitivity of Arterial Spin Labeling for Characterization of Longitudinal Perfusion Changes in Frontotemporal Dementia and Related Disorders. NeuroImage: Clinical, 2022, 35, 102853.	2.7	9
46	Sodium magnetic resonance imaging using ultra-short echo time sequences with anisotropic resolution and uniform k-space sampling. Magnetic Resonance Imaging, 2015, 33, 319-327.	1.8	7
47	Magnetisation transfer effects of Q2TIPS pulses in ASL. Magnetic Resonance Materials in Physics, Biology, and Medicine, 2012, 25, 113-126.	2.0	6
48	Measurement of vascular water transport in human subjects using time‐resolved pulsed arterial spin labelling. NMR in Biomedicine, 2015, 28, 1059-1068.	2.8	6
49	Simultaneous multislice acquisition with multi-contrast segmented EPI for separation of signal contributions in dynamic contrast-enhanced imaging. PLoS ONE, 2018, 13, e0202673.	2.5	6
50	Concordance of regional hypoperfusion by pCASL MRI and 15O-water PET in frontotemporal dementia: Is pCASL an efficacious alternative?. NeuroImage: Clinical, 2022, 33, 102950.	2.7	6
51	Microvascular Impairment in Patients With Cerebral Small Vessel Disease Assessed With Arterial Spin Labeling Magnetic Resonance Imaging: A Pilot Study. Frontiers in Aging Neuroscience, 2022, 14, .	3.4	5
52	Reproducibility and repeatability of magnetic resonance imaging in dementia. Physica Medica, 2022, 101, 8-17.	0.7	4
53	Reliability and Reproducibility of Hadamard Encoded Pseudo-Continuous Arterial Spin Labeling in Healthy Elderly. Frontiers in Neuroscience, 2021, 15, 711898.	2.8	3
54	Combined acquisition of diffusion and T2*-weighted measurements using simultaneous multi-contrast magnetic resonance imaging. Magnetic Resonance Materials in Physics, Biology, and Medicine, 2021, , 1.	2.0	2

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55	Joint estimation and correction of motion and geometric distortion in segmented arterial spin labeling. Magnetic Resonance in Medicine, 2022, 87, 1876-1885.	3.0	1
56	Towards free breathing <scp>3D ASL</scp> imaging of the human liver using prospective motion correction. Magnetic Resonance in Medicine, 2022, , .	3.0	1
57	A software tool for advanced MRgFUS prostate therapy planning and follow up. AIP Conference Proceedings, 2017, , .	0.4	0
58	Design and Characterization of a Metasurface Enhancement Plate for 3T MRI. , 2020, , .		0
59	A metamaterial-based cable mantle for shield current suppression in MRI systems. , 2020, , .		0
60	Non-contrast agent perfusion MRI methods. Advances in Magnetic Resonance Technology and Applications, 2021, , 177-193.	0.1	0