

# Tobias Kober

## List of Publications by Year in descending order

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Version: 2024-02-01

97  
papers

3,315  
citations

236925

25  
h-index

182427

51  
g-index

99  
all docs

99  
docs citations

99  
times ranked

4125  
citing authors

#	ARTICLE	IF	CITATIONS
1	<scp>Qâ€Dixon</scp> and <scp>GRAPPATINI T2</scp> Mapping Parameters: A Whole Spinal Assessment of the Relationship Between Osteoporosis and Intervertebral Disc Degeneration. Journal of Magnetic Resonance Imaging, 2022, 55, 1536-1546.	3.4	9
2	Fully automated detection of focal cortical dysplasia: Comparison of MPRAGE and MP2RAGE sequences. Epilepsia, 2022, 63, 75-85.	5.1	7
3	Letter to the Editor regarding article â€œTechnical and clinical validation of commercial automated volumetric MRI tools for dementia diagnosisâ€”a systematic reviewâ€•(DOI 10.1007/s00234-021â€“02818-4). Neuroradiology, 2022, , 1.	2.2	1
4	Periventricular gradient of T1 tissue alterations in multiple sclerosis. NeuroImage: Clinical, 2022, 34, 103009.	2.7	9
5	A Fetal Brain magnetic resonance Acquisition Numerical phantom (FaBiAN). Scientific Reports, 2022, 12, .	3.3	4
6	Evaluating reproducibility and subject-specificity of microstructure-informed connectivity. NeuroImage, 2022, 258, 119356.	4.2	4
7	Fast and highâ€resolution myelin water imaging: Accelerating multiâ€echo GRASE with CAIPIRINHA. Magnetic Resonance in Medicine, 2021, 85, 209-222.	3.0	16
8	Compressed sensing with signal averaging for improved sensitivity and motion artifact reduction in fluorineâ€19 MRI. NMR in Biomedicine, 2021, 34, e4418.	2.8	8
9	Dynamic distortion correction for functional MRI using FID navigators. Magnetic Resonance in Medicine, 2021, 85, 1294-1307.	3.0	16
10	Comparison of 2D simultaneous multi-slice and 3D GRASE readout schemes for pseudo-continuous arterial spin labeling of cerebral perfusion at 3 T. Magnetic Resonance Materials in Physics, Biology, and Medicine, 2021, 34, 437-450.	2.0	3
11	Clinical implementation of accelerated T2 mapping: Quantitative magnetic resonance imaging as a biomarker for annular tear and lumbar disc herniation. European Radiology, 2021, 31, 3590-3599.	4.5	16
12	Normal volumetric and T1 relaxation time values at 1.5ÂT in segmented pediatric brain MRI using a MP2RAGE acquisition. European Radiology, 2021, 31, 1505-1516.	4.5	4
13	Probing myelin content of the human brain with MRI: A review. Magnetic Resonance in Medicine, 2021, 85, 627-652.	3.0	42
14	Improving diagnosis accuracy of brain volume abnormalities during childhood with an automated MP2RAGE-based MRI brain segmentation. Journal of Neuroradiology, 2021, 48, 259-265.	1.1	4
15	Free induction decay navigator motion metrics for prediction of diagnostic image quality in pediatric MRI. Magnetic Resonance in Medicine, 2021, 85, 3169-3181.	3.0	2
16	Simulated Half-Fourier Acquisitions Single-shot Turbo Spin Echo (HASTE) of the Fetal Brain: Application to Super-Resolution Reconstruction. Lecture Notes in Computer Science, 2021, , 157-167.	1.3	0
17	The role of brain perivascular space burden in early-stage Parkinsonâ€™s disease. Npj Parkinson's Disease, 2021, 7, 12.	5.3	30
18	Magnetization-prepared 2 Rapid Gradient-Echo MRI for B1 Insensitive 3D T1 Mapping of Hip Cartilage: An Experimental and Clinical Validation. Radiology, 2021, 299, 150-158.	7.3	8

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19	Model-informed machine learning for multi-component $T_2$ relaxometry. Medical Image Analysis, 2021, 69, 101940.	11.6	26
20	Fluid and White Matter Suppression Imaging and Voxel-Based Morphometric Analysis in Conventional Magnetic Resonance Imaging-Negative Epilepsy. Frontiers in Neurology, 2021, 12, 651592.	2.4	8
21	Multi-Compartment Diffusion Mri, T2 Relaxometry And Myelin Water Imaging As Neuroimaging Descriptors For Anomalous Tissue Detection. , 2021, , .		2
22	Comparison of non-parametric T2 relaxometry methods for myelin water quantification. Medical Image Analysis, 2021, 69, 101959.	11.6	16
23	Quantitative comparison of subcortical and ventricular volumetry derived from MPRAGE and MP2RAGE images using different brain morphometry software. Magnetic Resonance Materials in Physics, Biology, and Medicine, 2021, 34, 903-914.	2.0	2
24	Clinical correlates of white matter lesions in Parkinson's disease using automated multi-modal segmentation measures. Journal of the Neurological Sciences, 2021, 427, 117518.	0.6	6
25	Revisiting the T2 spectrum imaging inverse problem: Bayesian regularized non-negative least squares. NeuroImage, 2021, 244, 118582.	4.2	8
26	Synthetic T2-weighted images of the lumbar spine derived from an accelerated T2 mapping sequence: Comparison to conventional T2w turbo spin echo. Magnetic Resonance Imaging, 2021, 84, 92-100.	1.8	3
27	Validating atlas-based lesion disconnectomics in multiple sclerosis: A retrospective multi-centric study. NeuroImage: Clinical, 2021, 32, 102817.	2.7	4
28	T1-Based Synthetic Magnetic Resonance Contrasts Improve Multiple Sclerosis and Focal Epilepsy Imaging at 7 T. Investigative Radiology, 2021, 56, 127-133.	6.2	9
29	Data-driven myelin water imaging based on $T_1$ and $T_2$ relaxometry. NMR in Biomedicine, 2021, , e4668.	2.8	0
30	Model-based super-resolution reconstruction of $T_2$ maps. Magnetic Resonance in Medicine, 2020, 83, 906-919.	3.0	11
31	Quantitative brain relaxation atlases for personalized detection and characterization of brain pathology. Magnetic Resonance in Medicine, 2020, 83, 337-351.	3.0	19
32	Rapid measurement and correction of spatiotemporal $B_0$ field changes using FID navigators and a multi-channel reference image. Magnetic Resonance in Medicine, 2020, 83, 575-589.	3.0	23
33	Magnetization transfer in magnetic resonance fingerprinting. Magnetic Resonance in Medicine, 2020, 84, 128-141.	3.0	52
34	RimNet: A deep 3D multimodal MRI architecture for paramagnetic rim lesion assessment in multiple sclerosis. NeuroImage: Clinical, 2020, 28, 102412.	2.7	21
35	Accelerated T2 Mapping of the Lumbar Intervertebral Disc. Investigative Radiology, 2020, 55, 695-701.	6.2	10
36	MRI-based brain volumetry and retinal optical coherence tomography as the biomarkers of outcome in acute methanol poisoning. NeuroToxicology, 2020, 80, 12-19.	3.0	6

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37	Novel $T_2$ Mapping for Evaluating Cervical Cancer Features by Providing Quantitative $T_2$ Maps and Synthetic Morphologic Images: A Preliminary Study. <i>Journal of Magnetic Resonance Imaging</i> , 2020, 52, 1859-1869.	3.4	20
38	Deep Learning to Automate Reference-Free Image Quality Assessment of Whole-Heart MR Images. <i>Radiology: Artificial Intelligence</i> , 2020, 2, e190123.	5.8	18
39	Assessment of brain volumes obtained from MP-RAGE and MP2RAGE images, quantified using different segmentation methods. <i>Magnetic Resonance Materials in Physics, Biology, and Medicine</i> , 2020, 33, 757-767.	2.0	3
40	Morphometric MRI Analysis: Improved Detection of Focal Cortical Dysplasia Using the MP2RAGE Sequence. <i>American Journal of Neuroradiology</i> , 2020, 41, 1009-1014.	2.4	19
41	Automated MRI-based volumetry of basal ganglia and thalamus at the chronic phase of cortical stroke. <i>Neuroradiology</i> , 2020, 62, 1371-1380.	2.2	10
42	Accelerated MP2RAGE imaging using Cartesian phyllotaxis readout and compressed sensing reconstruction. <i>Magnetic Resonance in Medicine</i> , 2020, 84, 1881-1894.	3.0	30
43	CVSnet: A machine learning approach for automated central vein sign assessment in multiple sclerosis. <i>NMR in Biomedicine</i> , 2020, 33, e4283.	2.8	31
44	Serum GFAP in multiple sclerosis: correlation with disease type and MRI markers of disease severity. <i>Scientific Reports</i> , 2020, 10, 10923.	3.3	66
45	Test-retest variability of brain morphometry analysis: an investigation of sequence and coil effects. <i>Annals of Translational Medicine</i> , 2020, 8, 12-12.	1.7	22
46	Clinical equivalence assessment of $T_2$ synthesized pediatric brain magnetic resonance imaging. <i>Journal of Neuroradiology</i> , 2019, 46, 130-135.	1.1	5
47	Episodic memory decline in Parkinson's disease: relation with white matter hyperintense lesions and influence of quantification method. <i>Brain Imaging and Behavior</i> , 2019, 13, 810-818.	2.1	20
48	Head motion measurement and correction using $FID$ navigators. <i>Magnetic Resonance in Medicine</i> , 2019, 81, 258-274.	3.0	40
49	Regional $T_1$ mapping of the whole cervical spinal cord using an optimized MP2RAGE sequence. <i>NMR in Biomedicine</i> , 2019, 32, e4142.	2.8	13
50	Cerebral Gray and White Matter Involvement in Anorexia Nervosa Evaluated by $T_1$ , $T_2$ , and $T_2^*$ Mapping. <i>Journal of Neuroimaging</i> , 2019, 29, 598-604.	2.0	7
51	Quantitative $T_2$ mapping accelerated by GRAPPATINI for evaluation of muscles in patients with myositis. <i>British Journal of Radiology</i> , 2019, 92, 20190109.	2.2	13
52	Fast model-based $T_2$ mapping using SAR-reduced simultaneous multislice excitation. <i>Magnetic Resonance in Medicine</i> , 2019, 82, 2090-2103.	3.0	11
53	Longitudinal analysis of white matter and cortical lesions in multiple sclerosis. <i>NeuroImage: Clinical</i> , 2019, 23, 101938.	2.7	25
54	MRI $T_2$ Mapping of the Knee Providing Synthetic Morphologic Images: Comparison to Conventional Turbo Spin-Echo MRI. <i>Radiology</i> , 2019, 293, 620-630.	7.3	31

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55	Patient respiratory-triggered quantitative T <sub>2</sub> mapping in the pancreas. <i>Journal of Magnetic Resonance Imaging</i> , 2019, 50, 410-416.	3.4	15
56	Artificial Intelligence in Musculoskeletal Imaging: Review of Current Literature, Challenges, and Trends. <i>Seminars in Musculoskeletal Radiology</i> , 2019, 23, 304-311.	0.7	51
57	Methanol Poisoning as an Acute Toxicological Basal Ganglia Lesion Model: Evidence from Brain Volumetry and Cognition. <i>Alcoholism: Clinical and Experimental Research</i> , 2019, 43, 1486-1497.	2.4	12
58	Advantages of fluid and white matter suppression (FLAWS) with MP2RAGE compared with double inversion recovery turbo spin echo (DIR-TSE) at 7T. <i>European Journal of Radiology</i> , 2019, 116, 160-164.	2.6	11
59	Brain tissue segmentation based on MP2RAGE multi-contrast images in 7 T MRI. <i>PLoS ONE</i> , 2019, 14, e0210803.	2.5	23
60	Automated Detection and Segmentation of Multiple Sclerosis Lesions Using Ultra-High-Field MP2RAGE. <i>Investigative Radiology</i> , 2019, 54, 356-364.	6.2	34
61	Accelerated T <sub>2</sub> mapping combining parallel MRI and model-based reconstruction: GRAPPATINI. <i>Journal of Magnetic Resonance Imaging</i> , 2018, 48, 359-368.	3.4	71
62	Improved Visualization of Cortical Lesions in Multiple Sclerosis Using 7T MP2RAGE. <i>American Journal of Neuroradiology</i> , 2018, 39, 459-466.	2.4	65
63	Partial volume-aware assessment of multiple sclerosis lesions. <i>NeuroImage: Clinical</i> , 2018, 18, 245-253.	2.7	10
64	Investigation of lateral geniculate nucleus volume and diffusion tensor imaging in patients with normal tension glaucoma using 7 tesla magnetic resonance imaging. <i>PLoS ONE</i> , 2018, 13, e0198830.	2.5	28
65	Multivariate and predictive modelling of neural variability in mild cognitive impairment. , 2018, , .		0
66	Gray-matter-specific MR imaging improves the detection of epileptogenic zones in focal cortical dysplasia: A new sequence called fluid and white matter suppression (FLAWS). <i>NeuroImage: Clinical</i> , 2018, 20, 388-397.	2.7	27
67	An Ultra-High Field Study of Cerebellar Pathology in Early Relapsing-Remitting Multiple Sclerosis Using MP2RAGE. <i>Investigative Radiology</i> , 2017, 52, 265-273.	6.2	17
68	Segmentation of Cortical and Subcortical Multiple Sclerosis Lesions Based on Constrained Partial Volume Modeling. <i>Lecture Notes in Computer Science</i> , 2017, , 142-149.	1.3	6
69	Evaluating anorexia-related brain atrophy using MP2RAGE-based morphometry. <i>European Radiology</i> , 2017, 27, 5064-5072.	4.5	16
70	Prospective head motion correction using FID-guided on-demand image navigators. <i>Magnetic Resonance in Medicine</i> , 2017, 78, 193-203.	3.0	11
71	Simultaneous Quantitative MRI Mapping of T1, T2* and Magnetic Susceptibility with Multi-Echo MP2RAGE. <i>PLoS ONE</i> , 2017, 12, e0169265.	2.5	65
72	A New Approach for Deep Gray Matter Analysis Using Partial-Volume Estimation. <i>PLoS ONE</i> , 2016, 11, e0148631.	2.5	7

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73	Automated detection of white matter and cortical lesions in early stages of multiple sclerosis. <i>Journal of Magnetic Resonance Imaging</i> , 2016, 43, 1445-1454.	3.4	64
74	An in vivo study of the orientation-dependent and independent components of transverse relaxation rates in white matter. <i>NMR in Biomedicine</i> , 2016, 29, 1780-1790.	2.8	33
75	Basic MR sequence parameters systematically bias automated brain volume estimation. <i>Neuroradiology</i> , 2016, 58, 1153-1160.	2.2	21
76	Comparison of accelerated T1-weighted whole-brain structural-imaging protocols. <i>NeuroImage</i> , 2016, 124, 157-167.	4.2	14
77	Accuracy and Precision of Head Motion Information in Multi-Channel Free Induction Decay Navigators for Magnetic Resonance Imaging. <i>IEEE Transactions on Medical Imaging</i> , 2015, 34, 1879-1889.	8.9	14
78	Improved temporal resolution for functional studies with reduced number of segments with three-dimensional echo planar imaging. <i>Magnetic Resonance in Medicine</i> , 2014, 72, 786-792.	3.0	9
79	Dielectric pads and low-adiabatic pulses: Complementary techniques to optimize structural T <sub>1</sub> -weighted whole-brain MP2RAGE scans at 7 tesla. <i>Journal of Magnetic Resonance Imaging</i> , 2014, 40, 804-812.	3.4	58
80	Reduction of motion artifacts in carotid MRI using free-induction decay navigators. <i>Journal of Magnetic Resonance Imaging</i> , 2014, 40, 214-220.	3.4	13
81	MP2RAGE provides new clinically-compatible correlates of mild cognitive deficits in relapsing-remitting multiple sclerosis. <i>Journal of Neurology</i> , 2014, 261, 1606-1613.	3.6	24
82	Quantitative comparison of cortical surface reconstructions from MP2RAGE and multi-echo MPRAGE data at 3 and 7T. <i>NeuroImage</i> , 2014, 90, 60-73.	4.2	85
83	A novel manipulation method of human body ownership using an fMRI-compatible master-slave system. <i>Journal of Neuroscience Methods</i> , 2014, 235, 25-34.	2.5	22
84	Robust T1-Weighted Structural Brain Imaging and Morphometry at 7T Using MP2RAGE. <i>PLoS ONE</i> , 2014, 9, e99676.	2.5	103
85	Motion compensated carotid MRI using FID navigators. <i>Journal of Cardiovascular Magnetic Resonance</i> , 2013, 15, P242.	3.3	0
86	Micro-Structural Brain Alterations in Aviremic HIV+ Patients with Minor Neurocognitive Disorders: A Multi-Contrast Study at High Field. <i>PLoS ONE</i> , 2013, 8, e72547.	2.5	19
87	A Connectome-Based Comparison of Diffusion MRI Schemes. <i>PLoS ONE</i> , 2013, 8, e75061.	2.5	21
88	MP2RAGE Multiple Sclerosis Magnetic Resonance Imaging at 3 T. <i>Investigative Radiology</i> , 2012, 47, 346-352.	6.2	72
89	Prospective and retrospective motion correction in diffusion magnetic resonance imaging of the human brain. <i>NeuroImage</i> , 2012, 59, 389-398.	4.2	61
90	Motion Compensation Strategies in Magnetic Resonance Imaging. <i>Critical Reviews in Biomedical Engineering</i> , 2012, 40, 99-119.	0.9	49

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91	Fluid and white matter suppression with the MP2RAGE sequence. <i>Journal of Magnetic Resonance Imaging</i> , 2012, 35, 1063-1070.	3.4	60
92	SA2RAGE: A new sequence for fast $B_1$ -mapping. <i>Magnetic Resonance in Medicine</i> , 2012, 67, 1609-1619.	3.0	71
93	Temporal SNR characteristics in segmented 3D-EPI at 7T. <i>Magnetic Resonance in Medicine</i> , 2012, 67, 344-352.	3.0	64
94	Head motion detection using FID navigators. <i>Magnetic Resonance in Medicine</i> , 2011, 66, 135-143.	3.0	58
95	Eddy current effects on a clinical 7T-68cm bore scanner. <i>Magnetic Resonance Materials in Physics, Biology, and Medicine</i> , 2010, 23, 39-43.	2.0	11
96	MP2RAGE, a self bias-field corrected sequence for improved segmentation and T1-mapping at high field. <i>NeuroImage</i> , 2010, 49, 1271-1281.	4.2	1,075
97	Minimization of Nyquist ghosting for echo-planar imaging at ultra-high fields based on a $\pi$ -negative readout gradient strategy. <i>Journal of Magnetic Resonance Imaging</i> , 2009, 30, 1171-1178.	3.4	31