Christoph Juchem

List of Publications by Year
in descending order

55	2,164	257357	254106
papers	citations	24 h-index	43 g-index

57	57	57	2075
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Highâ€resolution simulation of B₀ field conditions in the human heart from segmented computed tomography images. NMR in Biomedicine, 2022, 35, e4739.	1.6	1
2	B₀ shimming for in vivo magnetic resonance spectroscopy: Experts' consensus recommendations. NMR in Biomedicine, 2021, 34, e4350.	1.6	60
3	Preprocessing, analysis and quantification in singleâ€voxel magnetic resonance spectroscopy: experts' consensus recommendations. NMR in Biomedicine, 2021, 34, e4257.	1.6	196
4	B₀ shimming of the human heart at 7T. Magnetic Resonance in Medicine, 2021, 85, 182-196.	1.9	13
5	Contribution of macromolecules to brain ¹H MR spectra: Experts' consensus recommendations. NMR in Biomedicine, 2021, 34, e4393.	1.6	92
6	Development and validation of 3D MPâ€SSFP to enable MRI in inhomogeneous magnetic fields. Magnetic Resonance in Medicine, 2021, 85, 831-844.	1.9	9
7	Magnetic resonance Spectrum simulator (MARSS), a novel software package for fast and computationally efficient basis set simulation. NMR in Biomedicine, 2021, 34, e4129.	1.6	31
8	Acrossâ€vendor standardization of semiâ€LASER for singleâ€voxel MRS at 3T. NMR in Biomedicine, 2021, 34, e4218.	1.6	43
9	Advanced single voxel ¹H magnetic resonance spectroscopy techniques in humans: Experts' consensus recommendations. NMR in Biomedicine, 2021, 34, e4236.	1.6	98
10	INSPECTOR: free software for magnetic resonance spectroscopy data inspection, processing, simulation and analysis. Scientific Reports, 2021, 11, 2094.	1.6	27
11	FAMASITO: FASTMAP Shim Tool towards userâ€friendly singleâ€step B₀ homogenization. NMR in Biomedicine, 2021, 34, e4486.	1.6	2
12	Minimum Reporting Standards for in vivo Magnetic Resonance Spectroscopy (MRSinMRS): Experts' consensus recommendations. NMR in Biomedicine, 2021, 34, e4484.	1.6	144
13	Are CramÃ©râ€Rao lower bounds an accurate estimate for standard deviations in in vivo magnetic resonance spectroscopy?. NMR in Biomedicine, 2021, 34, e4521.	1.6	15
14	Hippocampal singleâ€voxel MR spectroscopy with a long echo time at 3 T using semiâ€LASER sequence. NMR in Biomedicine, 2021, 34, e4538.	1.6	3
15	On the way to routine cardiac MRI at 7 Tesla - a pilot study on consecutive 84 examinations. PLoS ONE, 2021, 16, e0252797.	1.1	11
16	In vivo evidence of differential frontal cortex metabolic abnormalities in progressive and relapsingâ€remitting multiple sclerosis. NMR in Biomedicine, 2021, 34, e4590.	1.6	9
17	Frequency drift in MR spectroscopy at 3T. NeuroImage, 2021, 241, 118430.	2.1	28
18	Simultaneous optimization of crusher and phase cycling schemes for magnetic resonance spectroscopy: an extension of dephasing optimization through coherence order pathway selection. Magnetic Resonance in Medicine, 2020, 83, 391-402.	1.9	10

#	Article	IF	Citations
19	Theoretical description of modern¹H in Vivo magnetic resonance spectroscopic pulse sequences. Journal of Magnetic Resonance Imaging, 2020, 51, 1008-1029.	1.9	18
20	UTE-SPECIAL for 3D localization at an echo time of 4Âms on a clinical 3ÂT scanner. Journal of Magnetic Resonance, 2020, 311, 106670.	1.2	1
21	Dynamic multicoil technique (DYNAMITE) MRI on human brain. Magnetic Resonance in Medicine, 2020, 84, 2953-2963.	1.9	5
22	A semiâ€LASER, singleâ€voxel spectroscopic sequence with a minimal echo time of 20.1 ms in the human brain at 3 T. NMR in Biomedicine, 2020, 33, e4324.	1.6	12
23	Elevated homocarnosine and GABA in subject on isoniazid as assessed through 1H MRS at 7T. Analytical Biochemistry, 2020, 599, 113738.	1.1	6
24	Concentration and effective T₂ relaxation times of macromolecules at 3T. Magnetic Resonance in Medicine, 2020, 84, 2327-2337.	1.9	15
25	Quantifying the Metabolic Signature of Multiple Sclerosis by in vivo Proton Magnetic Resonance Spectroscopy: Current Challenges and Future Outlook in the Translation From Proton Signal to Diagnostic Biomarker. Frontiers in Neurology, 2019, 10, 1173.	1.1	40
26	Dephasing optimization through coherence order pathway selection (DOTCOPS) for improved crusher schemes in MR spectroscopy. Magnetic Resonance in Medicine, 2019, 81, 2209-2222.	1.9	26
27	Combined imaging and shimming with the dynamic multiâ€coil technique. Magnetic Resonance in Medicine, 2019, 81, 1424-1433.	1.9	6
28	Quantification of glutathione transverse relaxation time T 2 using echo time extension with variable refocusing selectivity and symmetry in the human brain at 7 Tesla. Journal of Magnetic Resonance, 2018, 290, 1-11.	1.2	15
29	The effects of ketamine on prefrontal glutamate neurotransmission in healthy and depressed subjects. Neuropsychopharmacology, 2018, 43, 2154-2160.	2.8	146
30	Elevated Î±-Hydroxybutyrate and Branched-Chain Amino Acid Levels Predict Deterioration of Glycemic Control in Adolescents. Journal of Clinical Endocrinology and Metabolism, 2017, 102, 2473-2481.	1.8	62
31	The public multiâ€coil information (PUMCIN) policy. Magnetic Resonance in Medicine, 2017, 78, 2042-2047.	1.9	8
32	B0 magnetic field homogeneity and shimming for inÂvivo magnetic resonance spectroscopy. Analytical Biochemistry, 2017, 529, 17-29.	1.1	76
33	Reproducibility measurement of glutathione, GABA, and glutamate: Towards in vivo neurochemical profiling of multiple sclerosis with MR spectroscopy at 7T. Journal of Magnetic Resonance Imaging, 2017, 45, 187-198.	1.9	75
34	Imaging the intratumoralâ€“peritumoral extracellular pH gradient of gliomas. NMR in Biomedicine, 2016, 29, 309-319.	1.6	52
35	Dynamic multiâ€coil tailored excitation for transmit <scp>B</scp>₁ correction at 7 Tesla. Magnetic Resonance in Medicine, 2016, 76, 83-93.	1.9	6
36	Brain region and activity-dependent properties of M for calibrated fMRI. NeuroImage, 2016, 125, 848-856.	2.1	26

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37	CHAPTER 4. B0 Shimming Technology. New Developments in NMR, 2016, , 166-207.	0.1	16
38	Dynamic multi-coil technique (DYNAMITE) shimming for echo-planar imaging of the human brain at 7 Tesla. NeuroImage, 2015, 105, 462-472.	2.1	63
39	Multiâ€slice MRI with the dynamic multiâ€coil technique. NMR in Biomedicine, 2015, 28, 1526-1534.	1.6	15
40	Basis of Magnetic Resonance. , 2014, , 3-14.		4
41	DYNAmic Multiâ€coil TEchnique (DYNAMITE) shimming of the rat brain at 11.7â€‰T. NMR in Biomedicine, 2014, 27, 897-906.	1.6	30
42	In vivo Oâ€Space imaging with a dedicated 12 cm Z2 insert coil on a human 3T scanner using phase map calibration. Magnetic Resonance in Medicine, 2013, 69, 444-455.	1.9	31
43	Multi-coil magnetic field modeling. Journal of Magnetic Resonance, 2013, 236, 95-104.	1.2	34
44	Multislice ¹H MRSI of the human brain at 7 T using dynamic B₀ and B₁ shimming. Magnetic Resonance in Medicine, 2012, 68, 662-670.	1.9	62
45	Dynamic multi-coil shimming of the human brain at 7T. Journal of Magnetic Resonance, 2011, 212, 280-288.	1.2	126
46	Multicoil shimming of the mouse brain. Magnetic Resonance in Medicine, 2011, 66, 893-900.	1.9	45
47	Dynamic shimming of the human brain at 7 T. Concepts in Magnetic Resonance Part B, 2010, 37B, 116-128.	0.3	67
48	Magnetic field homogenization of the human prefrontal cortex with a set of localized electrical coils. Magnetic Resonance in Medicine, 2010, 63, 171-180.	1.9	58
49	Magnetic field modeling with a set of individual localized coils. Journal of Magnetic Resonance, 2010, 204, 281-289.	1.2	76
50	1H-MRS of the macaque monkey primary visual cortex at 7 T: strategies and pitfalls of shimming at the brain surface. Magnetic Resonance Imaging, 2007, 25, 902-912.	1.0	11
51	Simultaneous EEG and fMRI in the macaque monkey at 4.7 Tesla. Magnetic Resonance Imaging, 2006, 24, 335-342.	1.0	22
52	Combined passive and active shimming for in vivo MR spectroscopy at high magnetic fields. Journal of Magnetic Resonance, 2006, 183, 278-289.	1.2	51
53	High-resolution1H chemical shift imaging in the monkey visual cortex. Magnetic Resonance in Medicine, 2005, 54, 1541-1546.	1.9	14
54	High-field localized 1H NMR spectroscopy in the anesthetized and in the awake monkey. Magnetic Resonance Imaging, 2004, 22, 1361-1372.	1.0	31

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55	Region and volume dependencies in spectral line width assessed by 1H 2D MR chemical shift imaging in the monkey brain at 7 T. Magnetic Resonance Imaging, 2004, 22, 1373-1383.	1.0	21