

Rolf Gruetter

List of Publications by Year in descending order

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Version: 2024-02-01

319
papers

22,848
citations

7551

77
h-index

11899

134
g-index

331
all docs

331
docs citations

331
times ranked

15666
citing authors

#	ARTICLE	IF	CITATIONS
1	[13C]bicarbonate labelled from hyperpolarized [1-13C]pyruvate is an in vivo marker of hepatic gluconeogenesis in fasted state. <i>Communications Biology</i> , 2022, 5, 10.	2.0	3
2	Segmenting electroencephalography wires reduces radiofrequency shielding artifacts in simultaneous electroencephalography and functional magnetic resonance imaging at 7 T. <i>Magnetic Resonance in Medicine</i> , 2022, , .	1.9	2
3	Excitatory/inhibitory neuronal metabolic balance in mouse hippocampus upon infusion of [¹³ C ₆]glucose. <i>Journal of Cerebral Blood Flow and Metabolism</i> , 2021, 41, 282-297.	2.4	4
4	B ₀ shimming for in vivo magnetic resonance spectroscopy: Experts' consensus recommendations. <i>NMR in Biomedicine</i> , 2021, 34, e4350.	1.6	60
5	Contribution of macromolecules to brain ¹ H MR spectra: Experts' consensus recommendations. <i>NMR in Biomedicine</i> , 2021, 34, e4393.	1.6	92
6	Magnetic resonance spectroscopy in the rodent brain: Experts' consensus recommendations. <i>NMR in Biomedicine</i> , 2021, 34, e4325.	1.6	9
7	PIRACY: An Optimized Pipeline for Functional Connectivity Analysis in the Rat Brain. <i>Frontiers in Neuroscience</i> , 2021, 15, 602170.	1.4	12
8	Hyperpolarized 13C-glucose magnetic resonance highlights reduced aerobic glycolysis in vivo in infiltrative glioblastoma. <i>Scientific Reports</i> , 2021, 11, 5771.	1.6	13
9	The relationship between EEG and fMRI connectomes is reproducible across simultaneous EEG-fMRI studies from 1.5T to 7T. <i>NeuroImage</i> , 2021, 231, 117864.	2.1	24
10	Measuring Glycolytic Activity with Hyperpolarized [2H7, U-13C6] D-Glucose in the Naive Mouse Brain under Different Anesthetic Conditions. <i>Metabolites</i> , 2021, 11, 413.	1.3	7
11	Dipole-Fed Rectangular Dielectric Resonator Antennas for Magnetic Resonance Imaging at 7T: The Impact of Quasi-Transverse Electric Modes on Transmit Field Distribution. <i>Frontiers in Physics</i> , 2021, 9, .	1.0	5
12	Radical-free hyperpolarized MRI using endogenously occurring pyruvate analogues and UV-induced nonpersistent radicals. <i>NMR in Biomedicine</i> , 2021, 34, e4584.	1.6	2
13	Evaluation of the whole auditory pathway using high-resolution and functional MRI at 7T parallel-transmit. <i>PLoS ONE</i> , 2021, 16, e0254378.	1.1	3
14	Late postnatal neurometabolic development in healthy male rats using 1 H and 31 P magnetic resonance spectroscopy. <i>Journal of Neurochemistry</i> , 2021, 157, 508-519.	2.1	4
15	Metabolite concentration changes associated with positive and negative BOLD responses in the human visual cortex: A functional MRS study at 7 Tesla. <i>Journal of Cerebral Blood Flow and Metabolism</i> , 2020, 40, 488-500.	2.4	40
16	¹³ C Dynamic Nuclear Polarization using SA-BDPA at 6.7 T and 1.1 K: Coexistence of Pure Thermal Mixing and Well-Resolved Solid Effect. <i>Journal of Physical Chemistry Letters</i> , 2020, 11, 6873-6879.	2.1	7
17	Glutamine-to-glutamate ratio in the nucleus accumbens predicts effort-based motivated performance in humans. <i>Neuropsychopharmacology</i> , 2020, 45, 2048-2057.	2.8	16
18	Mitochondrial gene signature in the prefrontal cortex for differential susceptibility to chronic stress. <i>Scientific Reports</i> , 2020, 10, 18308.	1.6	43

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19	Impact of aerobic exercise type on blood flow, muscle energy metabolism, and mitochondrial biogenesis in experimental lower extremity artery disease. <i>Scientific Reports</i> , 2020, 10, 14048.	1.6	6
20	Metabolic and perfusion responses to acute hypoglycemia in the rat cortex: A non-invasive magnetic resonance approach. <i>Journal of Neurochemistry</i> , 2020, 154, 71-83.	2.1	2
21	Brain NAD Is Associated With ATP Energy Production and Membrane Phospholipid Turnover in Humans. <i>Frontiers in Aging Neuroscience</i> , 2020, 12, 609517.	1.7	23
22	Metabolic signature in nucleus accumbens for anti-depressant-like effects of acetyl-L-carnitine. <i>ELife</i> , 2020, 9, .	2.8	45
23	Combined deletion of Glut1 and Glut3 impairs lung adenocarcinoma growth. <i>ELife</i> , 2020, 9, .	2.8	18
24	N-Acetyl-Cysteine Supplementation Improves Functional Connectivity Within the Cingulate Cortex in Early Psychosis: A Pilot Study. <i>International Journal of Neuropsychopharmacology</i> , 2019, 22, 478-487.	1.0	25
25	Multi-slice passband bSSFP for human and rodent fMRI at ultra-high field. <i>Journal of Magnetic Resonance</i> , 2019, 305, 31-40.	1.2	9
26	A combined 32-channel receive/8-channel transmit dipoles coil array for whole-brain MR imaging at 7T. <i>Magnetic Resonance in Medicine</i> , 2019, 82, 1229-1241.	1.9	35
27	Capturing the spatiotemporal dynamics of self-generated, task-initiated thoughts with EEG and fMRI. <i>NeuroImage</i> , 2019, 194, 82-92.	2.1	171
28	Methodological consensus on clinical proton MRS of the brain: Review and recommendations. <i>Magnetic Resonance in Medicine</i> , 2019, 82, 527-550.	1.9	280
29	Investigating the variability of cardiac pulse artifacts across heartbeats in simultaneous EEG-fMRI recordings: A 7T study. <i>NeuroImage</i> , 2019, 191, 21-35.	2.1	19
30	Improved off-resonance phase behavior using a phase-inverted adiabatic half-passage pulse for ¹³ C MRS in humans at 7 T. <i>NMR in Biomedicine</i> , 2019, 32, e4171.	1.6	1
31	A human cerebral and cerebellar 8-channel transmit RF dipole coil array at 7T. <i>Magnetic Resonance in Medicine</i> , 2019, 81, 1447-1458.	1.9	36
32	Nucleus accumbens neurochemistry in human anxiety: A 7 T 1H-MRS study. <i>European Neuropsychopharmacology</i> , 2019, 29, 365-375.	0.3	32
33	High-fat diet consumption alters energy metabolism in the mouse hypothalamus. <i>International Journal of Obesity</i> , 2019, 43, 1295-1304.	1.6	37
34	Alterations of Brain Energy Metabolism in Type 2 Diabetic Goto-Kakizaki Rats Measured In Vivo by ¹³ C Magnetic Resonance Spectroscopy. <i>Neurotoxicity Research</i> , 2019, 36, 268-278.	1.3	29
35	Glucose transporter 2 mediates the hypoglycemia-induced increase in cerebral blood flow. <i>Journal of Cerebral Blood Flow and Metabolism</i> , 2019, 39, 1725-1736.	2.4	5
36	Evolution of the neurochemical profiles in the G93A-SOD1 mouse model of amyotrophic lateral sclerosis. <i>Journal of Cerebral Blood Flow and Metabolism</i> , 2019, 39, 1283-1298.	2.4	22

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37	Probing cardiac metabolism by hyperpolarized ^{13}C MR using an exclusively endogenous substrate mixture and photoinduced nonpersistent radicals. <i>Magnetic Resonance in Medicine</i> , 2018, 79, 2451-2459.	1.9	18
38	Mapping and characterization of positive and negative BOLD responses to visual stimulation in multiple brain regions at 7T. <i>Human Brain Mapping</i> , 2018, 39, 2426-2441.	1.9	27
39	Feasibility of in vivo measurement of glucose metabolism in the mouse hypothalamus by ^{13}C MRS at 14.1T. <i>Magnetic Resonance in Medicine</i> , 2018, 80, 874-884.	1.9	11
40	In Vivo Heteronuclear Magnetic Resonance Spectroscopy. <i>Methods in Molecular Biology</i> , 2018, 1718, 169-187.	0.4	8
41	<i>In vivo</i> characterization of brain metabolism by ^1H MRS, ^{13}C MRS and ^{18}F FDG PET reveals significant glucose oxidation of invasively growing glioma cells. <i>International Journal of Cancer</i> , 2018, 143, 127-138.	2.3	16
42	F44. AN ADD-ON TRIAL WITH N-ACETYL-CYSTEINE (NAC) IN EARLY PSYCHOSIS PATIENTS: TOWARDS BIOMARKER GUIDED TREATMENT. <i>Schizophrenia Bulletin</i> , 2018, 44, S236-S236.	2.3	0
43	<i>In vivo</i> ^{13}C MRS in the mouse brain at 14.1 Tesla and metabolic flux quantification under infusion of $[1,6\text{-}^{13}\text{C}_2]$ glucose. <i>Journal of Cerebral Blood Flow and Metabolism</i> , 2018, 38, 1701-1714.	2.4	16
44	N-acetylcysteine in a Double-Blind Randomized Placebo-Controlled Trial: Toward Biomarker-Guided Treatment in Early Psychosis. <i>Schizophrenia Bulletin</i> , 2018, 44, 317-327.	2.3	121
45	Cannabis use in early psychosis is associated with reduced glutamate levels in the prefrontal cortex. <i>Psychopharmacology</i> , 2018, 235, 13-22.	1.5	27
46	Increased hepatic fatty acid polyunsaturation precedes ectopic lipid deposition in the liver in adaptation to high-fat diets in mice. <i>Magnetic Resonance Materials in Physics, Biology, and Medicine</i> , 2018, 31, 341-354.	1.1	15
47	Astrocytic and neuronal oxidative metabolism are coupled to the rate of glutamate-glutamine cycle in the tree shrew visual cortex. <i>Glia</i> , 2018, 66, 477-491.	2.5	45
48	N-acetylcysteine add-on treatment leads to an improvement of fornix white matter integrity in early psychosis: a double-blind randomized placebo-controlled trial. <i>Translational Psychiatry</i> , 2018, 8, 220.	2.4	44
49	T52. N-ACETYL-CYSTEINE ADD-ON TREATMENT LEADS TO AN IMPROVEMENT OF FORNIX WHITE MATTER INTEGRITY IN EARLY PSYCHOSIS. <i>Schizophrenia Bulletin</i> , 2018, 44, S133-S134.	2.3	1
50	Nutritional Ketosis Increases NAD ⁺ /NADH Ratio in Healthy Human Brain: An in Vivo Study by ^3P -MRS. <i>Frontiers in Nutrition</i> , 2018, 5, 62.	1.6	62
51	Impact of Caffeine Consumption on Type 2 Diabetes-Induced Spatial Memory Impairment and Neurochemical Alterations in the Hippocampus. <i>Frontiers in Neuroscience</i> , 2018, 12, 1015.	1.4	40
52	Clinical Neuroimaging Using 7 T MRI: Challenges and Prospects. <i>Journal of Neuroimaging</i> , 2018, 28, 5-13.	1.0	24
53	Technical and experimental features of Magnetic Resonance Spectroscopy of brain glycogen metabolism. <i>Analytical Biochemistry</i> , 2017, 529, 117-126.	1.1	8
54	Glycogen Supercompensation in the Rat Brain After Acute Hypoglycemia is Independent of Glucose Levels During Recovery. <i>Neurochemical Research</i> , 2017, 42, 1629-1635.	1.6	19

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55	Progress towards in vivo brain ¹³ C-MRS in mice: Metabolic flux analysis in small tissue volumes. <i>Analytical Biochemistry</i> , 2017, 529, 229-244.	1.1	13
56	Energy metabolism in the rat cortex under thiopental anaesthesia measured <i>In Vivo</i> by ¹³ C MRS. <i>Journal of Neuroscience Research</i> , 2017, 95, 2297-2306.	1.3	14
57	Studying cyto and myeloarchitecture of the human cortex at ultra-high field with quantitative imaging: R1, R2* and magnetic susceptibility. <i>NeuroImage</i> , 2017, 147, 152-163.	2.1	80
58	Measuring glucose cerebral metabolism in the healthy mouse using hyperpolarized ¹³ C magnetic resonance. <i>Scientific Reports</i> , 2017, 7, 11719.	1.6	43
59	Social isolation stress and chronic glutathione deficiency have a common effect on the glutamine-glutamate ratio and myo-inositol concentration in the mouse frontal cortex. <i>Journal of Neurochemistry</i> , 2017, 142, 767-775.	2.1	15
60	Hierarchical Status Predicts Behavioral Vulnerability and Nucleus Accumbens Metabolic Profile Following Chronic Social Defeat Stress. <i>Current Biology</i> , 2017, 27, 2202-2210.e4.	1.8	161
61	Influence of physiological noise on accelerated 2D and 3D resting state functional MRI data at 7T. <i>Magnetic Resonance in Medicine</i> , 2017, 78, 888-896.	1.9	34
62	Sexual dimorphism in hepatic lipids is associated with the evolution of metabolic status in mice. <i>NMR in Biomedicine</i> , 2017, 30, e3761.	1.6	11
63	Diffusion-weighted MRS of acetate in the rat brain. <i>NMR in Biomedicine</i> , 2017, 30, e3768.	1.6	5
64	Prospective head motion correction using FID-guided on-demand image navigators. <i>Magnetic Resonance in Medicine</i> , 2017, 78, 193-203.	1.9	11
65	How Energy Metabolism Supports Cerebral Function: Insights from ¹³ C Magnetic Resonance Studies In vivo. <i>Frontiers in Neuroscience</i> , 2017, 11, 288.	1.4	64
66	Retrospective correction of involuntary microscopic head movement using highly accelerated fat image navigators (3D FatNavs) at 7T. <i>Magnetic Resonance in Medicine</i> , 2016, 75, 1030-1039.	1.9	110
67	Genetic Polymorphism Associated Prefrontal Glutathione and Its Coupling With Brain Glutamate and Peripheral Redox Status in Early Psychosis. <i>Schizophrenia Bulletin</i> , 2016, 42, 1185-1196.	2.3	83
68	Hyperpolarized ⁶ Li as a probe for hemoglobin oxygenation level. <i>Contrast Media and Molecular Imaging</i> , 2016, 11, 41-46.	0.4	15
69	Simultaneous and interleaved acquisition of ^{NMR} signals from different nuclei with a clinical ^{MRI} scanner. <i>Magnetic Resonance in Medicine</i> , 2016, 76, 1636-1641.	1.9	29
70	Early detection of human glioma sphere xenografts in mouse brain using diffusion MRI at 14.1T. <i>NMR in Biomedicine</i> , 2016, 29, 1577-1589.	1.6	9
71	Simultaneous and interleaved acquisition of NMR signals from different nuclei with a clinical MRI scanner. <i>Magnetic Resonance in Medicine</i> , 2016, 76, spcone-spcone.	1.9	1
72	Three-dimensional echo planar imaging with controlled aliasing: A sequence for high temporal resolution functional MRI. <i>Magnetic Resonance in Medicine</i> , 2016, 75, 2350-2361.	1.9	53

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73	Retrospective correction of involuntary microscopic head movement using highly accelerated fat image navigators (3D FatNavs) at 7T. <i>Magnetic Resonance in Medicine</i> , 2016, 75, spcone.	1.9	0
74	Glutathione Deficit Affects the Integrity and Function of the Fimbria/Fornix and Anterior Commissure in Mice: Relevance for Schizophrenia. <i>International Journal of Neuropsychopharmacology</i> , 2016, 19, pyv110.	1.0	40
75	3D T2-weighted imaging at 7T using dynamic kT-points on single-transmit MRI systems. <i>Magnetic Resonance Materials in Physics, Biology, and Medicine</i> , 2016, 29, 347-358.	1.1	12
76	Refined Analysis of Brain Energy Metabolism Using In Vivo Dynamic Enrichment of ¹³ C Multiplets. <i>ASN Neuro</i> , 2016, 8, 175909141663234.	1.5	13
77	Compartmentalised energy metabolism supporting glutamatergic neurotransmission in response to increased activity in the rat cerebral cortex: A ¹³ C MRS study <i>in vivo</i> at 14.1 T. <i>Journal of Cerebral Blood Flow and Metabolism</i> , 2016, 36, 928-940.	2.4	46
78	Quantitative activity-induced manganese-dependent MRI for characterizing cortical layers in the primary somatosensory cortex of the rat. <i>Brain Structure and Function</i> , 2016, 221, 695-707.	1.2	2
79	Parallel imaging with phase scrambling. <i>Magnetic Resonance in Medicine</i> , 2015, 73, 1407-1419.	1.9	11
80	Single acquisition electrical property mapping based on relative coil sensitivities: A proof-of-concept demonstration. <i>Magnetic Resonance in Medicine</i> , 2015, 74, 185-195.	1.9	29
81	Characterization of hepatic fatty acids in mice with reduced liver fat by ultra-short echo time ¹ H-MRS at 14.1 T <i>in vivo</i> . <i>NMR in Biomedicine</i> , 2015, 28, 1009-1020.	1.6	12
82	Imaging of prolonged BOLD response in the somatosensory cortex of the rat. <i>NMR in Biomedicine</i> , 2015, 28, 414-421.	1.6	15
83	Stroking or Buzzing? A Comparison of Somatosensory Touch Stimuli Using 7 Tesla fMRI. <i>PLoS ONE</i> , 2015, 10, e0134610.	1.1	14
84	Distinct contributions of Brodmann areas 1 and 2 to body ownership. <i>Social Cognitive and Affective Neuroscience</i> , 2015, 10, 1449-1459.	1.5	22
85	Fast low-specific absorption rate B ₀ -mapping along projections at high field using two-dimensional radiofrequency pulses. <i>Magnetic Resonance in Medicine</i> , 2015, 73, 901-908.	1.9	11
86	Correcting surface coil excitation inhomogeneities in single-shot SPEN MRI. <i>Journal of Magnetic Resonance</i> , 2015, 259, 199-206.	1.2	5
87	A double-quadrature radiofrequency coil design for proton-decoupled carbon- ¹³ magnetic resonance spectroscopy in humans at 7T. <i>Magnetic Resonance in Medicine</i> , 2015, 73, 894-900.	1.9	18
88	Assessment of Metabolic Fluxes in the Mouse Brain <i>in Vivo</i> Using ¹ H- ¹³ C] NMR Spectroscopy at 14.1 Tesla. <i>Journal of Cerebral Blood Flow and Metabolism</i> , 2015, 35, 759-765.	2.4	22
89	Physiological noise in human cerebellar fMRI. <i>Magnetic Resonance Materials in Physics, Biology, and Medicine</i> , 2015, 28, 485-492.	1.1	14
90	Towards high-quality simultaneous EEG-fMRI at 7 T: Detection and reduction of EEG artifacts due to head motion. <i>NeuroImage</i> , 2015, 120, 143-153.	2.1	53

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91	In Vivo Longitudinal 1H MRS Study of Transgenic Mouse Models of Prion Disease in the Hippocampus and Cerebellum at 14.1T. <i>Neurochemical Research</i> , 2015, 40, 2639-2646.	1.6	6
92	Direct noninvasive estimation of myocardial tricarboxylic acid cycle flux in vivo using hyperpolarized ¹³ C magnetic resonance. <i>Journal of Molecular and Cellular Cardiology</i> , 2015, 87, 129-137.	0.9	30
93	GDH-Dependent Glutamate Oxidation in the Brain Dictates Peripheral Energy Substrate Distribution. <i>Cell Reports</i> , 2015, 13, 365-375.	2.9	49
94	Brain energy metabolism measured by ¹³ C magnetic resonance spectroscopy in vivo upon infusion of [¹³ C]lactate. <i>Journal of Neuroscience Research</i> , 2015, 93, 1009-1018.	1.3	21
95	A modulated closed form solution for quantitative susceptibility mapping – A thorough evaluation and comparison to iterative methods based on edge prior knowledge. <i>NeuroImage</i> , 2015, 107, 163-174.	2.1	47
96	Simultaneous EEG-fMRI at ultra-high field: Artifact prevention and safety assessment. <i>NeuroImage</i> , 2015, 105, 132-144.	2.1	63
97	Glutathione deficit impairs myelin maturation: relevance for white matter integrity in schizophrenia patients. <i>Molecular Psychiatry</i> , 2015, 20, 827-838.	4.1	95
98	Non-Invasive Diagnostic Biomarkers for Estimating the Onset Time of Permanent Cerebral Ischemia. <i>Journal of Cerebral Blood Flow and Metabolism</i> , 2014, 34, 1848-1855.	2.4	20
99	Definition and quantification of acute inflammatory white matter injury in the immature brain by MRI/MRS at high magnetic field. <i>Pediatric Research</i> , 2014, 75, 415-423.	1.1	24
100	Ultra-high field birdcage coils: A comparison study at 14.1T. , 2014, 2014, 2360-3.		5
101	Localized Single-Voxel Magnetic Resonance Spectroscopy, Water Suppression, and Novel Approaches for Ultrashort Echo-Time Measurements. , 2014, , 15-30.		5
102	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.	1.9	9
103	<i>In vivo</i> quantification of neuroglial metabolism and glial glutamate concentration using ¹³ C MRS at 14.1T. <i>Journal of Neurochemistry</i> , 2014, 128, 125-139.	2.1	38
104	An improved trap design for decoupling multinuclear RF coils. <i>Magnetic Resonance in Medicine</i> , 2014, 72, 584-590.	1.9	51
105	Phase-based manganese enhanced MRI, a new methodology to enhance brain cytoarchitectural contrast and study manganese uptake. <i>Magnetic Resonance in Medicine</i> , 2014, 72, 1246-1256.	1.9	3
106	Optimized MEGA-SPECIAL for <i>in vivo</i> glutamine detection in the rat brain at 14.1T. <i>NMR in Biomedicine</i> , 2014, 27, 1151-1158.	1.6	2
107	Experimental peripheral arterial disease: new insights into muscle glucose uptake, macrophage, and T-cell polarization during early and late stages. <i>Physiological Reports</i> , 2014, 2, e00234.	0.7	14
108	Human finger somatotopy in areas 3b, 1, and 2: A 7T fMRI study using a natural stimulus. <i>Human Brain Mapping</i> , 2014, 35, 213-226.	1.9	182

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109	Are glutamate and lactate increases ubiquitous to physiological activation? A 1H functional MR spectroscopy study during motor activation in human brain at 7Tesla. <i>NeuroImage</i> , 2014, 93, 138-145.	2.1	90
110	Hyperpolarized 13C lactate as a substrate for in vivo metabolic studies in skeletal muscle. <i>Metabolomics</i> , 2014, 10, 986-994.	1.4	24
111	<i>In vivo</i> brain macromolecule signals in healthy and glioblastoma mouse models: ¹ H magnetic resonance spectroscopy, post-processing and metabolite quantification at 14.1 T. <i>Journal of Neurochemistry</i> , 2014, 129, 806-815.	2.1	17
112	Protective effects of maternal nutritional supplementation with lactoferrin on growth and brain metabolism. <i>Pediatric Research</i> , 2014, 75, 51-61.	1.1	33
113	Is the macromolecule signal tissue-specific in healthy human brain? A ¹ H MRS study at 7 tesla in the occipital lobe. <i>Magnetic Resonance in Medicine</i> , 2014, 72, 934-940.	1.9	51
114	Image-Derived Input Function from the Vena Cava for ¹⁸ F-FDG PET Studies in Rats and Mice. <i>Journal of Nuclear Medicine</i> , 2014, 55, 1380-1388.	2.8	53
115	Clinical Proton MR Spectroscopy in Central Nervous System Disorders. <i>Radiology</i> , 2014, 270, 658-679.	3.6	524
116	Longitudinal neurochemical modifications in the aging mouse brain measured in vivo by 1H magnetic resonance spectroscopy. <i>Neurobiology of Aging</i> , 2014, 35, 1660-1668.	1.5	90
117	MRS glucose mapping and PET joining forces: reevaluation of the lumped constant in the rat brain under isoflurane anaesthesia. <i>Journal of Neurochemistry</i> , 2014, 129, 672-682.	2.1	9
118	Improving T ₂ -weighted imaging at high field through the use of k _T points. <i>Magnetic Resonance in Medicine</i> , 2014, 71, 1478-1488.	1.9	32
119	Multi-Modal Assessment of Long-Term Erythropoietin Treatment after Neonatal Hypoxic-Ischemic Injury in Rat Brain. <i>PLoS ONE</i> , 2014, 9, e95643.	1.1	38
120	Proton T ₁ relaxation times of metabolites in human occipital white and gray matter at 7 T. <i>Magnetic Resonance in Medicine</i> , 2013, 69, 931-936.	1.9	82
121	An <i>in vivo</i> ultrahigh field 14.1 T ¹ H MRS study on 6-OHDA and α -synuclein based rat models of Parkinson's disease: GABA as an early disease marker. <i>NMR in Biomedicine</i> , 2013, 26, 43-50.	1.6	37
122	In vivo enzymatic activity of acetylCoA synthetase in skeletal muscle revealed by 13C turnover from hyperpolarized [1-13C]acetate to [1-13C]acetylcarnitine. <i>Biochimica Et Biophysica Acta - General Subjects</i> , 2013, 1830, 4171-4178.	1.1	61
123	Glutamatergic and GABAergic energy metabolism measured in the rat brain by ¹³ C ¹ H NMR spectroscopy at 14.1 T. <i>Journal of Neurochemistry</i> , 2013, 126, 579-590.	2.1	71
124	Single spin-echo T ₂ relaxation times of cerebral metabolites at 14.1 T in the in vivo rat brain. <i>Magnetic Resonance Materials in Physics, Biology, and Medicine</i> , 2013, 26, 549-554.	1.1	11
125	Digit somatotopy in the human cerebellum: A 7T fMRI study. <i>NeuroImage</i> , 2013, 67, 354-362.	2.1	44
126	Unedited <i>in vivo</i> detection and quantification of γ -aminobutyric acid in the occipital cortex using short TE MRS at 3 T. <i>NMR in Biomedicine</i> , 2013, 26, 1353-1362.	1.6	75

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127	Investigation of field and diffusion time dependence of the diffusion-weighted signal at ultrahigh magnetic fields. <i>NMR in Biomedicine</i> , 2013, 26, 1251-1257.	1.6	18
128	Characterization of sustained BOLD activation in the rat barrel cortex and neurochemical consequences. <i>NeuroImage</i> , 2013, 74, 343-351.	2.1	33
129	Which prior knowledge? Quantification of in vivo brain ¹³ C MR spectra following ¹³ C glucose infusion using AMARES. <i>Magnetic Resonance in Medicine</i> , 2013, 69, 1512-1522.	1.9	12
130	3-D Residual Eddy Current Field Characterisation: Applied to Diffusion Weighted Magnetic Resonance Imaging. <i>IEEE Transactions on Medical Imaging</i> , 2013, 32, 1515-1525.	5.4	7
131	Brain Glucose Transport and Phosphorylation Under Acute Insulin-Induced Hypoglycemia in Mice: An ¹⁸ F-FDG PET Study. <i>Journal of Nuclear Medicine</i> , 2013, 54, 2153-2160.	2.8	11
132	Metabolic Flux and Compartmentation Analysis in the Brain In vivo. <i>Frontiers in Endocrinology</i> , 2013, 4, 156.	1.5	47
133	Net increase of lactate and glutamate concentration in activated human visual cortex detected with magnetic resonance spectroscopy at 7 tesla. <i>Journal of Neuroscience Research</i> , 2013, 91, 1076-1083.	1.3	118
134	Quantification of the neurochemical profile using simulated macromolecule resonances at 3 T. <i>NMR in Biomedicine</i> , 2013, 26, 593-599.	1.6	41
135	Feasibility of direct mapping of cerebral fluorodeoxyglucose metabolism in situ at subcellular resolution using soft X-ray fluorescence. <i>Journal of Neuroscience Research</i> , 2013, 91, 1050-1058.	1.3	16
136	Direct mapping of ¹⁹ F in ¹⁹ F-DG-6P in brain tissue at subcellular resolution using soft X-ray fluorescence. <i>Journal of Physics: Conference Series</i> , 2013, 463, 012003.	0.3	3
137	New Developments and Applications of the MP2RAGE Sequence - Focusing the Contrast and High Spatial Resolution R1 Mapping. <i>PLoS ONE</i> , 2013, 8, e69294.	1.1	135
138	The C57BL/6J Mouse Exhibits Sporadic Congenital Portosystemic Shunts. <i>PLoS ONE</i> , 2013, 8, e69782.	1.1	51
139	Hepatic glucose sensing is required to preserve β^2 cell glucose competence. <i>Journal of Clinical Investigation</i> , 2013, 123, 1662-1676.	3.9	118
140	Cerebral Glutamine Metabolism under Hyperammonemia Determined <i>in vivo</i> by Localized ¹ H and ¹⁵ N NMR Spectroscopy. <i>Journal of Cerebral Blood Flow and Metabolism</i> , 2012, 32, 696-708.	2.4	40
141	A Two-Compartment Mathematical Model of Neuroglial Metabolism Using [1- ¹¹ C] Acetate. <i>Journal of Cerebral Blood Flow and Metabolism</i> , 2012, 32, 548-559.	2.4	10
142	Handling Macromolecule Signals in the Quantification of the Neurochemical Profile. <i>Journal of Alzheimer's Disease</i> , 2012, 31, S101-S115.	1.2	78
143	Proton and Phosphorus Magnetic Resonance Spectroscopy of a Mouse Model of Alzheimer's Disease. <i>Journal of Alzheimer's Disease</i> , 2012, 31, S87-S99.	1.2	40
144	MP2RAGE Multiple Sclerosis Magnetic Resonance Imaging at 3 T. <i>Investigative Radiology</i> , 2012, 47, 346-352.	3.5	72

#	ARTICLE	IF	CITATIONS
145	The neurochemical profile quantified by in vivo 1H NMR spectroscopy. <i>NeuroImage</i> , 2012, 61, 342-362.	2.1	199
146	Deletion of glutamate dehydrogenase 1 (<i>GluD1</i>) in the central nervous system affects glutamate handling without altering synaptic transmission. <i>Journal of Neurochemistry</i> , 2012, 123, 342-348.	2.1	52
147	<i>In Vivo</i> Detection of Brain Krebs Cycle Intermediate by Hyperpolarized Magnetic Resonance. <i>Journal of Cerebral Blood Flow and Metabolism</i> , 2012, 32, 2108-2113.	2.4	72
148	N-Acetylcysteine Normalizes Neurochemical Changes in the Glutathione-Deficient Schizophrenia Mouse Model During Development. <i>Biological Psychiatry</i> , 2012, 71, 1006-1014.	0.7	100
149	Prospective and retrospective motion correction in diffusion magnetic resonance imaging of the human brain. <i>NeuroImage</i> , 2012, 59, 389-398.	2.1	61
150	In vivo assessment of myelination by phase imaging at high magnetic field. <i>NeuroImage</i> , 2012, 59, 1979-1987.	2.1	80
151	SA2RAGE: A new sequence for fast B_1 mapping. <i>Magnetic Resonance in Medicine</i> , 2012, 67, 1609-1619.	1.9	71
152	A comparison of in vivo ^{13}C MR brain glycogen quantification at 9.4 and 14.1 T. <i>Magnetic Resonance in Medicine</i> , 2012, 67, 1523-1527.	1.9	9
153	Localized in vivo hyperpolarization transfer sequences. <i>Magnetic Resonance in Medicine</i> , 2012, 68, 349-352.	1.9	27
154	In vivo Structural Imaging of the Cerebellum, the Contribution of Ultra-High Fields. <i>Cerebellum</i> , 2012, 11, 384-391.	1.4	15
155	Characterization of cerebral glucose dynamics <i>in vivo</i> with a four-state conformational model of transport at the blood-brain barrier. <i>Journal of Neurochemistry</i> , 2012, 121, 396-406.	2.1	35
156	Spread Spectrum Magnetic Resonance Imaging. <i>IEEE Transactions on Medical Imaging</i> , 2012, 31, 586-598.	5.4	86
157	High-resolution spatial mapping of changes in the neurochemical profile after focal ischemia in mice. <i>NMR in Biomedicine</i> , 2012, 25, 247-254.	1.6	21
158	<i>In vivo</i> metabolic profiling of glioma-initiating cells using proton magnetic resonance spectroscopy at 14.1 Tesla. <i>NMR in Biomedicine</i> , 2012, 25, 506-513.	1.6	17
159	Temporal SNR characteristics in segmented 3D-EPI at 7T. <i>Magnetic Resonance in Medicine</i> , 2012, 67, 344-352.	1.9	64
160	Cerebral Glucose Transport and Homeostasis. <i>Advances in Neurobiology</i> , 2012, , 655-673.	1.3	4
161	Measurements of Glycogen Metabolism in the Living Brain. <i>Advances in Neurobiology</i> , 2012, , 699-706.	1.3	0
162	Where sound position influences sound object representations: A 7-T fMRI study. <i>NeuroImage</i> , 2011, 54, 1803-1811.	2.1	38

#	ARTICLE	IF	CITATIONS
163	Developmental and metabolic brain alterations in rats exposed to bisphenol A during gestation and lactation. <i>International Journal of Developmental Neuroscience</i> , 2011, 29, 37-43.	0.7	43
164	Compartmentalized Cerebral Metabolism of [1,6- ¹³ C]Glucose Determined by in vivo ¹³ C NMR Spectroscopy at 14.1 T. <i>Frontiers in Neuroenergetics</i> , 2011, 3, 3.	5.3	70
165	Chronic Delivery of Antibody Fragments Using Immunoisolated Cell Implants as a Passive Vaccination Tool. <i>PLoS ONE</i> , 2011, 6, e18268.	1.1	7
166	Increase of [¹⁸ F]FLT Tumor Uptake In Vivo Mediated by FdUrd: Toward Improving Cell Proliferation Positron Emission Tomography. <i>Molecular Imaging and Biology</i> , 2011, 13, 321-331.	1.3	12
167	Longitudinal MR assessment of hypoxic ischemic injury in the immature rat brain. <i>Magnetic Resonance in Medicine</i> , 2011, 65, 305-312.	1.9	40
168	Diffusion tensor echo planar imaging using surface coil transceiver with a semiadiabatic RF pulse sequence at 14.1T. <i>Magnetic Resonance in Medicine</i> , 2011, 65, 732-737.	1.9	18
169	Head motion detection using FID navigators. <i>Magnetic Resonance in Medicine</i> , 2011, 66, 135-143.	1.9	58
170	Detection of neuronal activity and metabolism in a model of dehydration-induced anorexia in rats at 14.1T using manganese-enhanced MRI and ¹ H MRS. <i>NMR in Biomedicine</i> , 2011, 24, 1326-1336.	1.6	15
171	Early Predictive Biomarkers for Lesion After Transient Cerebral Ischemia. <i>Stroke</i> , 2011, 42, 799-805.	1.0	40
172	Continuous arterial spin labeling of mouse cerebral blood flow using an actively-detuned two-coil system at 9.4T. , 2011, 2011, 6993-6.		4
173	High-Resolution Magnetic Resonance Imaging Quantitatively Detects Individual Pancreatic Islets. <i>Diabetes</i> , 2011, 60, 2853-2860.	0.3	38
174	Effect of Manganese Chloride on the Neurochemical Profile of the Rat Hypothalamus. <i>Journal of Cerebral Blood Flow and Metabolism</i> , 2011, 31, 2324-2333.	2.4	21
175	Echo-time independent signal modulations for strongly coupled systems in triple echo localization schemes: An extension of S-PRESS editing. <i>Journal of Magnetic Resonance</i> , 2010, 203, 108-112.	1.2	4
176	Eddy current effects on a clinical 7T-68cm bore scanner. <i>Magnetic Resonance Materials in Physics, Biology, and Medicine</i> , 2010, 23, 39-43.	1.1	11
177	Quantification of brain glycogen concentration and turnover through localized ¹³ C NMR of both the C1 and C6 resonances. <i>NMR in Biomedicine</i> , 2010, 23, 270-276.	1.6	19
178	Neurochemical profile of the mouse hypothalamus using in vivo ¹ H MRS at 14.1T. <i>NMR in Biomedicine</i> , 2010, 23, 578-583.	1.6	31
179	Direct in vivo measurement of glycine and the neurochemical profile in the rat medulla oblongata. <i>NMR in Biomedicine</i> , 2010, 23, 1097-1102.	1.6	18
180	Scavenging Free Radicals To Preserve Enhancement and Extend Relaxation Times in NMR using Dynamic Nuclear Polarization. <i>Angewandte Chemie - International Edition</i> , 2010, 49, 6182-6185.	7.2	89

#	ARTICLE	IF	CITATIONS
181	Deep thiopental anesthesia alters steady-state glucose homeostasis but not the neurochemical profile of rat cortex. <i>Journal of Neuroscience Research</i> , 2010, 88, 413-419.	1.3	24
182	^{13}C NMR spectroscopy of the rat brain during infusion of ^{13}C acetate at 14.1 T. <i>Magnetic Resonance in Medicine</i> , 2010, 64, 334-340.	1.9	26
183	Diffusion-weighted spectroscopy: A novel approach to determine macromolecule resonances in short-echo time ^1H -MRS. <i>Magnetic Resonance in Medicine</i> , 2010, 64, 939-946.	1.9	36
184	BOLD responses to trigeminal nerve stimulation. <i>Magnetic Resonance Imaging</i> , 2010, 28, 1143-1151.	1.0	21
185	Neurochemical changes in the developing rat hippocampus during prolonged hypoglycemia. <i>Journal of Neurochemistry</i> , 2010, 114, 728-738.	2.1	40
186	Neurochemical profile of the developing mouse cortex determined by <i>in vivo</i> ^1H NMR spectroscopy at 14.1 T and the effect of recurrent anaesthesia. <i>Journal of Neurochemistry</i> , 2010, 115, 1466-1477.	2.1	51
187	Cerebellar Cortical Layers: In Vivo Visualization with Structural High-Field-Strength MR Imaging. <i>Radiology</i> , 2010, 254, 942-948.	3.6	66
188	MP2RAGE, a self bias-field corrected sequence for improved segmentation and T1-mapping at high field. <i>NeuroImage</i> , 2010, 49, 1271-1281.	2.1	1,075
189	Feasibility of <i>in vivo</i> ^{15}N MRS detection of hyperpolarized ^{15}N labeled choline in rats. <i>Physical Chemistry Chemical Physics</i> , 2010, 12, 5818.	1.3	96
190	Steady-state brain glucose transport kinetics re-evaluated with a four-state conformational model. <i>Frontiers in Neuroenergetics</i> , 2009, 1, 6.	5.3	26
191	Quantification of <i>in vivo</i> short echo-time proton magnetic resonance spectra at 14.1 T using two different approaches of modelling the macromolecule spectrum. <i>Measurement Science and Technology</i> , 2009, 20, 104034.	1.4	35
192	Minimization of Nyquist ghosting for echo-planar imaging at ultra-high fields based on a negative readout gradient strategy. <i>Journal of Magnetic Resonance Imaging</i> , 2009, 30, 1171-1178.	1.9	31
193	Selective resonance suppression ^1H - ^{13}C NMR spectroscopy with asymmetric adiabatic RF pulses. <i>Magnetic Resonance in Medicine</i> , 2009, 61, 260-266.	1.9	4
194	Hyperpolarized lithium ^6Li as a sensor of nanomolar contrast agents. <i>Magnetic Resonance in Medicine</i> , 2009, 61, 1489-1493.	1.9	53
195	MR spectroscopy of the human brain with enhanced signal intensity at ultrashort echo times on a clinical platform at 3T and 7T. <i>Magnetic Resonance in Medicine</i> , 2009, 61, 1279-1285.	1.9	291
196	Comparison of T_1 relaxation times of the neurochemical profile in rat brain at 9.4 tesla and 14.1 tesla. <i>Magnetic Resonance in Medicine</i> , 2009, 62, 862-867.	1.9	42
197	<i>in vivo</i> ^1H NMR spectroscopy of the human brain at high magnetic fields: Metabolite quantification at 4T vs. 7T. <i>Magnetic Resonance in Medicine</i> , 2009, 62, 868-879.	1.9	316
198	<i>in vivo</i> measurement of glycine with short echo-time ^1H MRS in human brain at 7 T. <i>Magnetic Resonance Materials in Physics, Biology, and Medicine</i> , 2009, 22, 1-4.	1.1	42

#	ARTICLE	IF	CITATIONS
199	Evolution of the Neurochemical Profile after Transient Focal Cerebral Ischemia in the Mouse Brain. <i>Journal of Cerebral Blood Flow and Metabolism</i> , 2009, 29, 811-819.	2.4	86
200	Neuroprotective Role of Lactate after Cerebral Ischemia. <i>Journal of Cerebral Blood Flow and Metabolism</i> , 2009, 29, 1780-1789.	2.4	197
201	The rate-limiting step for glucose transport into the hypothalamus is across the blood-hypothalamus interface. <i>Journal of Neurochemistry</i> , 2009, 109, 38-45.	2.1	20
202	Caffeine consumption attenuates neurochemical modifications in the hippocampus of streptozotocin-induced diabetic rats. <i>Journal of Neurochemistry</i> , 2009, 111, 368-379.	2.1	133
203	Investigation of high-resolution functional magnetic resonance imaging by means of surface and array radiofrequency coils at 7 T. <i>Magnetic Resonance Imaging</i> , 2009, 27, 1011-1018.	1.0	26
204	Alteration of brain glycogen turnover in the conscious rat after 5h of prolonged wakefulness. <i>Neurochemistry International</i> , 2009, 55, 45-51.	1.9	27
205	Proton NMR of ¹⁵ N-Choline Metabolites Enhanced by Dynamic Nuclear Polarization. <i>Journal of the American Chemical Society</i> , 2009, 131, 16014-16015.	6.6	107
206	On the origin of the MR image phase contrast: An in vivo MR microscopy study of the rat brain at 14.1T. <i>NeuroImage</i> , 2009, 46, 345-352.	2.1	109
207	Principles of Operation of a DNP Prepolarizer Coupled to a Rodent MRI Scanner. <i>Applied Magnetic Resonance</i> , 2008, 34, 313-319.	0.6	40
208	Comparison of three commercially available radio frequency coils for human brain imaging at 3 Tesla. <i>Magnetic Resonance Materials in Physics, Biology, and Medicine</i> , 2008, 21, 53-61.	1.1	13
209	Quantitative proton spectroscopic imaging of the neurochemical profile in rat brain with microliter resolution at ultra-short echo times. <i>Magnetic Resonance in Medicine</i> , 2008, 59, 52-58.	1.9	67
210	Editing through multiple bonds: Threonine detection. <i>Magnetic Resonance in Medicine</i> , 2008, 59, 245-251.	1.9	11
211	In vivo ¹ H NMR measurement of glycine in rat brain at 9.4 T at short echo time. <i>Magnetic Resonance in Medicine</i> , 2008, 60, 727-731.	1.9	16
212	Proton T ₂ relaxation time of J-coupled cerebral metabolites in rat brain at 9.4T. <i>NMR in Biomedicine</i> , 2008, 21, 396-401.	1.6	69
213	¹ H NMR spectroscopy of rat brain in vivo at 14.1Tesla: Improvements in quantification of the neurochemical profile. <i>Journal of Magnetic Resonance</i> , 2008, 194, 163-168.	1.2	105
214	Snapshot gradient-recalled echo-planar images of rat brains at long echo time at 9.4 T. <i>Magnetic Resonance Imaging</i> , 2008, 26, 954-960.	1.0	5
215	Non-invasive quantification of brain glycogen absolute concentration. <i>Journal of Neurochemistry</i> , 2008, 107, 1414-1423.	2.1	24
216	Comparison of two approaches to model the macromolecule spectrum for the quantification of short TE ¹ H MRS spectra. , 2008, , .		3

#	ARTICLE	IF	CITATIONS
217	Human brain glycogen content and metabolism: implications on its role in brain energy metabolism. <i>American Journal of Physiology - Endocrinology and Metabolism</i> , 2007, 292, E946-E951.	1.8	114
218	Design and performance of a DNP prepolarizer coupled to a rodent MRI scanner. <i>Concepts in Magnetic Resonance Part B</i> , 2007, 31B, 255-269.	0.3	172
219	Direct validation of in vivo localized ¹³ C MRS measurements of brain glycogen. <i>Magnetic Resonance in Medicine</i> , 2007, 57, 243-248.	1.9	17
220	Dynamics of lactate concentration and blood oxygen level-dependent effect in the human visual cortex during repeated identical stimuli. <i>Journal of Neuroscience Research</i> , 2007, 85, 3340-6.	1.3	58
221	Mathematical modeling of ¹³ C label incorporation of the TCA cycle: The concept of composite precursor function. <i>Journal of Neuroscience Research</i> , 2007, 85, 3304-3317.	1.3	19
222	Perinatal Iron Deficiency Predisposes the Developing Rat Hippocampus to Greater Injury from Mild to Moderate Hypoxia-Ischemia. <i>Journal of Cerebral Blood Flow and Metabolism</i> , 2007, 27, 729-740.	2.4	39
223	Sustained Neuronal Activation Raises Oxidative Metabolism to a New Steady-State Level: Evidence from ¹ H NMR Spectroscopy in the Human Visual Cortex. <i>Journal of Cerebral Blood Flow and Metabolism</i> , 2007, 27, 1055-1063.	2.4	253
224	Neurochemical changes in Huntington R6/2 mouse striatum detected by in vivo ¹ H NMR spectroscopy. <i>Journal of Neurochemistry</i> , 2007, 100, 1397-1406.	2.1	104
225	Brain energy metabolism and neurotransmission at near-freezing temperatures: in vivo ¹ H MRS study of a hibernating mammal. <i>Journal of Neurochemistry</i> , 2007, 101, 1505-1515.	2.1	49
226	Relaxivity of Gd-based contrast agents on X nuclei with long intrinsic relaxation times in aqueous solutions. <i>Magnetic Resonance Imaging</i> , 2007, 25, 821-825.	1.0	15
227	Biochemical quantification of total brain glycogen concentration in rats under different glycemic states. <i>Neurochemistry International</i> , 2006, 48, 616-622.	1.9	46
228	Effect of chronic hypoglycaemia on glucose concentration and glycogen content in rat brain: a localized ¹³ C NMR study. <i>Journal of Neurochemistry</i> , 2006, 99, 260-268.	2.1	37
229	Sensitivity of single-voxel ¹ H-MRS in investigating the metabolism of the activated human visual cortex at 7 T. <i>Magnetic Resonance Imaging</i> , 2006, 24, 343-348.	1.0	115
230	In vivo ¹³ C NMR spectroscopy and metabolic modeling in the brain: a practical perspective. <i>Magnetic Resonance Imaging</i> , 2006, 24, 527-539.	1.0	98
231	Proton MRS of the unilateral substantia nigra in the human brain at 4 tesla: Detection of high GABA concentrations. <i>Magnetic Resonance in Medicine</i> , 2006, 55, 296-301.	1.9	100
232	Proton-observed carbon-edited NMR spectroscopy in strongly coupled second-order spin systems. <i>Magnetic Resonance in Medicine</i> , 2006, 55, 250-257.	1.9	58
233	Quantification of vitamin C in the rat brain in vivo using short echo-time ¹ H MRS. <i>Magnetic Resonance in Medicine</i> , 2006, 55, 979-983.	1.9	30
234	Localized short-echo-time proton MR spectroscopy with full signal-intensity acquisition. <i>Magnetic Resonance in Medicine</i> , 2006, 56, 965-970.	1.9	260

#	ARTICLE	IF	CITATIONS
235	Detection of an antioxidant profile in the human brain in vivo via double editing with MEGA-PRESS. <i>Magnetic Resonance in Medicine</i> , 2006, 56, 1192-1199.	1.9	76
236	High Magnetic Fields for Imaging Cerebral Morphology, Function, and Biochemistry. <i>Biological Magnetic Resonance</i> , 2006, , 285-342.	0.4	8
237	In-Vivo NMR Spectroscopy of the Brain at High Fields. , 2006, , 373-409.		1
238	In vivo effect of chronic hypoxia on the neurochemical profile of the developing rat hippocampus. <i>Developmental Brain Research</i> , 2005, 156, 202-209.	2.1	64
239	Brain glucose concentrations in patients with type 1 diabetes and hypoglycemia unawareness. <i>Journal of Neuroscience Research</i> , 2005, 79, 42-47.	1.3	88
240	Evaluation of brain mitochondrial glutamate and α -ketoglutarate transport under physiologic conditions. <i>Journal of Neuroscience Research</i> , 2005, 79, 106-113.	1.3	28
241	Brain glucose concentrations in healthy humans subjected to recurrent hypoglycemia. <i>Journal of Neuroscience Research</i> , 2005, 82, 525-530.	1.3	34
242	Uncovering hidden in vivo resonances using editing based on localized TOCSY. <i>Magnetic Resonance in Medicine</i> , 2005, 53, 783-789.	1.9	14
243	In vivo ^1H NMR spectroscopy and neurochemistry. Quantification matters. <i>Magnetic Resonance in Medicine</i> , 2005, 54, 1048-1049.	1.9	1
244	Validation of glutathione quantitation from STEAM spectra against edited ^1H NMR spectroscopy at 4T: application to schizophrenia. <i>Magnetic Resonance Materials in Physics, Biology, and Medicine</i> , 2005, 18, 276-282.	1.1	92
245	Methodology of ^1H NMR spectroscopy of the human brain at very high magnetic fields. <i>Applied Magnetic Resonance</i> , 2005, 29, 139-157.	0.6	164
246	A localization method for the measurement of fast relaxing ^{13}C NMR signals in humans at high magnetic fields. <i>Applied Magnetic Resonance</i> , 2005, 29, 159-169.	0.6	11
247	Brain glucose concentrations in poorly controlled diabetes mellitus as measured by high-field magnetic resonance spectroscopy. <i>Metabolism: Clinical and Experimental</i> , 2005, 54, 1008-1013.	1.5	44
248	Neuroglial Metabolism in the Awake Rat Brain: CO_2 Fixation Increases with Brain Activity. <i>Journal of Neuroscience</i> , 2004, 24, 11273-11279.	1.7	204
249	Whole-brain glutamate metabolism evaluated by steady-state kinetics using a double-isotope procedure: effects of gabapentin. <i>Journal of Neurochemistry</i> , 2004, 90, 1104-1116.	2.1	37
250	Dynamic or inert metabolism? Turnover of N-acetyl aspartate and glutathione from d-[1- ^{13}C]glucose in the rat brain in vivo. <i>Journal of Neurochemistry</i> , 2004, 91, 778-787.	2.1	46
251	Temperature and SAR calculations for a human head within volume and surface coils at 64 and 300 MHz. <i>Journal of Magnetic Resonance Imaging</i> , 2004, 19, 650-656.	1.9	248
252	^1H NMR detection of vitamin C in human brain in vivo. <i>Magnetic Resonance in Medicine</i> , 2004, 51, 225-229.	1.9	57

#	ARTICLE	IF	CITATIONS
253	Highly resolved in vivo ¹ H NMR spectroscopy of the mouse brain at 9.4 T. <i>Magnetic Resonance in Medicine</i> , 2004, 52, 478-484.	1.9	171
254	Ultrahigh field magnetic resonance imaging and spectroscopy. <i>Magnetic Resonance Imaging</i> , 2003, 21, 1263-1281.	1.0	218
255	Effect of hypoglycemia on brain glycogen metabolism in vivo. <i>Journal of Neuroscience Research</i> , 2003, 72, 25-32.	1.3	186
256	Glycogen: The forgotten cerebral energy store. <i>Journal of Neuroscience Research</i> , 2003, 74, 179-183.	1.3	178
257	Developmental and regional changes in the neurochemical profile of the rat brain determined by in vivo ¹ H NMR spectroscopy. <i>Magnetic Resonance in Medicine</i> , 2003, 50, 24-32.	1.9	212
258	Measurement of reduced glutathione (GSH) in human brain using LCModel analysis of difference-edited spectra. <i>Magnetic Resonance in Medicine</i> , 2003, 50, 19-23.	1.9	162
259	¹ H-localized broadband ¹³ C NMR spectroscopy of the rat brain in vivo at 9.4 T. <i>Magnetic Resonance in Medicine</i> , 2003, 50, 684-692.	1.9	70
260	Toward dynamic isotopomer analysis in the rat brain in vivo: automatic quantitation of ¹³ C NMR spectra using LCModel. <i>NMR in Biomedicine</i> , 2003, 16, 400-412.	1.6	71
261	Localized in vivo ¹³ C NMR spectroscopy of the brain. <i>NMR in Biomedicine</i> , 2003, 16, 313-338.	1.6	150
262	In vivo ¹³ C NMR assessment of brain glycogen concentration and turnover in the awake rat. <i>Neurochemistry International</i> , 2003, 43, 317-322.	1.9	82
263	Direct, noninvasive measurement of brain glycogen metabolism in humans. <i>Neurochemistry International</i> , 2003, 43, 323-329.	1.9	86
264	Principles of the measurement of neuro-glial metabolism using in vivo ¹³ C NMR spectroscopy. <i>Advances in Molecular and Cell Biology</i> , 2003, , 409-433.	0.1	8
265	Perinatal Iron Deficiency Alters the Neurochemical Profile of the Developing Rat Hippocampus. <i>Journal of Nutrition</i> , 2003, 133, 3215-3221.	1.3	205
266	In vivo ¹³ C NMR studies of compartmentalized cerebral carbohydrate metabolism. <i>Neurochemistry International</i> , 2002, 41, 143-154.	1.9	113
267	Direct in vivo measurement of human cerebral GABA concentration using MEGA-editing at 7 Tesla. <i>Magnetic Resonance in Medicine</i> , 2002, 47, 1009-1012.	1.9	128
268	Elucidation of the role of fructose 2,6-bisphosphate in the regulation of glucose fluxes in mice using in vivo ¹³ C NMR measurements of hepatic carbohydrate metabolism. <i>FEBS Journal</i> , 2002, 269, 4418-4426.	0.2	23
269	Effect of Deep Pentobarbital Anesthesia on Neurotransmitter Metabolism <i>in Vivo</i> : On the Correlation of Total Glucose Consumption with Glutamatergic Action. <i>Journal of Cerebral Blood Flow and Metabolism</i> , 2002, 22, 1343-1351.	2.4	122
270	Effect of Deep Pentobarbital Anesthesia on Neurotransmitter Metabolism In Vivo: On the Correlation of Total Glucose Consumption With Glutamatergic Action. <i>Journal of Cerebral Blood Flow and Metabolism</i> , 2002, , 1343-1351.	2.4	37

#	ARTICLE	IF	CITATIONS
271	Elucidation of the role of fructose 2,6-bisphosphate in the regulation of glucose fluxes in mice using in vivo (13)C NMR measurements of hepatic carbohydrate metabolism. FEBS Journal, 2002, 269, 4418-26.	0.2	4
272	A mathematical model of compartmentalized neurotransmitter metabolism in the human brain. American Journal of Physiology - Endocrinology and Metabolism, 2001, 281, E100-E112.	1.8	290
273	Noninvasive Measurements of [1-13C] Glycogen Concentrations and Metabolism in Rat Brain In Vivo. Journal of Neurochemistry, 2001, 73, 1300-1308.	2.1	92
274	Metabolic changes in quinolinic acid-lesioned rat striatum detected non-invasively by in vivo 1H NMR spectroscopy. Journal of Neuroscience Research, 2001, 66, 891-898.	1.3	52
275	In vivo 1H NMR spectroscopy of the human brain at 7 T. Magnetic Resonance in Medicine, 2001, 46, 451-456.	1.9	353
276	Study of tricarboxylic acid cycle flux changes in human visual cortex during hemifield visual stimulation using 1H-{13C} MRS and fMRI. Magnetic Resonance in Medicine, 2001, 45, 349-355.	1.9	112
277	In Vivo Measurements of Brain Glucose Transport Using the Reversible Michaelis-Menten Model and Simultaneous Measurements of Cerebral Blood Flow Changes during Hypoglycemia. Journal of Cerebral Blood Flow and Metabolism, 2001, 21, 653-663.	2.4	140
278	The Effect of Insulin on In Vivo Cerebral Glucose Concentrations and Rates of Glucose Transport/Metabolism in Humans. Diabetes, 2001, 50, 2203-2209.	0.3	161
279	Field mapping without reference scan using asymmetric echo-planar techniques. Magnetic Resonance in Medicine, 2000, 43, 319-323.	1.9	521
280	Effect of acute hyperglycemia on visual cortical activation as measured by functional MRI. Journal of Neuroscience Research, 2000, 62, 279-285.	1.3	19
281	Single-shot, three-dimensional non-echo localization method for in vivo NMR spectroscopy. Magnetic Resonance in Medicine, 2000, 44, 387-394.	1.9	66
282	Extracellular-Intracellular Distribution of Glucose and Lactate in the Rat Brain Assessed Noninvasively by Diffusion-Weighted 1H Nuclear Magnetic Resonance Spectroscopy In Vivo. Journal of Cerebral Blood Flow and Metabolism, 2000, 20, 736-746.	2.4	139
283	Magnetic Resonance Studies of Brain Function and Neurochemistry. Annual Review of Biomedical Engineering, 2000, 2, 633-660.	5.7	84
284	Field mapping without reference scan using asymmetric echo-planar techniques. , 2000, 43, 319.		2
285	Water diffusion in rat brain in vivo as detected at very large b values is multicompartmental. Magnetic Resonance Materials in Physics, Biology, and Medicine, 1999, 8, 98-108.	1.1	54
286	Toward an in Vivo Neurochemical Profile: Quantification of 18 Metabolites in Short-Echo-Time 1H NMR Spectra of the Rat Brain. Journal of Magnetic Resonance, 1999, 141, 104-120.	1.2	457
287	In vivo 1H NMR spectroscopy of rat brain at 1 ms echo time. Magnetic Resonance in Medicine, 1999, 41, 649-656.	1.9	870
288	In vivo observation of lactate methyl proton magnetization transfer in rat C6 glioma. Magnetic Resonance in Medicine, 1999, 41, 676-685.	1.9	24

#	ARTICLE	IF	CITATIONS
289	Localized in vivo ¹ H NMR detection of neurotransmitter labeling in rat brain during infusion of [1- ¹³ C] D-glucose. <i>Magnetic Resonance in Medicine</i> , 1999, 41, 1077-1083.	1.9	105
290	Localized Eddy Current Compensation Using Quantitative Field Mapping. <i>Journal of Magnetic Resonance</i> , 1998, 131, 139-143.	1.2	58
291	Resolution Improvements in in Vivo ¹ H NMR Spectra with Increased Magnetic Field Strength. <i>Journal of Magnetic Resonance</i> , 1998, 135, 260-264.	1.2	176
292	Identification of a high concentration of scyllo-inositol in the brain of a healthy human subject using ¹ H- and ¹³ C-NMR. <i>Magnetic Resonance in Medicine</i> , 1998, 39, 313-316.	1.9	42
293	Detecting natural abundance carbon signal of NAA metabolite within 12-cm ³ localized volume of human brain using ¹ H- ¹³ C NMR spectroscopy. <i>Magnetic Resonance in Medicine</i> , 1998, 40, 180-184.	1.9	36
294	Brain lactate by magnetic resonance spectroscopy during fulminant hepatic failure in the dog. <i>Liver Transplantation</i> , 1998, 4, 158-165.	1.9	40
295	Localized in vivo ¹³ C-NMR of Glutamate Metabolism in the Human Brain: Initial Results at 4 Tesla. <i>Developmental Neuroscience</i> , 1998, 20, 380-388.	1.0	188
296	Steady-State Cerebral Glucose Concentrations and Transport in the Human Brain. <i>Journal of Neurochemistry</i> , 1998, 70, 397-408.	2.1	215
297	In vivo magnetic resonance spectroscopy of human brain: The biophysical basis of dementia. <i>Biophysical Chemistry</i> , 1997, 68, 161-172.	1.5	80
298	A Half-Volume Coil for Efficient Proton Decoupling in Humans at 4 Tesla. <i>Journal of Magnetic Resonance</i> , 1997, 125, 178-184.	1.2	162
299	Observation of resolved glucose signals in ¹ H NMR spectra of the human brain at 4 Tesla. <i>Magnetic Resonance in Medicine</i> , 1996, 36, 1-6.	1.9	87
300	Broadband decoupled, ¹ H-localized ¹³ C MRS of the human brain at 4 tesla. <i>Magnetic Resonance in Medicine</i> , 1996, 36, 659-664.	1.9	75
301	¹ H NMR Studies of Glucose Transport in the Human Brain. <i>Journal of Cerebral Blood Flow and Metabolism</i> , 1996, 16, 427-438.	2.4	89
302	Synchronization device for electrocardiography-gated echo-planar imaging. <i>Radiology</i> , 1995, 197, 311-313.	3.6	20
303	Simultaneous Determination of the Rates of the TCA Cycle, Glucose Utilization, α -Ketoglutarate/Glutamate Exchange, and Glutamine Synthesis in Human Brain by NMR. <i>Journal of Cerebral Blood Flow and Metabolism</i> , 1995, 15, 12-25.	2.4	307
304	Validation of ¹³ C NMR measurements of liver glycogen in vivo. <i>Magnetic Resonance in Medicine</i> , 1994, 31, 583-588.	1.9	68
305	Localized ¹³ C NMR Spectroscopy in the Human Brain of Amino Acid Labeling from [¹³ C]Glucose. <i>Journal of Neurochemistry</i> , 1994, 63, 1377-1385.	2.1	229
306	Determination of saturation factors in ³¹ P NMR spectra of the developing human brain. <i>Magnetic Resonance in Medicine</i> , 1993, 29, 7-11.	1.9	15

#	ARTICLE	IF	CITATIONS
307	Automatic, localized in Vivo adjustment of all first-and second-order shim coils. <i>Magnetic Resonance in Medicine</i> , 1993, 29, 804-811.	1.9	826
308	Echo-planar magnetic resonance imaging studies of frontal cortex activation during word generation in humans.. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 1993, 90, 4952-4956.	3.3	424
309	Non-Invasive Measurements of the Cerebral Steady-State Glucose Concentration and Transport in Humans by ¹³ C Nuclear Magnetic Resonance. <i>Advances in Experimental Medicine and Biology</i> , 1993, 331, 35-40.	0.8	15
310	Direct measurement of brain glucose concentrations in humans by ¹³ C NMR spectroscopy.. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 1992, 89, 1109-1112.	3.3	212
311	Localized ¹³ C NMR spectroscopy of myo-inositol in the human brain in vivo. <i>Magnetic Resonance in Medicine</i> , 1992, 25, 204-210.	1.9	48
312	Detection and assignment of the glucose signal in 1h nmr difference spectra of the human brain. <i>Magnetic Resonance in Medicine</i> , 1992, 27, 183-188.	1.9	53
313	Temporal and spatial analysis of fields generated by eddy currents in superconducting magnets: Optimization of corrections and quantitative characterization of magnet/gradient systems. <i>Magnetic Resonance in Medicine</i> , 1991, 20, 268-284.	1.9	109
314	¹³ C NMR visibility of rabbit muscle glycogen in vivo. <i>Magnetic Resonance in Medicine</i> , 1991, 20, 327-332.	1.9	53
315	Non-invasive ³¹ P magnetic resonance spectroscopy revealed McArdle disease in an asymptomatic child. <i>European Journal of Pediatrics</i> , 1990, 149, 483-486.	1.3	10
316	A simple design for a double-tunable probe head for imaging and spectroscopy at high fields. <i>Magnetic Resonance in Medicine</i> , 1990, 15, 128-134.	1.9	11
317	A method for rapid evaluation of saturation factors in in vivo surface coil NMR spectroscopy using B1-insensitive pulse cycles. <i>NMR in Biomedicine</i> , 1990, 3, 265-271.	1.6	15
318	Variations in the in vivo P-31 MR spectra of the developing human brain during postnatal life. Work in progress.. <i>Radiology</i> , 1989, 172, 197-199.	3.6	53
319	Sequential NMR assignments of labile protons in DNA using two-dimensional nuclear-Overhauser-enhancement spectroscopy with three jump-and-return pulse sequences. <i>FEBS Journal</i> , 1987, 166, 215-220.	0.2	27