D S Fahmeed Hyder

List of Publications by Year in descending order

Source: https://exaly.com/author-pdf/1351771/publications.pdf

Version: 2024-02-01

227 papers

14,625 citations

63 h-index 23514 111 g-index

235 all docs

235 docs citations

235 times ranked 13662 citing authors

#	Article	IF	CITATIONS
1	Comparison of metabolic and immunologic responses to transarterial chemoembolization with different chemoembolic regimens in a rabbit VX2 liver tumor model. European Radiology, 2022, 32, 2437-2447.	2.3	9
2	Highâ€resolution pH imaging using ratiometric chemical exchange saturation transfer combined with biosensor imaging of redundant deviation in shifts featuring paramagnetic DOTAâ€tetraglycinate agents. NMR in Biomedicine, 2022, 35, e4658.	1.6	2
3	Glucose sparing by glycogenolysis (GSG) determines the relationship between brain metabolism and neurotransmission. Journal of Cerebral Blood Flow and Metabolism, 2022, 42, 844-860.	2.4	24
4	Dysregulated proton and sodium gradients highlight cancer invasion and proliferation. Translational Oncology, 2022, 16, 101310.	1.7	1
5	Human brain functional MRS reveals interplay of metabolites implicated in neurotransmission and neuroenergetics. Journal of Cerebral Blood Flow and Metabolism, 2022, 42, 911-934.	2.4	16
6	Comparison of Lanthanide Macrocyclic Complexes as ²³ Na NMR Sensors. Analytical Chemistry, 2022, 94, 2536-2545.	3.2	1
7	Extracellular pH Mapping as Therapeutic Readout of Drug Delivery in Glioblastoma. Methods in Molecular Biology, 2022, 2394, 515-536.	0.4	O
8	Mapping oxidative metabolism in the human brain with calibrated fMRI in health and disease. Journal of Cerebral Blood Flow and Metabolism, 2022, 42, 1139-1162.	2.4	9
9	The Stroke Preclinical Assessment Network: Rationale, Design, Feasibility, and Stage 1 Results. Stroke, 2022, 53, 1802-1812.	1.0	22
10	Brain-targeting, acid-responsive antioxidant nanoparticles for stroke treatment and drug delivery. Bioactive Materials, 2022, 16, 57-65.	8.6	18
11	High-resolution relaxometry-based calibrated fMRI in murine brain: Metabolic differences between awake and anesthetized states. Journal of Cerebral Blood Flow and Metabolism, 2022, 42, 811-825.	2.4	11
12	Aerobic glycolysis imaging of epileptic foci during the inter-ictal period. EBioMedicine, 2022, 79, 104004.	2.7	7
13	Thalamic activations in rat brain by fMRI during tactile (forepaw, whisker) and non-tactile (visual,) Tj ETQq1 1 0.7	'84314 rg 1.1	BT {Overlock }
14	Hemodynamic impairments within individual watershed areas in asymptomatic carotid artery stenosis by multimodal MRI. Journal of Cerebral Blood Flow and Metabolism, 2021, 41, 380-396.	2.4	23
15	Methods 13C MRS Measurements of in Vivo Rates of the Glutamate/Glutamine and GABA/Glutamine Neurotransmitter Cycles., 2021,, 688-700.		2
16	Imaging the transmembrane and transendothelial sodium gradients in gliomas. Scientific Reports, 2021, 11, 6710.	1.6	6
17	Diffusion weighted imaging as a biomarker of retinoic acid induced myelomeningocele. PLoS ONE, 2021, 16, e0253583.	1.1	4
18	Imaging extracellular acidification and immune activation in cancer. Current Opinion in Biomedical Engineering, 2021, 18, 100278.	1.8	4

#	Article	IF	CITATIONS
19	Imaging Hallmarks of the Tumor Microenvironment in Glioblastoma Progression. Frontiers in Oncology, 2021, 11, 692650.	1.3	12
20	Imaging effective oxygen diffusivity in the human brain with multiparametric magnetic resonance imaging. Journal of Cerebral Blood Flow and Metabolism, 2021, , 0271678X2110484.	2.4	2
21	Small loci of astroglial glutamine synthetase deficiency in the postnatal brain cause epileptic seizures and impaired functional connectivity. Epilepsia, 2021, 62, 2858-2870.	2.6	7
22	Metabolic underpinnings of activated and deactivated cortical areas in human brain. Journal of Cerebral Blood Flow and Metabolism, 2021, 41, 986-1000.	2.4	16
23	A highâ€throughput imaging platform to characterize extracellular pH in organotypic threeâ€dimensional in vitro models of liver cancer. NMR in Biomedicine, 2021, 34, e4465.	1.6	3
24	Preimplantation factor modulates oligodendrocytes by H19-induced demethylation of NCOR2. JCI Insight, 2021, 6, .	2.3	5
25	Renal plasticity revealed through reversal of polycystic kidney disease in mice. Nature Genetics, 2021, 53, 1649-1663.	9.4	57
26	Supraspinal Sensorimotor and Pain-Related Reorganization after a Hemicontusion Rat Cervical Spinal Cord Injury. Journal of Neurotrauma, 2021, 38, 3393-3405.	1.7	8
27	Methylated tetraâ€amide derivatives of paramagnetic complexes for magnetic resonance biosensing with both BIRDS and CEST. NMR in Biomedicine, 2021, , e4687.	1.6	0
28	Characterizing white matter fiber orientation effects on multi-parametric quantitative BOLD assessment of oxygen extraction fraction. Journal of Cerebral Blood Flow and Metabolism, 2020, 40, 760-774.	2.4	21
29	Dynamic Thermal Mapping of Localized Therapeutic Hypothermia in the Brain. Journal of Neurotrauma, 2020, 37, 55-65.	1.7	9
30	Extracellular pH mapping of liver cancer on a clinical 3T MRI scanner. Magnetic Resonance in Medicine, 2020, 83, 1553-1564.	1.9	30
31	Prognosticating brain tumor patient survival after laser thermotherapy: Comparison between neuroradiological reading and semi-quantitative analysis of MRI data. Magnetic Resonance Imaging, 2020, 65, 45-54.	1.0	2
32	Kaempferol Treatment after Traumatic Brain Injury during Early Development Mitigates Brain Parenchymal Microstructure and Neural Functional Connectivity Deterioration at Adolescence. Journal of Neurotrauma, 2020, 37, 966-974.	1.7	15
33	Tumor-targeted pH-low insertion peptide delivery of theranostic gadolinium nanoparticles for image-guided nanoparticle-enhanced radiation therapy. Translational Oncology, 2020, 13, 100839.	1.7	13
34	Association Between Magnetic Resonance Imaging-Based Spinal Morphometry and Sensorimotor Behavior in a Hemicontusion Model of Incomplete Cervical Spinal Cord Injury in Rats. Brain Connectivity, 2020, 10, 479-489.	0.8	5
35	Manganese Ferrite Nanoparticles (MnFe2O4): Size Dependence for Hyperthermia and Negative/Positive Contrast Enhancement in MRI. Nanomaterials, 2020, 10, 2297.	1.9	83
36	Simultaneous cortex-wide fluorescence Ca2+ imaging and whole-brain fMRI. Nature Methods, 2020, 17, 1262-1271.	9.0	111

#	Article	IF	CITATIONS
37	APOE genotype-dependent pharmacogenetic responses to rapamycin for preventing Alzheimer's disease. Neurobiology of Disease, 2020, 139, 104834.	2.1	26
38	Oxygen extraction fraction mapping with multi-parametric quantitative BOLD MRI: Reduced transverse relaxation bias using 3D-GraSE imaging. NeuroImage, 2020, 220, 117095.	2.1	9
39	Molecular MRI of the Immuno-Metabolic Interplay in a Rabbit Liver Tumor Model: A Biomarker for Resistance Mechanisms in Tumor-targeted Therapy?. Radiology, 2020, 296, 575-583.	3.6	19
40	Orthonasal versus retronasal glomerular activity in rat olfactory bulb by fMRI. NeuroImage, 2020, 212, 116664.	2.1	19
41	Molecular Imaging of Extracellular Tumor pH to Reveal Effects of Locoregional Therapy on Liver Cancer Microenvironment. Clinical Cancer Research, 2020, 26, 428-438.	3.2	34
42	Idarubicin-Loaded ONCOZENE Drug-Eluting Bead Chemoembolization in a Rabbit Liver Tumor Model: Investigating Safety, Therapeutic Efficacy, and Effects on Tumor Microenvironment. Journal of Vascular and Interventional Radiology, 2020, 31, 1706-1716.e1.	0.2	9
43	Alterations of Parenchymal Microstructure, Neuronal Connectivity, and Cerebrovascular Resistance at Adolescence after Mild-to-Moderate Traumatic Brain Injury in Early Development. Journal of Neurotrauma, 2019, 36, 601-608.	1.7	11
44	Selective deletion of glutamine synthetase in the mouse cerebral cortex induces glial dysfunction and vascular impairment that precede epilepsy and neurodegeneration. Neurochemistry International, 2019, 123, 22-33.	1.9	39
45	Flow-metabolism uncoupling in patients with asymptomatic unilateral carotid artery stenosis assessed by multi-modal magnetic resonance imaging. Journal of Cerebral Blood Flow and Metabolism, 2019, 39, 2132-2143.	2.4	24
46	In vivo ¹³ C and ¹ Hâ€[¹³ C] MRS studies of neuroenergetics and neurotransmitter cycling, applications to neurological and psychiatric disease and brain cancer. NMR in Biomedicine, 2019, 32, e4172.	1.6	34
47	Design of Gadoteridol-Loaded Cationic Liposomal Adjuvant CAF01 for MRI of Lung Deposition of Intrapulmonary Administered Particles. Molecular Pharmaceutics, 2019, 16, 4725-4737.	2.3	5
48	Engineering of human brain organoids with a functional vascular-like system. Nature Methods, 2019, 16, 1169-1175.	9.0	551
49	Functional MRS with J-edited lactate in human motor cortex at 4†T. Neurolmage, 2019, 184, 101-108.	2.1	24
50	Amygdala hyper-connectivity in a mouse model of unpredictable early life stress. Translational Psychiatry, 2018, 8, 49.	2.4	87
51	Aspm knockout ferret reveals an evolutionary mechanism governing cerebral cortical size. Nature, 2018, 556, 370-375.	13.7	127
52	Spontaneous activity forms a foundation for odor-evoked activation maps in the rat olfactory bulb. Neurolmage, 2018, 172, 586-596.	2.1	6
53	Evaluating the gray and white matter energy budgets of human brain function. Journal of Cerebral Blood Flow and Metabolism, 2018, 38, 1339-1353.	2.4	131
54	Trajectories of Brain Lactate and Re-visited Oxygen-Glucose Index Calculations Do Not Support Elevated Non-oxidative Metabolism of Glucose Across Childhood. Frontiers in Neuroscience, 2018, 12, 631.	1.4	12

#	Article	IF	Citations
55	Impact of Global Mean Normalization on Regional Glucose Metabolism in the Human Brain. Neural Plasticity, 2018, 2018, 1-16.	1.0	7
56	Neuroimaging Biomarkers of mTOR Inhibition on Vascular and Metabolic Functions in Aging Brain and Alzheimer's Disease. Frontiers in Aging Neuroscience, 2018, 10, 225.	1.7	12
57	Hypofrontality and Posterior Hyperactivity in Early Schizophrenia: Imaging and Behavior in a Preclinical Model. Biological Psychiatry, 2017, 81, 503-513.	0.7	22
58	Advances in Imaging Brain Metabolism. Annual Review of Biomedical Engineering, 2017, 19, 485-515.	5.7	40
59	Network evolution in mesial temporal lobe epilepsy revealed by diffusion tensor imaging. Epilepsia, 2017, 58, 824-834.	2.6	31
60	Effects of Tissue-Specific Functional Magnetic Resonance Imaging Signal Regression on Resting-State Functional Connectivity. Brain Connectivity, 2017, 7, 482-490.	0.8	16
61	Temozolomide arrests glioma growth and normalizes intratumoral extracellular pH. Scientific Reports, 2017, 7, 7865.	1.6	43
62	Mapping Extracellular pH of Gliomas in Presence of Superparamagnetic Nanoparticles: Towards Imaging the Distribution of Drug-Containing Nanoparticles and Their Curative Effect on the Tumor Microenvironment. Contrast Media and Molecular Imaging, 2017, 2017, 1-15.	0.4	16
63	Brain Tumor Diagnostics and Therapeutics with Superparamagnetic Ferrite Nanoparticles. Contrast Media and Molecular Imaging, 2017, 2017, 1-17.	0.4	22
64	Simultaneous spinâ€echo and gradientâ€echo BOLD measurements by dynamic MRS. NMR in Biomedicine, 2017, 30, e3745.	1.6	2
65	Erythrocyte efferocytosis modulates macrophages towards recovery after intracerebral hemorrhage. Journal of Clinical Investigation, 2017, 128, 607-624.	3.9	132
66	lmaging the intratumoral–peritumoral extracellular pH gradient of gliomas. NMR in Biomedicine, 2016, 29, 309-319.	1.6	52
67	Convulsive seizures from experimental focal cortical dysplasia occur independently of cell misplacement. Nature Communications, 2016, 7, 11753.	5.8	78
68	The Whole-Brain "Global―Signal from Resting State fMRI as a Potential Biomarker of Quantitative State Changes in Glucose Metabolism. Brain Connectivity, 2016, 6, 435-447.	0.8	70
69	A ketogenic diet increases transport and oxidation of ketone bodies in RG2 and 9L gliomas without affecting tumor growth. Neuro-Oncology, 2016, 18, 1079-1087.	0.6	72
70	Metabolic demands of neural-hemodynamic associated and disassociated areas in brain. Journal of Cerebral Blood Flow and Metabolism, 2016, 36, 1695-1707.	2.4	24
71	Improved specific loss power on cancer cells by hyperthermia and MRI contrast of hydrophilic Fe _x Co _{1â\inx} Fe _{O₄ nanoensembles. Contrast Media and Molecular Imaging, 2016, 11, 514-526.}	0.4	22
72	Excitatory Synaptic Drive and Feedforward Inhibition in the Hippocampal CA3 Circuit Are Regulated by SynCAM 1. Journal of Neuroscience, 2016, 36, 7464-7475.	1.7	32

#	Article	IF	Citations
73	Towards longitudinal mapping of extracellular pH in gliomas. NMR in Biomedicine, 2016, 29, 1364-1372.	1.6	31
74	An epigenetic mechanism mediates developmental nicotine effects on neuronal structure and behavior. Nature Neuroscience, 2016, 19, 905-914.	7.1	78
75	Uniform distributions of glucose oxidation and oxygen extraction in gray matter of normal human brain: No evidence of regional differences of aerobic glycolysis. Journal of Cerebral Blood Flow and Metabolism, 2016, 36, 903-916.	2.4	74
76	Delivery of mesenchymal stem cells in biomimetic engineered scaffolds promotes healing of diabetic ulcers. Regenerative Medicine, 2016, 11, 245-260.	0.8	55
77	Comparison of glomerular activity patterns by fMRI and wide-field calcium imaging: Implications for principles underlying odor mapping. NeuroImage, 2016, 126, 208-218.	2.1	19
78	Quantitative \hat{I}^2 mapping for calibrated fMRI. Neurolmage, 2016, 126, 219-228.	2.1	24
79	Brain region and activity-dependent properties of M for calibrated fMRI. NeuroImage, 2016, 125, 848-856.	2.1	26
80	Afatinib plus Cetuximab Delays Resistance Compared to Single-Agent Erlotinib or Afatinib in Mouse Models of TKI-NaĀ-ve EGFR L858R-Induced Lung Adenocarcinoma. Clinical Cancer Research, 2016, 22, 426-435.	3.2	46
81	Distribution of temperature changes and neurovascular coupling in rat brain following 3,4-methylenedioxymethamphetamine (MDMA, "ecstasyâ€) exposure. NMR in Biomedicine, 2015, 28, 1257-1266.	1.6	14
82	Lanthanide ion (III) complexes of 1,4,7,10â€tetraazacyclododecaneâ€1,4,7,10â€tetraaminophosphonate for dual biosensing of pH with chemical exchange saturation transfer (CEST) and biosensor imaging of redundant deviation in shifts (BIRDS). Contrast Media and Molecular Imaging, 2015, 10, 51-58.	0.4	31
83	Role of mitochondrial calcium uptake homeostasis in resting state fMRI brain networks. NMR in Biomedicine, 2015, 28, 1579-1588.	1.6	14
84	Distributions of Irritative Zones Are Related to Individual Alterations of Resting-State Networks in Focal Epilepsy. PLoS ONE, 2015, 10, e0134352.	1.1	12
85	Dendrimer-Based Responsive MRI Contrast Agents (G1–G4) for Biosensor Imaging of Redundant Deviation in Shifts (BIRDS). Bioconjugate Chemistry, 2015, 26, 2315-2323.	1.8	25
86	Decreased Subcortical Cholinergic Arousal in Focal Seizures. Neuron, 2015, 85, 561-572.	3.8	99
87	Rhythmic 3–4Hz discharge is insufficient to produce cortical BOLD fMRI decreases in generalized seizures. Neurolmage, 2015, 109, 368-377.	2.1	11
88	Imaging the delivery of brain-penetrating PLGA nanoparticles in the brain using magnetic resonance. Journal of Neuro-Oncology, 2015, 121, 441-449.	1.4	44
89	Decreased Resting Functional Connectivity after Traumatic Brain Injury in the Rat. PLoS ONE, 2014, 9, e95280.	1.1	54
90	Intranasal epidermal growth factor treatment rescues neonatal brain injury. Nature, 2014, 506, 230-234.	13.7	198

#	Article	IF	CITATIONS
91	Characterization of a lanthanide complex encapsulated with MRI contrast agents into liposomes for biosensor imaging of redundant deviation in shifts (BIRDS). Journal of Biological Inorganic Chemistry, 2014, 19, 1385-1398.	1.1	20
92	Direct evidence for activity-dependent glucose phosphorylation in neurons with implications for the astrocyte-to-neuron lactate shuttle. Proceedings of the National Academy of Sciences of the United States of America, 2014, 111, 5385-5390.	3.3	160
93	DYNAmic Multiâ€coll TEchnique (DYNAMITE) shimming of the rat brain at 11.7 T. NMR in Biomedicine, 2014, 27, 897-906.	1.6	30
94	Water-Soluble Anisotropic Iron Oxide Nanoparticles: Dextran-Coated Crystalline Nanoplates and Nanoflowers. Particulate Science and Technology, 2014, 32, 224-233.	1.1	4
95	Insights from Neuroenergetics into the Interpretation of Functional Neuroimaging: An Alternative Empirical Model for Studying the Brain's Support of Behavior. Journal of Cerebral Blood Flow and Metabolism, 2014, 34, 1721-1735.	2.4	41
96	Diffusion Tensor Imaging as a Predictor of Locomotor Function after Experimental Spinal Cord Injury and Recovery. Journal of Neurotrauma, 2014, 31, 1362-1373.	1.7	62
97	Caloric Restriction Impedes Age-Related Decline of Mitochondrial Function and Neuronal Activity. Journal of Cerebral Blood Flow and Metabolism, 2014, 34, 1440-1443.	2.4	60
98	Mapping phosphorylation rate of fluoro-deoxy-glucose in rat brain by 19F chemical shift imaging. Magnetic Resonance Imaging, 2014, 32, 305-313.	1.0	6
99	Physiological Basis of BOLD fMRI Decreases. Neuromethods, 2014, , 221-236.	0.2	2
100	Functional MRI and neural responses in a rat model of Alzheimer's disease. NeuroImage, 2013, 79, 404-411.	2.1	29
101	Anti-epileptogenesis: Electrophysiology, diffusion tensor imaging and behavior in a genetic absence model. Neurobiology of Disease, 2013, 60, 126-138.	2.1	49
102	Glutamatergic Function in the Resting Awake Human Brain is Supported by Uniformly High Oxidative Energy. Journal of Cerebral Blood Flow and Metabolism, 2013, 33, 339-347.	2.4	101
103	Mitochondrial Calcium Uptake Capacity Modulates Neocortical Excitability. Journal of Cerebral Blood Flow and Metabolism, 2013, 33, 1115-1126.	2.4	38
104	Analysis of Time and Space Invariance of BOLD Responses in the Rat Visual System. Cerebral Cortex, 2013, 23, 210-222.	1.6	28
105	Cortical energy demands of signaling and nonsignaling components in brain are conserved across mammalian species and activity levels. Proceedings of the National Academy of Sciences of the United States of America, 2013, 110, 3549-3554.	3.3	204
106	Quantitative basis for neuroimaging of cortical laminae with calibrated functional MRI. Proceedings of the National Academy of Sciences of the United States of America, 2013, 110, 15115-15120.	3.3	57
107	Increased resting functional connectivity in spikeâ€wave epilepsy in <scp>WAG</scp> / <scp>R</scp> ij rats. Epilepsia, 2013, 54, 1214-1222.	2.6	39
108	<i>In vivo</i> threeâ€dimensional molecular imaging with Biosensor Imaging of Redundant Deviation in Shifts (BIRDS) at high spatiotemporal resolution. NMR in Biomedicine, 2013, 26, 1589-1595.	1.6	39

#	Article	IF	CITATIONS
109	Mitochondrial Functional State Impacts Spontaneous Neocortical Activity and Resting State fMRI. PLoS ONE, 2013, 8, e63317.	1.1	24
110	Lactate preserves neuronal metabolism and function following antecedent recurrent hypoglycemia. Journal of Clinical Investigation, 2013, 123, 1988-1998.	3.9	80
111	CMR02 Mapping by Calibrated fMRI. Series in Medical Physics and Biomedical Engineering, 2013, , 85-109.	0.1	1
112	Pitfalls in fractal time series analysis: fMRI BOLD as an exemplary case. Frontiers in Physiology, 2012, 3, 417.	1.3	52
113	Neural Progenitor Cells Regulate Capillary Blood Flow in the Postnatal Subventricular Zone. Journal of Neuroscience, 2012, 32, 16435-16448.	1.7	64
114	Maternal separation with early weaning: A rodent model providing novel insights into neglect associated developmental deficits. Development and Psychopathology, 2012, 24, 1401-1416.	1.4	72
115	Quantitative fMRI and oxidative neuroenergetics. NeuroImage, 2012, 62, 985-994.	2.1	81
116	S Phase Entry of Neural Progenitor Cells Correlates with Increased Blood Flow in the Young Subventricular Zone. PLoS ONE, 2012, 7, e31960.	1.1	26
117	Neuroanatomical changes in a mouse model of early life neglect. Brain Structure and Function, 2012, 217, 459-472.	1.2	22
118	Fractal analysis of spontaneous fluctuations of the BOLD signal in rat brain. NeuroImage, 2011, 58, 1060-1069.	2.1	48
119	A lanthanide complex with dual biosensing properties: CEST (chemical exchange saturation transfer) and BIRDS (biosensor imaging of redundant deviation in shifts) with europium DOTA–tetraglycinate. NMR in Biomedicine, 2011, 24, 1216-1225.	1.6	29
120	Role of Ongoing, Intrinsic Activity of Neuronal Populations for Quantitative Neuroimaging of Functional Magnetic Resonance Imaging–Based Networks. Brain Connectivity, 2011, 1, 185-193.	0.8	12
121	Evidence for the importance of measuring total brain activity in neuroimaging. Proceedings of the National Academy of Sciences of the United States of America, 2011, 108, 5475-5476.	3.3	17
122	Where fMRI and Electrophysiology Agree to Disagree: Corticothalamic and Striatal Activity Patterns in the WAG/Rij Rat. Journal of Neuroscience, 2011, 31, 15053-15064.	1.7	115
123	Brain temperature by Biosensor Imaging of Redundant Deviation in Shifts (BIRDS): comparison between TmDOTP ^{5â^'} and TmDOTMA ^{â^'} . NMR in Biomedicine, 2010, 23, 277-285.	1.6	62
124	Neurovascular and neurometabolic couplings in dynamic calibrated fMRI: transient oxidative neuroenergetics for block-design and event-related paradigms. Frontiers in Neuroenergetics, 2010, 2, .	5. 3	31
125	Neuronal correlate of BOLD signal fluctuations at rest: Err on the side of the baseline. Proceedings of the National Academy of Sciences of the United States of America, 2010, 107, 10773-10774.	3.3	37
126	Triptolide reduces cyst formation in a neonatal to adult transition Pkd1 model of ADPKD. Nephrology Dialysis Transplantation, 2010, 25, 2187-2194.	0.4	58

#	Article	IF	CITATIONS
127	Focal BOLD fMRI changes in bicuculline-induced tonic–clonic seizures in the rat. NeuroImage, 2010, 50, 902-909.	2.1	60
128	Cortical Deactivation Induced by Subcortical Network Dysfunction in Limbic Seizures. Journal of Neuroscience, 2009, 29, 13006-13018.	1.7	110
129	Oxidative Neuroenergetics in Event-Related Paradigms. Journal of Neuroscience, 2009, 29, 1707-1718.	1.7	62
130	Baseline brain energy supports the state of consciousness. Proceedings of the National Academy of Sciences of the United States of America, 2009, 106, 11096-11101.	3.3	135
131	Hypoxic Injury during Neonatal Development in Murine Brain: Correlation between In Vivo DTI Findings and Behavioral Assessment. Cerebral Cortex, 2009, 19, 2891-2901.	1.6	49
132	Consequences of Intraventricular Hemorrhage in a Rabbit Pup Model. Stroke, 2009, 40, 3369-3377.	1.0	103
133	Brain temperature and pH measured by $\langle \sup 1 \langle \sup H \rangle$ chemical shift imaging of a thulium agent. NMR in Biomedicine, 2009, 22, 229-239.	1.6	69
134	Multimodal Measurements of Blood Plasma and Red Blood Cell Volumes during Functional Brain Activation. Journal of Cerebral Blood Flow and Metabolism, 2009, 29, 19-24.	2.4	29
135	Cerebral oxygen demand for shortâ€ived and steadyâ€state events. Journal of Neurochemistry, 2009, 109, 73-79.	2.1	35
136	Neurophysiology of functional imaging. NeuroImage, 2009, 45, 1047-1054.	2.1	43
137	DTI abnormalities in anterior corpus callosum of rats with spike–wave epilepsy. NeuroImage, 2009, 47, 459-466.	2.1	80
138	Dynamic Imaging of Brain Function. Methods in Molecular Biology, 2009, 489, 3-21.	0.4	26
139	Tactile and Non-tactile Sensory Paradigms for fMRI and Neurophysiologic Studies in Rodents. Methods in Molecular Biology, 2009, 489, 213-242.	0.4	26
140	Frequencyâ€dependent tactile responses in rat brain measured by functional MRI. NMR in Biomedicine, 2008, 21, 410-416.	1.6	45
141	The micro-architecture of the cerebral cortex: Functional neuroimaging models and metabolism. NeuroImage, 2008, 40, 1436-1459.	2.1	53
142	Negative BOLD with Large Increases in Neuronal Activity. Cerebral Cortex, 2008, 18, 1814-1827.	1.6	207
143	Remote Effects of Focal Hippocampal Seizures on the Rat Neocortex. Journal of Neuroscience, 2008, 28, 9066-9081.	1.7	133
144	Coding of Peripheral Olfactory Information in the Olfactory Bulb of Small Animals., 2008, , 279-283.		0

#	Article	IF	Citations
145	Energetics of neuronal signaling and fMRI activity. Proceedings of the National Academy of Sciences of the United States of America, 2007, 104, 20546-20551.	3.3	121
146	A BOLD search for baseline. NeuroImage, 2007, 36, 277-281.	2.1	67
147	Neurodevelopment of C57B/L6 mouse brain assessed byin vivo diffusion tensor imaging. NMR in Biomedicine, 2007, 20, 375-382.	1.6	54
148	Dynamics of Changes in Blood Flow, Volume, and Oxygenation: Implications for Dynamic Functional Magnetic Resonance Imaging Calibration. Journal of Cerebral Blood Flow and Metabolism, 2007, 27, 690-696.	2.4	94
149	Lamotrigine suppresses neurophysiological responses to somatosensory stimulation in the rodent. Neurolmage, 2006, 29, 216-224.	2.1	45
150	Reproducibility of odor maps by fMRI in rodents. NeuroImage, 2006, 31, 1238-1246.	2.1	34
151	Physiology of Functional Magnetic Resonance Imaging. , 2006, 124, 175-195.		31
152	Brain Homocarnosine and Seizure Control of Patients Taking Gabapentin or Topiramate. Epilepsia, 2006, 47, 495-498.	2.6	15
153	Regional Temperature Changes in the Brain during Somatosensory Stimulation. Journal of Cerebral Blood Flow and Metabolism, 2006, 26, 68-78.	2.4	60
154	A Multiparametric Assessment of Oxygen Efflux from the Brain. Journal of Cerebral Blood Flow and Metabolism, 2006, 26, 79-91.	2.4	43
155	Neuronal–Glial Glucose Oxidation and Glutamatergic–GABAergic Function. Journal of Cerebral Blood Flow and Metabolism, 2006, 26, 865-877.	2.4	365
156	Simultaneous activation of mouse main and accessory olfactory bulbs by odors or pheromones. Journal of Comparative Neurology, 2005, 489, 491-500.	0.9	179
157	Adaptation in the rodent olfactory bulb measured by fMRI. Magnetic Resonance in Medicine, 2005, 54, 443-448.	1.9	39
158	Deriving Changes in CMRO2 from Calibrated fMRI., 2005, , 147-171.		4
159	Brain and Mind: An NMR Perspective. , 2005, , 295-309.		2
160	Relationship between CMRO2 and Neuronal Activity., 2005, , 173-194.		3
161	Fractal correlation structure in fMRI data of rat brain. Journal of Cerebral Blood Flow and Metabolism, 2005, 25, S379-S379.	2.4	1
162	The intra and inter-subject reproducibility of rodent olfactory bulb activity maps measured with fMRI. Journal of Cerebral Blood Flow and Metabolism, 2005, 25, S336-S336.	2.4	0

#	Article	IF	CITATIONS
163	Effects of isoflurane induction on inter-animal reproducibility. Journal of Cerebral Blood Flow and Metabolism, 2005, 25, S397-S397.	2.4	0
164	High resolution measurements of neuronal activity, cerebral blood flow, and fMRI during spike-wave seizures in WAG/Rij rats. Journal of Cerebral Blood Flow and Metabolism, 2005, 25, S409-S409.	2.4	0
165	Effects of volatile agents on neurophysiology in î±-chloralose anesthetized rats. Journal of Cerebral Blood Flow and Metabolism, 2005, 25, S200-S200.	2.4	0
166	Fractal patterns of local and global CBF in rat brain during hypotension. Journal of Cerebral Blood Flow and Metabolism, 2005, 25, S195-S195.	2.4	0
167	Fractal properties of neurophysiologic signals in rat somatosensory cortex. Journal of Cerebral Blood Flow and Metabolism, 2005, 25, S186-S186.	2.4	0
168	Volatile induction agents affect adaptation in \hat{l}_{\pm} -chloralose anesthetized rat. Journal of Cerebral Blood Flow and Metabolism, 2005, 25, S401-S401.	2.4	0
169	Neural basis of localized and delocalized fMRI patterns. Journal of Cerebral Blood Flow and Metabolism, 2005, 25, S383-S383.	2.4	0
170	Influence of volatile induction agents on fMRI and neural activity. Journal of Cerebral Blood Flow and Metabolism, 2005, 25, S395-S395.	2.4	1
171	Neuroimaging With Calibrated fMRI. Stroke, 2004, 35, 2635-2641.	1.0	54
172	Dynamic fMRI and EEG Recordings during Spike-Wave Seizures and Generalized Tonic-Clonic Seizures in WAG/Rij Rats. Journal of Cerebral Blood Flow and Metabolism, 2004, 24, 589-599.	2.4	157
173	Relative Changes in Cerebral Blood Flow and Neuronal Activity in Local Microdomains during Generalized Seizures. Journal of Cerebral Blood Flow and Metabolism, 2004, 24, 1057-1068.	2.4	64
174	Dynamic Imaging of Perfusion and Oxygenation by Functional Magnetic Resonance Imaging. Journal of Cerebral Blood Flow and Metabolism, 2004, 24, 1369-1381.	2.4	23
175	Informatics Approaches to Functional MRI Odor Mapping of the Rodent Olfactory Bulb: OdorMapBuilder and OdorMapDB. Neuroinformatics, 2004, 2, 003-018.	1.5	27
176	A novel approach for selective brain cooling: implications for hypercapnia and seizure activity. Intensive Care Medicine, 2004, 30, 1829-1833.	3.9	22
177	Energetic basis of brain activity: implications for neuroimaging. Trends in Neurosciences, 2004, 27, 489-495.	4.2	511
178	Brain temperature measured by 1H-NMR in conjunction with a lanthanide complex. Journal of Applied Physiology, 2003, 94, 1641-1649.	1.2	57
179	Cerebral metabolism and consciousness. Comptes Rendus - Biologies, 2003, 326, 253-273.	0.1	49
180	In vivo NMR Studies of the Glutamate Neurotransmitter Flux and Neuroenergetics: Implications for Brain Function. Annual Review of Physiology, 2003, 65, 401-427.	5.6	310

#	Article	IF	CITATIONS
181	Odor maps of aldehydes and esters revealed by functional MRI in the glomerular layer of the mouse olfactory bulb. Proceedings of the National Academy of Sciences of the United States of America, 2003, 100, 11029-11034.	3.3	179
182	Increased Cortical GABA Concentrations in Depressed Patients Receiving ECT. American Journal of Psychiatry, 2003, 160, 577-579.	4.0	414
183	Dominant Events That Modulate Mass Transfer Coefficient of Oxygen in Cerebral Cortex. Advances in Experimental Medicine and Biology, 2003, 530, 401-411.	0.8	1
184	Mapping Cerebral Glutamate 13C Turnover and Oxygen Consumption by in Vivo NMR. Advances in Experimental Medicine and Biology, 2003, 530, 29-39.	0.8	6
185	Total neuroenergetics support localized brain activity: Implications for the interpretation of fMRI. Proceedings of the National Academy of Sciences of the United States of America, 2002, 99, 10771-10776.	3.3	190
186	Cerebral energetics and spiking frequency: The neurophysiological basis of fMRI. Proceedings of the National Academy of Sciences of the United States of America, 2002, 99, 10765-10770.	3.3	322
187	Biophysical basis of brain activity: implications for neuroimaging. Quarterly Reviews of Biophysics, 2002, 35, 287-325.	2.4	72
188	Quantitative fMRI of rat brain by multi-modal MRI and MRS measurements. International Congress Series, 2002, 1235, 57-71.	0.2	2
189	Mapping at glomerular resolution: fMRI of rat olfactory bulb. Magnetic Resonance in Medicine, 2002, 48, 570-576.	1.9	66
190	Topiramate Rapidly Raises Brain GABA in Epilepsyâ€∱Patients. Epilepsia, 2001, 42, 543-548.	2.6	78
191	Quantitative functional imaging of the brain: towards mapping neuronal activity by BOLD fMRI. NMR in Biomedicine, 2001, 14, 413-431.	1.6	188
192	Lactate efflux and the neuroenergetic basis of brain function. NMR in Biomedicine, 2001, 14, 389-396.	1.6	116
193	Inhibition of Voltage-Dependent Sodium Channels Suppresses the Functional Magnetic Resonance Imaging Response to Forepaw Somatosensory Activation in the Rodent. Journal of Cerebral Blood Flow and Metabolism, 2001, 21, 585-591.	2.4	44
194	Cerebral energetics and the glycogen shunt: Neurochemical basis of functional imaging. Proceedings of the National Academy of Sciences of the United States of America, 2001, 98, 6417-6422.	3.3	272
195	Quantitative multi-modal functional MRI with blood oxygenation level dependent exponential decays adjusted for flow attenuated inversion recovery (BOLDED AFFAIR). Magnetic Resonance Imaging, 2000, 18, 227-235.	1.0	28
196	Dependence of Oxygen Delivery on Blood Flow in Rat Brain: A 7 Tesla Nuclear Magnetic Resonance Study. Journal of Cerebral Blood Flow and Metabolism, 2000, 20, 485-498.	2.4	92
197	High-Resolution CMRO2 Mapping in Rat Cortex: A Multiparametric Approach to Calibration of BOLD Image Contrast at 7 Tesla. Journal of Cerebral Blood Flow and Metabolism, 2000, 20, 847-860.	2.4	104
198	Effects of Gabapentin on Brain GABA, Homocarnosine, and Pyrrolidinone in Epilepsy Patients. Epilepsia, 2000, 41, 675-680.	2.6	104

#	Article	IF	CITATIONS
199	Assessment and discrimination of odor stimuli in rat olfactory bulb by dynamic functional MRI. Proceedings of the National Academy of Sciences of the United States of America, 2000, 97, 10601-10606.	3.3	117
200	Reduced Cortical Î ³ -Aminobutyric Acid Levels in Depressed Patients Determined by Proton Magnetic Resonance Spectroscopy. Archives of General Psychiatry, 1999, 56, 1043.	13.8	547
201	Stimulated changes in localized cerebral energy consumption under anesthesia. Proceedings of the National Academy of Sciences of the United States of America, 1999, 96, 3245-3250.	3.3	95
202	GABA Changes with Vigabatrin in the Developing Human Brain. Epilepsia, 1999, 40, 462-466.	2.6	28
203	Acute Effects of Vigabatrin on Brain GABA and Homocarnosine in Patients with Complex Partial Seizures. Epilepsia, 1999, 40, 958-964.	2.6	50
204	Effects of Vigabatrin on the GABAergic System as Determined by [1231]lomazenil SPECT and GABA MRS. Epilepsia, 1999, 40, 1433-1438.	2.6	38
205	Localized1H NMR measurements of 2-pyrrolidinone in human brain in vivo. Magnetic Resonance in Medicine, 1999, 41, 889-896.	1.9	34
206	In vivo carbon-edited detection with proton echo-planar spectroscopic imaging (ICED PEPSI): [3,4-13CH2]glutamate/glutamine tomography in rat brain. Magnetic Resonance in Medicine, 1999, 42, 997-1003.	1.9	49
207	Effects of valproate and other antiepileptic drugs on brain glutamate, glutamine, and GABA in patients with refractory complex partial seizures. Seizure: the Journal of the British Epilepsy Association, 1999, 8, 120-127.	0.9	68
208	In vivo nuclear magnetic resonance spectroscopy studies of the relationship between the glutamate-glutamine neurotransmitter cycle and functional neuroenergetics. Philosophical Transactions of the Royal Society B: Biological Sciences, 1999, 354, 1165-1177.	1.8	201
209	Regulation of Cerebral Oxygen Delivery. Advances in Experimental Medicine and Biology, 1999, 471, 99-110.	0.8	11
210	Toward Absolute Quantitation of Bold Functional MRI. Advances in Experimental Medicine and Biology, 1999, 471, 681-689.	0.8	17
211	Vigabatrin increases human brain homocarnosine and improves seizure control. Annals of Neurology, 1998, 44, 948-952.	2.8	60
212	Dynamic mapping at the laminar level of odor-elicited responses in rat olfactory bulb by functional MRI. Proceedings of the National Academy of Sciences of the United States of America, 1998, 95, 7715-7720.	3.3	131
213	A model for the regulation of cerebral oxygen delivery. Journal of Applied Physiology, 1998, 85, 554-564.	1.2	184
214	FMRI of the prefrontal cortex during overt verbal fluency. NeuroReport, 1997, 8, 561-565.	0.6	234
215	"Willed action": A functional MRI study of the human prefrontal cortex during a sensorimotor task. Proceedings of the National Academy of Sciences of the United States of America, 1997, 94, 6989-6994.	3.3	73
216	Oxidative Glucose Metabolism in Rat Brain during Single Forepaw Stimulation: A Spatially Localized 1H[13C] Nuclear Magnetic Resonance Study. Journal of Cerebral Blood Flow and Metabolism, 1997, 17, 1040-1047.	2.4	122

#	Article	IF	CITATIONS
217	Functional MRI bold signal coincides with electrical activity in the rat whisker barrels. Magnetic Resonance in Medicine, 1997, 38, 874-877.	1.9	82
218	Activation of single whisker barrel in rat brain localized by functional magnetic resonance imaging Proceedings of the National Academy of Sciences of the United States of America, 1996, 93, 475-478.	3.3	132
219	Increased tricarboxylic acid cycle flux in rat brain during forepaw stimulation detected with 1H[13C]NMR Proceedings of the National Academy of Sciences of the United States of America, 1996, 93, 7612-7617.	3.3	185
220	The rate of turnover of cortical GABA from [1-13C]glucose is reduced in rats treated with the GABA-transaminase inhibitor vigabatrin (\hat{I}^3 -vinyl GABA). Neurochemical Research, 1996, 21, 1031-1041.	1.6	61
221	Image reconstruction of sequentially sampled echo-planar data. Magnetic Resonance Imaging, 1995, 13, 97-103.	1.0	31
222	Dynamic Magnetic Resonance Imaging of the Rat Brain during Forepaw Stimulation. Journal of Cerebral Blood Flow and Metabolism, 1994, 14, 649-655.	2.4	156
223	Functional magnetic resonance imaging of human prefrontal cortex activation during a spatial working memory task Proceedings of the National Academy of Sciences of the United States of America, 1994, 91, 8690-8694.	3.3	431
224	Dynamic mapping of the human visual cortex by high-speed magnetic resonance imaging. Proceedings of the National Academy of Sciences of the United States of America, 1992, 89, 11069-11073.	3.3	347
225	Applications of nuclear magnetic cross-relaxation spectroscopy to tissues. Magnetic Resonance in Medicine, 1991, 17, 452-459.	1.9	44
226	Direct measurements of longitudinal relaxation and magnetization transfer in heterogeneous systems. Journal of Magnetic Resonance, 1990, 86, 416-419.	0.5	19
227	Dynamic Imaging of Perfusion and Oxygenation by Functional Magnetic Resonance Imaging. , 0, .		5