

# Jiadi Xu

## List of Publications by Year in descending order

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Version: 2024-02-01

65  
papers

2,364  
citations

236925

25  
h-index

223800

46  
g-index

69  
all docs

69  
docs citations

69  
times ranked

1860  
citing authors

#	ARTICLE	IF	CITATIONS
1	Nuclear Overhauser enhancement (NOE) imaging in the human brain at 7T. <i>NeuroImage</i> , 2013, 77, 114-124.	4.2	266
2	Magnetization Transfer Contrast and Chemical Exchange Saturation Transfer MRI. Features and analysis of the field-dependent saturation spectrum. <i>NeuroImage</i> , 2018, 168, 222-241.	4.2	220
3	Optimization of SABRE for polarization of the tuberculosis drugs pyrazinamide and isoniazid. <i>Journal of Magnetic Resonance</i> , 2013, 237, 73-78.	2.1	122
4	Variable delay multi-pulse train for fast chemical exchange saturation transfer and relayed-nuclear overhauser enhancement MRI. <i>Magnetic Resonance in Medicine</i> , 2014, 71, 1798-1812.	3.0	115
5	Dynamic glucose enhanced (DGE) MRI for combined imaging of blood-brain barrier break down and increased blood volume in brain cancer. <i>Magnetic Resonance in Medicine</i> , 2015, 74, 1556-1563.	3.0	94
6	Magnetization transfer contrast-suppressed imaging of amide proton transfer and relayed nuclear overhauser enhancement chemical exchange saturation transfer effects in the human brain at 7T. <i>Magnetic Resonance in Medicine</i> , 2016, 75, 88-96.	3.0	72
7	Natural D-glucose as a biodegradable MRI relaxation agent. <i>Magnetic Resonance in Medicine</i> , 2014, 72, 823-828.	3.0	69
8	Creatine and phosphocreatine mapping of mouse skeletal muscle by a polynomial and Lorentzian line-shape fitting CEST method. <i>Magnetic Resonance in Medicine</i> , 2019, 81, 69-78.	3.0	69
9	Investigation of the contribution of total creatine to the CEST spectrum of brain using a knockout mouse model. <i>NMR in Biomedicine</i> , 2017, 30, e3834.	2.8	64
10	Functional nanoparticles for magnetic resonance imaging. <i>Wiley Interdisciplinary Reviews: Nanomedicine and Nanobiotechnology</i> , 2016, 8, 814-841.	6.1	63
11	Altered d-glucose in brain parenchyma and cerebrospinal fluid of early Alzheimer's disease detected by dynamic glucose-enhanced MRI. <i>Science Advances</i> , 2020, 6, eaba3884.	10.3	60
12	Achieving 1% NMR polarization in water in less than 1min using SABRE. <i>Journal of Magnetic Resonance</i> , 2014, 246, 119-121.	2.1	59
13	A dextran-based probe for the targeted magnetic resonance imaging of tumours expressing prostate-specific membrane antigen. <i>Nature Biomedical Engineering</i> , 2017, 1, 977-982.	22.5	58
14	In vivo imaging of phosphocreatine with artificial neural networks. <i>Nature Communications</i> , 2020, 11, 1072.	12.8	55
15	Protein aggregation linked to Alzheimer's disease revealed by saturation transfer MRI. <i>NeuroImage</i> , 2019, 188, 380-390.	4.2	50
16	Detection of rapidly exchanging compounds using on-resonance frequency-labeled exchange (FLEX) transfer. <i>Magnetic Resonance in Medicine</i> , 2012, 68, 1048-1055.	3.0	47
17	CEST MRI of 3-methyl-D-glucose uptake and accumulation in brain tumors. <i>Magnetic Resonance in Medicine</i> , 2019, 81, 1993-2000.	3.0	42
18	Magnetic resonance imaging of glycogen using its magnetic coupling with water. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2020, 117, 3144-3149.	7.1	41

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19	Transplanted adipose-derived stem cells can be short-lived yet accelerate healing of acid-burn skin wounds: a multimodal imaging study. <i>Scientific Reports</i> , 2017, 7, 4644.	3.3	38
20	Onâ€resonance variable delay multipulse scheme for imaging of fastâ€exchanging protons and semisolid macromolecules. <i>Magnetic Resonance in Medicine</i> , 2017, 77, 730-739.	3.0	35
21	Separating fast and slow exchange transfer and magnetization transfer using offâ€resonance variableâ€delay multipleâ€pulse (VDMP) MRI. <i>Magnetic Resonance in Medicine</i> , 2018, 80, 1568-1576.	3.0	34
22	Characterization of tumor vascular permeability using natural dextrans and CEST MRI. <i>Magnetic Resonance in Medicine</i> , 2018, 79, 1001-1009.	3.0	33
23	An immunocompetent mouse model of human glioblastoma. <i>Oncotarget</i> , 2017, 8, 61072-61082.	1.8	30
24	Highâ€resolution creatine mapping of mouse brain at 11.7 T using nonâ€steadyâ€state chemical exchange saturation transfer. <i>NMR in Biomedicine</i> , 2019, 32, e4168.	2.8	29
25	CEST MRI of sepsisâ€induced acute kidney injury. <i>NMR in Biomedicine</i> , 2018, 31, e3942.	2.8	28
26	Multiâ€echo Length and Offset VARied Saturation (MeLOVARS) method for improved CEST imaging. <i>Magnetic Resonance in Medicine</i> , 2015, 73, 488-496.	3.0	27
27	D-Glucose uptake and clearance in the tauopathy Alzheimerâ€™s disease mouse brain detected by on-resonance variable delay multiple pulse MRI. <i>Journal of Cerebral Blood Flow and Metabolism</i> , 2021, 41, 1013-1025.	4.3	27
28	GlucoCEST imaging with onâ€resonance variable delay multiple pulse (onVDMP) MRI. <i>Magnetic Resonance in Medicine</i> , 2019, 81, 47-56.	3.0	26
29	CEST MRI detectable liposomal hydrogels for multiparametric monitoring in the brain at 3T. <i>Theranostics</i> , 2020, 10, 2215-2228.	10.0	26
30	Wholeâ€brain amide CEST imaging at 3T with a steadyâ€state radial MRI acquisition. <i>Magnetic Resonance in Medicine</i> , 2021, 86, 893-906.	3.0	26
31	Imaging of Endogenous Exchangeable Proton Signals in the Human Brain Using Frequency Labeled Exchange Transfer Imaging. <i>Magnetic Resonance in Medicine</i> , 2013, 69, 966-973.	3.0	25
32	CEST, ASL, and magnetization transfer contrast: How similar pulse sequences detect different phenomena. <i>Magnetic Resonance in Medicine</i> , 2018, 80, 1320-1340.	3.0	25
33	CT and CEST MRI bimodal imaging of the intratumoral distribution of iodinated liposomes. <i>Quantitative Imaging in Medicine and Surgery</i> , 2019, 9, 1579-1591.	2.0	24
34	Highâ€sensitivity CEST mapping using a spatiotemporal correlationâ€enhanced method. <i>Magnetic Resonance in Medicine</i> , 2020, 84, 3342-3350.	3.0	24
35	Deep neural network based CEST and AREX processing: Application in imaging a model of Alzheimerâ€™s disease at 3T. <i>Magnetic Resonance in Medicine</i> , 2022, 87, 1529-1545.	3.0	22
36	Screening CEST contrast agents using ultrafast CEST imaging. <i>Journal of Magnetic Resonance</i> , 2016, 265, 224-229.	2.1	21

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37	Early detection of Alzheimer's disease using creatine chemical exchange saturation transfer magnetic resonance imaging. <i>NeuroImage</i> , 2021, 236, 118071.	4.2	20
38	CEST MRI monitoring of tumor response to vascular disrupting therapy using high molecular weight dextrans. <i>Magnetic Resonance in Medicine</i> , 2019, 82, 1471-1479.	3.0	18
39	Chemical exchange saturation transfer imaging of creatine, phosphocreatine, and protein arginine residue in tissues. <i>NMR in Biomedicine</i> , 2023, 36, e4671.	2.8	18
40	A Novel Experimental Animal Model of Adult Chronic Hydrocephalus. <i>Neurosurgery</i> , 2016, 79, 746-756.	1.1	17
41	<sup>15</sup> N Heteronuclear Chemical Exchange Saturation Transfer MRI. <i>Journal of the American Chemical Society</i> , 2016, 138, 11136-11139.	13.7	16
42	The effect of the mTOR inhibitor rapamycin on glucoCEST signal in a preclinical model of glioblastoma. <i>Magnetic Resonance in Medicine</i> , 2019, 81, 3798-3807.	3.0	13
43	Age-Related Alterations in Brain Perfusion, Venous Oxygenation, and Oxygen Metabolic Rate of Mice: A 17-Month Longitudinal MRI Study. <i>Frontiers in Neurology</i> , 2020, 11, 559.	2.4	13
44	Fast whole brain MR imaging of dynamic susceptibility contrast changes in the cerebrospinal fluid (cDSC MRI). <i>Magnetic Resonance in Medicine</i> , 2020, 84, 3256-3270.	3.0	12
45	Mechanism and quantitative assessment of saturation transfer for water-based detection of the aliphatic protons in carbohydrate polymers. <i>Magnetic Resonance in Medicine</i> , 2021, 85, 1643-1654.	3.0	12
46	Sensitivity schemes for dynamic glucose-enhanced magnetic resonance imaging to detect glucose uptake and clearance in mouse brain at 3T. <i>NMR in Biomedicine</i> , 2022, 35, e4640.	2.8	12
47	Quantitative assessment of cerebral venous blood T <sub>2</sub> in mouse at 11.7T: Implementation, optimization, and age effect. <i>Magnetic Resonance in Medicine</i> , 2018, 80, 521-528.	3.0	11
48	Optimization of phase-contrast MRI for the estimation of global cerebral blood flow of mice at 11.7T. <i>Magnetic Resonance in Medicine</i> , 2019, 81, 2566-2575.	3.0	11
49	Brain metabolism in tau and amyloid mouse models of Alzheimer's disease: An MRI study. <i>NMR in Biomedicine</i> , 2021, 34, e4568.	2.8	11
50	Steady pulsed imaging and labeling scheme for noninvasive perfusion imaging. <i>Magnetic Resonance in Medicine</i> , 2016, 75, 238-248.	3.0	10
51	In vivo assessment of the placental anatomy and perfusion in a mouse model of intrauterine inflammation. <i>Journal of Magnetic Resonance Imaging</i> , 2018, 47, 1260-1267.	3.4	10
52	Monitoring diffuse injury during disease progression in experimental autoimmune encephalomyelitis with on resonance variable delay multiple pulse (onVDMP) CEST MRI. <i>NeuroImage</i> , 2020, 204, 116245.	4.2	10
53	Relayed nuclear Overhauser enhancement imaging with magnetization transfer contrast suppression at 3 T. <i>Magnetic Resonance in Medicine</i> , 2021, 85, 254-267.	3.0	10
54	Dynamic glucose enhanced MRI of the placenta in a mouse model of intrauterine inflammation. <i>Placenta</i> , 2018, 69, 86-91.	1.5	9

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55	Aqueductal Cerebrospinal Fluid Stroke Volume Flow in a Rodent Model of Chronic Communicating Hydrocephalus: Establishing a Homogeneous Study Population for Cerebrospinal Fluid Dynamics Exploration. <i>World Neurosurgery</i> , 2019, 128, e1118-e1125.	1.3	8
56	Relayed nuclear Overhauser effect weighted (rNOEw) imaging identifies multiple sclerosis. <i>NeuroImage: Clinical</i> , 2021, 32, 102867.	2.7	8
57	Deuterium oxide as a contrast medium for real-time MRI-guided endovascular neurointervention. <i>Theranostics</i> , 2021, 11, 6240-6250.	10.0	7
58	Dynamic contrast-enhanced CEST MRI using a low molecular weight dextran. <i>NMR in Biomedicine</i> , 2021, e4649.	2.8	7
59	Cerebrospinal fluid-tissue exchange revealed by phase alternate labeling with null recovery MRI. <i>Magnetic Resonance in Medicine</i> , 2022, 87, 1207-1217.	3.0	7
60	Age-dependent cerebrospinal fluid-tissue water exchange detected by magnetization transfer indirect spin labeling MRI. <i>Magnetic Resonance in Medicine</i> , 2022, 87, 2287-2298.	3.0	6
61	Detection of electrostatic molecular binding using the water proton signal. <i>Magnetic Resonance in Medicine</i> , 2022, 88, 901-915.	3.0	5
62	Quantitative cerebrovascular reactivity MRI in mice using acetazolamide challenge. <i>Magnetic Resonance in Medicine</i> , 2022, 88, 2233-2241.	3.0	5
63	Traumatic brain injury does not disrupt costimulatory blockade-induced immunological tolerance to glial-restricted progenitor allografts. <i>Journal of Neuroinflammation</i> , 2021, 18, 104.	7.2	3
64	Mutant G2019S-LRRK2 Induces Abnormalities in Arteriolar Cerebral Blood Volume in Mouse Brains: An MRI Study. <i>Neurodegenerative Diseases</i> , 2020, 20, 65-72.	1.4	1
65	Chapter 6 General Theory of CEST Image Acquisition and Post-Processing. , 2017, , 55-96.		0