Chunlei Liu

List of Publications by Year
in descending order

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122 papers	7,404 citations	61984 43 h-index	62596 80 g-index
126 all docs	126 docs citations	126 times ranked	6780 citing authors

#	Article	IF	Citations
1	Predictive value of thrombus susceptibility for cardioembolic stroke by quantitative susceptibility mapping. Quantitative Imaging in Medicine and Surgery, 2022, 12, 550-557.	2.0	8
2	Basilar artery thrombus magnetic susceptibility for cardioembolic stroke identification. Quantitative Imaging in Medicine and Surgery, 2022, 12, 1566-1571.	2.0	0
3	Cortical iron mediates <scp>ageâ€related</scp> decline in fluid cognition. Human Brain Mapping, 2022, 43, 1047-1060.	3.6	12
4	Involvement of the crosstalk between Nrf2 and NF-ÎºB pathways regulated by SIRT1 in myocardial ischemia/reperfusion injury. International Journal of Cardiology, 2022, 355, 44.	1.7	0
5	Regularized Asymmetric Susceptibility Tensor Imaging in the Human Brain in Vivo. IEEE Journal of Biomedical and Health Informatics, 2022, 26, 4508-4518.	6.3	2
6	DTI Tractâ€Based Quantitative Susceptibility Mapping: An Initial Feasibility Study to Investigate the Potential Role of Myelination in Brain Connectivity Change in Cerebral Palsy Patients During Autologous Cord Blood Cell Therapy Using a Rotationallyâ€Invariant Quantitative Measure. Journal of Magnetic Resonance Imaging, 2021, 53, 251-258.	3.4	8
7	Decoding COVID-19 pneumonia: comparison of deep learning and radiomics CT image signatures. European Journal of Nuclear Medicine and Molecular Imaging, 2021, 48, 1478-1486.	6.4	66
8	Quantitative Susceptibility Mapping of the Hippocampal Fimbria in Alzheimer's Disease. Journal of Magnetic Resonance Imaging, 2021, 53, 1823-1832.	3.4	13
9	Serum Ceruloplasmin Depletion is Associated With Magnetic Resonance Evidence of Widespread Accumulation of Brain Iron in Parkinson's Disease. Journal of Magnetic Resonance Imaging, 2021, 54, 1098-1106.	3.4	9
10	Asymmetric susceptibility tensor imaging. Magnetic Resonance in Medicine, 2021, 86, 2266-2275.	3.0	4
11	DiSpect: Displacement spectrum imaging of flow and tissue perfusion using spinâ€labeling and stimulated echoes. Magnetic Resonance in Medicine, 2021, 86, 2468-2481.	3.0	2
12	MoDL-QSM: Model-based deep learning for quantitative susceptibility mapping. NeuroImage, 2021, 240, 118376.	4.2	20
13	Evaluating methods and protocols of ferritin-based magnetogenetics. IScience, 2021, 24, 103094.	4.1	5
14	Decompose quantitative susceptibility mapping (QSM) to sub-voxel diamagnetic and paramagnetic components based on gradient-echo MRI data. NeuroImage, 2021, 242, 118477.	4.2	31
15	Imaging diamagnetic susceptibility of collagen in hepatic fibrosis using susceptibility tensor imaging. Magnetic Resonance in Medicine, 2020, 83, 1322-1330.	3.0	8
16	Brain MRI with Quantitative Susceptibility Mapping: Relationship to CT Attenuation Values. Radiology, 2020, 294, 600-609.	7.3	20
17	Consensus-based technical recommendations for clinical translation of renal BOLD MRI. Magnetic Resonance Materials in Physics, Biology, and Medicine, 2020, 33, 199-215.	2.0	68
18	Elevated homocysteine and differential risks of the renal function decline in hypertensive patients. Clinical and Experimental Hypertension, 2020, 42, 565-570.	1.3	8

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19	Lipid Oxidation Induced by RF Waves and Mediated by Ferritin Iron Causes Activation of Ferritin-Tagged Ion Channels. Cell Reports, 2020, 30, 3250-3260.e7.	6.4	28
20	Imaging microstructure with diffusion and susceptibility MR: neuronal density correlation in Disruptedâ€inâ€Schizophreniaâ€1 mutant mice. NMR in Biomedicine, 2020, 33, e4365.	2.8	11
21	Multiphoton magnetic resonance in imaging: A classical description and implementation. Magnetic Resonance in Medicine, 2020, 84, 1184-1197.	3.0	8
22	Toward a marker of upper motor neuron impairment in amyotrophic lateral sclerosis: A fully automatic investigation of the magnetic susceptibility in the precentral cortex. European Journal of Radiology, 2020, 124, 108815.	2.6	15
23	Asymmetrical nigral iron accumulation in Parkinsonâ€™s disease with motor asymmetry: an explorative, longitudinal and test-retest study. Aging, 2020, 12, 18622-18634.	3.1	10
24	Generalized parameter estimation in multi-echo gradient-echo-based chemical species separation. Quantitative Imaging in Medicine and Surgery, 2020, 10, 554-567.	2.0	15
25	Precise targeting of the globus pallidus internus with quantitative susceptibility mapping for deep brain stimulation surgery. Journal of Neurosurgery, 2020, 133, 1605-1611.	1.6	14
26	Multimodal integration of diffusion MRI for better characterization of tissue biology. NMR in Biomedicine, 2019, 32, e3939.	2.8	6
27	Learning-based single-step quantitative susceptibility mapping reconstruction without brain extraction. NeuroImage, 2019, 202, 116064.	4.2	44
28	Probing demyelination and remyelination of the cuprizone mouse model using multimodality MRI. Journal of Magnetic Resonance Imaging, 2019, 50, 1852-1865.	3.4	21
29	Multivariate MR biomarkers better predict cognitive dysfunction in mouse models of Alzheimer's disease. Magnetic Resonance Imaging, 2019, 60, 52-67.	1.8	16
30	Multi-atlas tool for automated segmentation of brain gray matter nuclei and quantification of their magnetic susceptibility. NeuroImage, 2019, 191, 337-349.	4.2	54
31	Imaging beta amyloid aggregation and iron accumulation in Alzheimer's disease using quantitative susceptibility mapping MRI. NeuroImage, 2019, 191, 176-185.	4.2	122
32	Oscillation-specific nodal alterations in early to middle stages Parkinsonâ€™s disease. Translational Neurodegeneration, 2019, 8, 36.	8.0	11
33	Quantitative susceptibility mapping of articular cartilage in patients with osteoarthritis at 3T. Journal of Magnetic Resonance Imaging, 2019, 49, 1665-1675.	3.4	19
34	Iron-related nigral degeneration influences functional topology mediated by striatal dysfunction in Parkinson's disease. Neurobiology of Aging, 2019, 75, 83-97.	3.1	35
35	Distribution of brain iron accrual in adolescence: Evidence from crossâ€sectional and longitudinal analysis. Human Brain Mapping, 2019, 40, 1480-1495.	3.6	33
36	Neonate and infant brain development from birth to 2 years assessed using MRI-based quantitative susceptibility mapping. NeuroImage, 2019, 185, 349-360.	4.2	36

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37	Quantitative susceptibility mapping as a biomarker for evaluating white matter alterations in Parkinsonâ€™s disease. Brain Imaging and Behavior, 2019, 13, 220-231.	2.1	30
38	Imaging the Centromedian Thalamic Nucleus Using Quantitative Susceptibility Mapping. Frontiers in Human Neuroscience, 2019, 13, 447.	2.0	23
39	Plasticity in deep and superficial white matter: a DTI study in world class gymnasts. Brain Structure and Function, 2018, 223, 1849-1862.	2.3	18
40	Quantitative susceptibility mapping in combination with water-fat separation for simultaneous liver iron and fat fraction quantification. European Radiology, 2018, 28, 3494-3504.	4.5	27
41	Quantitative susceptibility mapping (QSM) as a means to monitor cerebral hematoma treatment. Journal of Magnetic Resonance Imaging, 2018, 48, 907-915.	3.4	14
42	White Matter Changes Related to Subconcussive Impact Frequency during a Single Season of High School Football. American Journal of Neuroradiology, 2018, 39, 245-251.	2.4	35
43	Longitudinal atlas for normative human brain development and aging over the lifespan using quantitative susceptibility mapping. NeuroImage, 2018, 171, 176-189.	4.2	95
44	MRI gradient-echo phase contrast of the brain at ultra-short TE with off-resonance saturation. NeuroImage, 2018, 175, 1-11.	4.2	14
45	Accelerating quantitative susceptibility imaging acquisition using compressed sensing. Physics in Medicine and Biology, 2018, 63, 245002.	3.0	16
46	Longitudinal data for magnetic susceptibility of normative human brain development and aging over the lifespan. Data in Brief, 2018, 20, 623-631.	1.0	23
47	Microstructural alterations of cortical and deep gray matter over a season of high school football revealed by diffusion kurtosis imaging. Neurobiology of Disease, 2018, 119, 79-87.	4.4	19
48	Susceptibility tensor imaging (STI) of the brain. NMR in Biomedicine, 2017, 30, e3540.	2.8	59
49	Dentate nucleus iron deposition is a potential biomarker for tremorâ€dominant Parkinson's disease. NMR in Biomedicine, 2017, 30, e3554.	2.8	42
50	Magnetic susceptibility anisotropy outside the central nervous system. NMR in Biomedicine, 2017, 30, e3544.	2.8	22
51	Regionally progressive accumulation of iron in Parkinson's disease as measured by quantitative susceptibility mapping. NMR in Biomedicine, 2017, 30, e3489.	2.8	122
52	Joint 2D and 3D phase processing for quantitative susceptibility mapping: application to 2D echoâ€planar imaging. NMR in Biomedicine, 2017, 30, e3501.	2.8	36
53	Investigating magnetic susceptibility of human knee joint at 7 Tesla. Magnetic Resonance in Medicine, 2017, 78, 1933-1943.	3.0	54
54	Exploring the origins of echo-time-dependent quantitative susceptibility mapping (QSM) measurements in healthy tissue and cerebral microbleeds. NeuroImage, 2017, 149, 98-113.	4.2	64

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55	Differential microstructural and morphological abnormalities in mild cognitive impairment and <scp>A</scp>lzheimer's disease: Evidence from cortical and deep gray matter. Human Brain Mapping, 2017, 38, 2495-2508.	3.6	54
56	Joint eigenvector estimation from mutually anisotropic tensors improves susceptibility tensor imaging of the brain, kidney, and heart. Magnetic Resonance in Medicine, 2017, 77, 2331-2346.	3.0	13
57	Editorial for special issue on MRI phase contrast and quantitative susceptibility mapping. NMR in Biomedicine, 2017, 30, e3707.	2.8	2
58	Temperature-activated ion channels in neural crest cells confer maternal feverâ€“associated birth defects. Science Signaling, 2017, 10, .	3.6	51
59	Susceptibility tensor imaging and tractography of collagen fibrils in the articular cartilage. Magnetic Resonance in Medicine, 2017, 78, 1683-1690.	3.0	34
60	Improved Neuroimaging Atlas of the Dentate Nucleus. Cerebellum, 2017, 16, 951-956.	2.5	20
61	Quantitative assessment of gadolinium deposition in dentate nucleus using quantitative susceptibility mapping. Journal of Magnetic Resonance Imaging, 2017, 45, 1352-1358.	3.4	31
62	MRI tools for assessment of microstructure and nephron function of the kidney. American Journal of Physiology - Renal Physiology, 2016, 311, F1109-F1124.	2.7	27
63	Imaging whole-brain cytoarchitecture of mouse with MRI-based quantitative susceptibility mapping. NeuroImage, 2016, 137, 107-115.	4.2	43
64	An interferon-Î²-resistant and NLRP3 inflammasomeâ€“independent subtype of EAE with neuronal damage. Nature Neuroscience, 2016, 19, 1599-1609.	14.8	70
65	Magnetic susceptibility of brain iron is associated with childhood spatial IQ. NeuroImage, 2016, 132, 167-174.	4.2	47
66	Dynamic contrast-enhanced quantitative susceptibility mapping with ultrashort echo time MRI for evaluating renal function. American Journal of Physiology - Renal Physiology, 2016, 310, F174-F182.	2.7	20
67	Rapid multi-orientation quantitative susceptibility mapping. NeuroImage, 2016, 125, 1131-1141.	4.2	52
68	Quantitative Susceptibility Mapping at 3 T and 1.5 T. Investigative Radiology, 2015, 50, 522-530.	6.2	58
69	Magnetic susceptibility anisotropy of myocardium imaged by cardiovascular magnetic resonance reflects the anisotropy of myocardial filament Î±-helix polypeptide bonds. Journal of Cardiovascular Magnetic Resonance, 2015, 17, 60.	3.3	37
70	Regionâ€specific disturbed iron distribution in early idiopathic <scp>P</scp>arkinson's disease measured by quantitative susceptibility mapping. Human Brain Mapping, 2015, 36, 4407-4420.	3.6	181
71	Susceptibility tensor imaging of the kidney and its microstructural underpinnings. Magnetic Resonance in Medicine, 2015, 73, 1270-1281.	3.0	50
72	Streaking artifact reduction for quantitative susceptibility mapping of sources with large dynamic range. NMR in Biomedicine, 2015, 28, 1294-1303.	2.8	175

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73	Quantitative Susceptibility Mapping: Contrast Mechanisms and Clinical Applications. Tomography, 2015, 1, 3-17.	1.8	129
74	A method for estimating and removing streaking artifacts in quantitative susceptibility mapping. NeuroImage, 2015, 108, 111-122.	4.2	256
75	Radioprotection of the Brain White Matter by Mn(III) N-Butoxyethylpyridylporphyrinâ€“Based Superoxide Dismutase Mimic MnTnBuOE-2-PyP5+. Molecular Cancer Therapeutics, 2015, 14, 70-79.	4.1	60
76	Association between increased magnetic susceptibility of deep gray matter nuclei and decreased motor function in healthy adults. NeuroImage, 2015, 105, 45-52.	4.2	41
77	Susceptibility-weighted imaging and quantitative susceptibility mapping in the brain. Journal of Magnetic Resonance Imaging, 2015, 42, 23-41.	3.4	407
78	Feasibility of Imaging Tissue Electrical Conductivity by Switching Field Gradients with MRI. Tomography, 2015, 1, 125-135.	1.8	9
79	Susceptibility mapâ€weighted imaging (SMWI) for neuroimaging. Magnetic Resonance in Medicine, 2014, 72, 337-346.	3.0	39
80	Integrated Laplacianâ€based phase unwrapping and background phase removal for quantitative susceptibility mapping. NMR in Biomedicine, 2014, 27, 219-227.	2.8	239
81	Quantitative magnetic susceptibility of the developing mouse brain reveals microstructural changes in the white matter. NeuroImage, 2014, 88, 134-142.	4.2	49
82	Simultaneous imaging of in vivo conductivity and susceptibility. Magnetic Resonance in Medicine, 2014, 71, 1144-1150.	3.0	37
83	Differential developmental trajectories of magnetic susceptibility in human brain gray and white matter over the lifespan. Human Brain Mapping, 2014, 35, 2698-2713.	3.6	208
84	Prenatal alcohol exposure reduces magnetic susceptibility contrast and anisotropy in the white matter of mouse brains. NeuroImage, 2014, 102, 748-755.	4.2	32
85	The Alzheimer Structural Connectome: Changes in Cortical Network Topology with Increased Amyloid Plaque Burden. Radiology, 2014, 273, 175-184.	7.3	71
86	Dynamic and inherent B₀ correction for DTI using stimulated echo spiral imaging. Magnetic Resonance in Medicine, 2014, 71, 1044-1053.	3.0	12
87	Microstructural origins of gadoliniumâ€enhanced susceptibility contrast and anisotropy. Magnetic Resonance in Medicine, 2014, 72, 1702-1711.	3.0	19
88	Effects of chronic mild traumatic brain injury on white matter integrity in Iraq and Afghanistan war veterans. Human Brain Mapping, 2013, 34, 2986-2999.	3.6	107
89	No association of ZNF804A rs1344706 with white matter integrity in schizophrenia: A tract-based spatial statistics study. Neuroscience Letters, 2013, 532, 64-69.	2.1	19
90	Imaging neural architecture of the brain based on its multipole magnetic response. NeuroImage, 2013, 67, 193-202.	4.2	25

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91	Protective astrogenesis from the SVZ niche after injury is controlled by Notch modulator Thbs4. Nature, 2013, 497, 369-373.	27.8	244
92	Quantitative susceptibility mapping of kidney inflammation and fibrosis in type 1 angiotensin receptorâ€deficient mice. NMR in Biomedicine, 2013, 26, 1853-1863.	2.8	45
93	Probing white-matter microstructure with higher-order diffusion tensors and susceptibility tensor MRI. Frontiers in Integrative Neuroscience, 2013, 7, 11.	2.1	18
94	Comparison of Magnetic Susceptibility Tensor and Diffusion Tensor of the Brain. Journal of Neuroscience and Neuroengineering, 2013, 2, 431-440.	0.2	18
95	3D fiber tractography with susceptibility tensor imaging. NeuroImage, 2012, 59, 1290-1298.	4.2	82
96	Association of the ZNF804A gene polymorphism rs1344706 with white matter density changes in Chinese schizophrenia. Progress in Neuro-Psychopharmacology and Biological Psychiatry, 2012, 36, 122-127.	4.8	28
97	The effect of DISC1 on regional gray matter density of schizophrenia in Han Chinese population. Neuroscience Letters, 2012, 517, 21-24.	2.1	14
98	Fast and tissue-optimized mapping of magnetic susceptibility and T2* with multi-echo and multi-shot spirals. NeuroImage, 2012, 59, 297-305.	4.2	147
99	Magnetic susceptibility anisotropy of human brain in vivo and its molecular underpinnings. NeuroImage, 2012, 59, 2088-2097.	4.2	194
100	Whole brain susceptibility mapping using compressed sensing. Magnetic Resonance in Medicine, 2012, 67, 137-147.	3.0	328
101	High-field (9.4T) MRI of brain dysmyelination by quantitative mapping of magnetic susceptibility. NeuroImage, 2011, 56, 930-938.	4.2	199
102	Quantitative susceptibility mapping of human brain reflects spatial variation in tissue composition. NeuroImage, 2011, 55, 1645-1656.	4.2	487
103	Parallel reconstruction using null operations. Magnetic Resonance in Medicine, 2011, 66, 1241-1253.	3.0	51
104	Application of Low-pass & High-pass reconstruction for improving the performance of the POCS based algorithm. , 2011, , .		3
105	Auto-Calibrated Parallel Imaging Reconstruction for Arbitrary Trajectories Using ${f k}$-Space Sparse Matrices (kSPA). IEEE Transactions on Medical Imaging, 2010, 29, 950-959.	8.9	3
106	In vivo generalized diffusion tensor imaging (GDTI) using higherâ€order tensors (HOT). Magnetic Resonance in Medicine, 2010, 63, 243-252.	3.0	30
107	Susceptibility tensor imaging. Magnetic Resonance in Medicine, 2010, 63, 1471-1477.	3.0	300
108	Correlation of Apparent Diffusion Coefficient and Fractional Anisotropy Values in the Developing Infant Brain. American Journal of Roentgenology, 2010, 195, W456-W462.	2.2	41

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109	Generalized Diffusion Tensor Imaging (GDTI): A Method for Characterizing and Imaging Diffusion Anisotropy Caused by Non-Gaussian Diffusion. Israel Journal of Chemistry, 2010, 43, 145-154.	2.3	25
110	Prefrontal Plasticity and Stress Inoculation-Induced Resilience. Developmental Neuroscience, 2009, 31, 293-299.	2.0	72
111	Parallel spectroscopic imaging reconstruction with arbitrary trajectories using kâ€space sparse matrices. Magnetic Resonance in Medicine, 2009, 61, 267-272.	3.0	16
112	Advances in Magnetic Resonance Neuroimaging. Neurologic Clinics, 2009, 27, 1-19.	1.8	33
113	Singleâ€step nonlinear diffusion tensor estimation in the presence of microscopic and macroscopic motion. Magnetic Resonance in Medicine, 2008, 59, 1138-1150.	3.0	40
114	Slidingâ€window sensitivity encoding (SENSE) calibration for reducing noise in functional MRI (fMRI). Magnetic Resonance in Medicine, 2008, 60, 1090-1103.	3.0	5
115	Augmented generalized SENSE reconstruction to correct for rigid body motion. Magnetic Resonance in Medicine, 2007, 57, 90-102.	3.0	84
116	Parallel imaging reconstruction for arbitrary trajectories using kâ€space sparse matrices (kSPA). Magnetic Resonance in Medicine, 2007, 58, 1171-1181.	3.0	38
117	Limitations of apparent diffusion coefficient-based models in characterizing non-gaussian diffusion. Magnetic Resonance in Medicine, 2005, 54, 419-428.	3.0	32
118	Simultaneous phase correction and SENSE reconstruction for navigated multi-shot DWI with non-cartesian k-space sampling. Magnetic Resonance in Medicine, 2005, 54, 1412-1422.	3.0	92
119	Foundations of advanced magnetic resonance imaging. NeuroRx, 2005, 2, 167-196.	6.0	73
120	Foundations of advanced magnetic resonance imaging. Neurotherapeutics, 2005, 2, 167-196.	4.4	1
121	Characterizing non-gaussian diffusion by using generalized diffusion tensors. Magnetic Resonance in Medicine, 2004, 51, 924-937.	3.0	224
122	Selfâ€navigated interleaved spiral (SNAILS): Application to highâ€resolution diffusion tensor imaging. Magnetic Resonance in Medicine, 2004, 52, 1388-1396.	3.0	214