

# Tian Liu

## List of Publications by Citations

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The third column is the impact factor (IF) of the journal, and the fourth column is the number of citations of the article.

50  
papers

4,704  
citations

33  
h-index

51  
g-index

51  
ext. papers

5,527  
ext. citations

7  
avg, IF

5.58  
L-index

#	Paper	IF	Citations
50	Quantitative susceptibility mapping (QSM): Decoding MRI data for a tissue magnetic biomarker. <i>Magnetic Resonance in Medicine</i> , <b>2015</b> , 73, 82-101	4.4	478
49	Quantitative susceptibility map reconstruction from MR phase data using bayesian regularization: validation and application to brain imaging. <i>Magnetic Resonance in Medicine</i> , <b>2010</b> , 63, 194-206	4.4	457
48	Calculation of susceptibility through multiple orientation sampling (COSMOS): a method for conditioning the inverse problem from measured magnetic field map to susceptibility source image in MRI. <i>Magnetic Resonance in Medicine</i> , <b>2009</b> , 61, 196-204	4.4	312
47	Morphology enabled dipole inversion for quantitative susceptibility mapping using structural consistency between the magnitude image and the susceptibility map. <i>NeuroImage</i> , <b>2012</b> , 59, 2560-8	7.9	303
46	A novel background field removal method for MRI using projection onto dipole fields (PDF). <i>NMR in Biomedicine</i> , <b>2011</b> , 24, 1129-36	4.4	256
45	Morphology enabled dipole inversion (MEDI) from a single-angle acquisition: comparison with COSMOS in human brain imaging. <i>Magnetic Resonance in Medicine</i> , <b>2011</b> , 66, 777-83	4.4	236
44	Nonlinear formulation of the magnetic field to source relationship for robust quantitative susceptibility mapping. <i>Magnetic Resonance in Medicine</i> , <b>2013</b> , 69, 467-76	4.4	229
43	Quantitative susceptibility mapping in multiple sclerosis. <i>Radiology</i> , <b>2013</b> , 267, 551-9	20.5	178
42	Intracranial calcifications and hemorrhages: characterization with quantitative susceptibility mapping. <i>Radiology</i> , <b>2014</b> , 270, 496-505	20.5	168
41	Quantitative susceptibility mapping of multiple sclerosis lesions at various ages. <i>Radiology</i> , <b>2014</b> , 271, 183-92	20.5	164
40	Nonlinear regularization for per voxel estimation of magnetic susceptibility distributions from MRI field maps. <i>IEEE Transactions on Medical Imaging</i> , <b>2010</b> , 29, 273-81	11.7	159
39	Background field removal by solving the Laplacian boundary value problem. <i>NMR in Biomedicine</i> , <b>2014</b> , 27, 312-9	4.4	136
38	Cerebral microbleeds: burden assessment by using quantitative susceptibility mapping. <i>Radiology</i> , <b>2012</b> , 262, 269-78	20.5	136
37	Improved subthalamic nucleus depiction with quantitative susceptibility mapping. <i>Radiology</i> , <b>2013</b> , 269, 216-23	20.5	105
36	Quantitative susceptibility mapping of the midbrain in Parkinson's disease. <i>Movement Disorders</i> , <b>2016</b> , 31, 317-24	7	102
35	Quantitative mapping of cerebral metabolic rate of oxygen (CMRO2 ) using quantitative susceptibility mapping (QSM). <i>Magnetic Resonance in Medicine</i> , <b>2015</b> , 74, 945-52	4.4	92
34	Reducing the object orientation dependence of susceptibility effects in gradient echo MRI through quantitative susceptibility mapping. <i>Magnetic Resonance in Medicine</i> , <b>2012</b> , 68, 1563-9	4.4	86

33	Flow compensated quantitative susceptibility mapping for venous oxygenation imaging. <i>Magnetic Resonance in Medicine</i> , <b>2014</b> , 72, 438-45	4.4	84
32	Evaluation of iron content in human cerebral cavernous malformation using quantitative susceptibility mapping. <i>Investigative Radiology</i> , <b>2014</b> , 49, 498-504	10.1	76
31	Accuracy of the morphology enabled dipole inversion (MEDI) algorithm for quantitative susceptibility mapping in MRI. <i>IEEE Transactions on Medical Imaging</i> , <b>2012</b> , 31, 816-24	11.7	73
30	Simultaneous phase unwrapping and removal of chemical shift (SPURS) using graph cuts: application in quantitative susceptibility mapping. <i>IEEE Transactions on Medical Imaging</i> , <b>2015</b> , 34, 531-40	11.7	62
29	Magnetic susceptibility anisotropy: cylindrical symmetry from macroscopically ordered anisotropic molecules and accuracy of MRI measurements using few orientations. <i>NeuroImage</i> , <b>2013</b> , 70, 363-76	7.9	62
28	Oxygen extraction fraction measurement using quantitative susceptibility mapping: Comparison with positron emission tomography. <i>Journal of Cerebral Blood Flow and Metabolism</i> , <b>2016</b> , 36, 1424-33	7.3	59
27	Age and sex related differences in subcortical brain iron concentrations among healthy adults. <i>NeuroImage</i> , <b>2015</b> , 122, 385-98	7.9	57
26	Quantitative susceptibility mapping of the motor cortex in amyotrophic lateral sclerosis and primary lateral sclerosis. <i>American Journal of Roentgenology</i> , <b>2015</b> , 204, 1086-92	5.4	50
25	Unambiguous identification of superparamagnetic iron oxide particles through quantitative susceptibility mapping of the nonlinear response to magnetic fields. <i>Magnetic Resonance Imaging</i> , <b>2010</b> , 28, 1383-9	3.3	49
24	Imaging Cerebral Microhemorrhages in Military Service Members with Chronic Traumatic Brain Injury. <i>Radiology</i> , <b>2016</b> , 278, 536-45	20.5	46
23	Dynamic permeability and quantitative susceptibility: related imaging biomarkers in cerebral cavernous malformations. <i>Stroke</i> , <b>2014</b> , 45, 598-601	6.7	45
22	Joint estimation of chemical shift and quantitative susceptibility mapping (chemical QSM). <i>Magnetic Resonance in Medicine</i> , <b>2015</b> , 73, 2100-10	4.4	40
21	Noise Effects in Various Quantitative Susceptibility Mapping Methods. <i>IEEE Transactions on Biomedical Engineering</i> , <b>2013</b> , 60, 3441-8	5	39
20	Multiple sclerosis lesion geometry in quantitative susceptibility mapping (QSM) and phase imaging. <i>Journal of Magnetic Resonance Imaging</i> , <b>2015</b> , 42, 224-9	5.6	38
19	Hematoma volume measurement in gradient echo MRI using quantitative susceptibility mapping. <i>Stroke</i> , <b>2013</b> , 44, 2315-7	6.7	37
18	Internal structures of the globus pallidus in patients with Parkinson's disease: evaluation with quantitative susceptibility mapping (QSM). <i>European Radiology</i> , <b>2015</b> , 25, 710-8	8	34
17	Quantitative susceptibility mapping (QSM) minimizes interference from cellular pathology in R2* estimation of liver iron concentration. <i>Journal of Magnetic Resonance Imaging</i> , <b>2018</b> , 48, 1069-1079	5.6	31
16	Texture analyses of quantitative susceptibility maps to differentiate Alzheimer's disease from cognitive normal and mild cognitive impairment. <i>Medical Physics</i> , <b>2016</b> , 43, 4718	4.4	31

15	Quantitative Susceptibility Mapping of Intracerebral Hemorrhages at Various Stages. <i>Journal of Magnetic Resonance Imaging</i> , <b>2016</b> , 44, 420-5	5.6	30
14	An iterative spherical mean value method for background field removal in MRI. <i>Magnetic Resonance in Medicine</i> , <b>2014</b> , 72, 1065-71	4.4	23
13	Quantification of cerebral perfusion using dynamic quantitative susceptibility mapping. <i>Magnetic Resonance in Medicine</i> , <b>2015</b> , 73, 1540-8	4.4	22
12	Quantifying changes in nigrosomes using quantitative susceptibility mapping and neuromelanin imaging for the diagnosis of early-stage Parkinson's disease. <i>British Journal of Radiology</i> , <b>2018</b> , 91, 20180037	3.4	19
11	Quantitative susceptibility mapping in patients with systemic lupus erythematosus: detection of abnormalities in normal-appearing basal ganglia. <i>European Radiology</i> , <b>2016</b> , 26, 1056-63	8	14
10	Phase unwrapping with graph cuts optimization and dual decomposition acceleration for 3D high-resolution MRI data. <i>Magnetic Resonance in Medicine</i> , <b>2017</b> , 77, 1353-1358	4.4	14
9	Phase-corrected bipolar gradients in multi-echo gradient-echo sequences for quantitative susceptibility mapping. <i>Magnetic Resonance Materials in Physics, Biology, and Medicine</i> , <b>2015</b> , 28, 347-55	2.8	13
8	Enhancing k-space quantitative susceptibility mapping by enforcing consistency on the cone data (CCD) with structural priors. <i>Magnetic Resonance in Medicine</i> , <b>2016</b> , 75, 823-30	4.4	12
7	Improved Detection of Cortical Gray Matter Involvement in Multiple Sclerosis with Quantitative Susceptibility Mapping. <i>Academic Radiology</i> , <b>2015</b> , 22, 1427-32	4.3	11
6	Substantia Nigra Volume Dissociates Bradykinesia and Rigidity from Tremor in Parkinson's Disease: A 7 Tesla Imaging Study. <i>Journal of Parkinson's Disease</i> , <b>2020</b> , 10, 591-604	5.3	11
5	Quantitative Susceptibility Mapping of the Substantia Nigra in Parkinson's Disease. <i>Applied Magnetic Resonance</i> , <b>2017</b> , 48, 533-544	0.8	6
4	On the influence of zero-padding on the nonlinear operations in Quantitative Susceptibility Mapping. <i>Magnetic Resonance Imaging</i> , <b>2017</b> , 35, 154-159	3.3	6
3	Magnetic source MRI: a new quantitative imaging of magnetic biomarkers. <i>Annual International Conference of the IEEE Engineering in Medicine and Biology Society IEEE Engineering in Medicine and Biology Society Annual International Conference</i> , <b>2009</b> , 2009, 53-6	0.9	6
2	The influence of molecular order and microstructure on the R2* and the magnetic susceptibility tensor. <i>Magnetic Resonance Imaging</i> , <b>2016</b> , 34, 682-9	3.3	4
1	Structure Prior Effects in Bayesian Approaches of Quantitative Susceptibility Mapping. <i>BioMed Research International</i> , <b>2016</b> , 2016, 2738231	3	3