Sheng-Kwei Victor Song

List of Publications by Year
in descending order

41 papers	5,143 citations	394421 19 h-index	302126 39 g-index
46 all docs	46 docs citations	46 times ranked	7653 citing authors

#	Article	IF	Citations
1	Diffusion tensor imaging detects and differentiates axon and myelin degeneration in mouse optic nerve after retinal ischemia. NeuroImage, 2003, 20, 1714-1722.	4.2	1,593
2	Demyelination increases radial diffusivity in corpus callosum of mouse brain. NeuroImage, 2005, 26, 132-140.	4.2	1,482
3	Ciliogenesis and Leftâ€“Right Axis Defects in Forkhead Factor HFH-4â€“Null Mice. American Journal of Respiratory Cell and Molecular Biology, 2000, 23, 45-51.	2.9	330
4	Quantification of increased cellularity during inflammatory demyelination. Brain, 2011, 134, 3590-3601.	7.6	317
5	High-resolution MRI characterization of human thrombus using a novel fibrin-targeted paramagnetic nanoparticle contrast agent. Magnetic Resonance in Medicine, 2000, 44, 867-872.	3.0	247
6	Bioresorbable pressure sensors protected with thermally grown silicon dioxide for the monitoring of chronic diseases and healing processes. Nature Biomedical Engineering, 2019, 3, 37-46.	22.5	185
7	Differentiation and quantification of inflammation, demyelination and axon injury or loss in multiple sclerosis. Brain, 2015, 138, 1223-1238.	7.6	133
8	Quantifying white matter tract diffusion parameters in the presence of increased extra-fiber cellularity and vasogenic edema. NeuroImage, 2014, 101, 310-319.	4.2	108
9	Diffusion basis spectrum imaging detects and distinguishes coexisting subclinical inflammation, demyelination and axonal injury in experimental autoimmune encephalomyelitis mice. NMR in Biomedicine, 2014, 27, 843-852.	2.8	100
10	Neuroinflammation and White Matter Alterations in Obesity Assessed by Diffusion Basis Spectrum Imaging. Frontiers in Human Neuroscience, 2019, 13, 464.	2.0	56
11	Spinal Cord Injury Disrupts Resting-State Networks in the Human Brain. Journal of Neurotrauma, 2018, 35, 864-873.	3.4	51
12	â€œA new imaging modality to non-invasively assess multiple sclerosis pathologyâ€• Journal of Neuroimmunology, 2017, 304, 81-85.	2.3	44
13	Diffusion MRI quantifies early axonal loss in the presence of nerve swelling. Journal of Neuroinflammation, 2017, 14, 78.	7.2	39
14	Axonal transport rate decreased at the onset of optic neuritis in EAE mice. NeuroImage, 2014, 100, 244-253.	4.2	35
15	Magnetic Resonance Imaging Biomarker of Axon Loss Reflects Cervical Spondylotic Myelopathy Severity. Spine, 2016, 41, 751-756.	2.0	32
16	Deep learning with diffusion basis spectrum imaging for classification of multiple sclerosis lesions. Annals of Clinical and Translational Neurology, 2020, 7, 695-706.	3.7	32
17	Diffusion Assessment of Cortical Changes, Induced by Traumatic Spinal Cord Injury. Brain Sciences, 2017, 7, 21.	2.3	28
18	Impact Speed Does Not Determine Severity of Spinal Cord Injury in Mice with Fixed Impact Displacement. Journal of Neurotrauma, 2009, 26, 1395-1404.	3.4	27

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19	Non-invasive quantification of inflammation, axonal and myelin injury in multiple sclerosis. Brain, 2021, 144, 213-223.	7.6	27
20	A simple, robust hardware device for passive or active respiratory gating in MRI and MRS experiments. Concepts in Magnetic Resonance, 2004, 21B, 40-48.	1.3	26
21	Diffusion basis spectrum imaging provides insights into MS pathology. Neurology: Neuroimmunology and NeuroInflammation, 2020, 7, .	6.0	25
22	Diffusion Basis Spectrum and Diffusion Tensor Imaging Detect Hippocampal Inflammation and Dendritic Injury in a Virus-Induced Mouse Model of Epilepsy. Frontiers in Neuroscience, 2018, 12, 77.	2.8	23
23	Diffusion fMRI detects white-matter dysfunction in mice with acute optic neuritis. Neurobiology of Disease, 2014, 67, 1-8.	4.4	20
24	Noninvasive Quantification of Axonal Loss in the Presence of Tissue Swelling in Traumatic Spinal Cord Injury Mice. Journal of Neurotrauma, 2019, 36, 2308-2315.	3.4	19
25	Histopathological correlation of diffusion basis spectrum imaging metrics of a biopsy-proven inflammatory demyelinating brain lesion: A brief report. Multiple Sclerosis Journal, 2019, 25, 1937-1941.	3.0	18
26	Diffusion Histology Imaging Combining Diffusion Basis Spectrum Imaging (DBSI) and Machine Learning Improves Detection and Classification of Glioblastoma Pathology. Clinical Cancer Research, 2020, 26, 5388-5399.	7.0	18
27	Diffusion basis spectrum imaging for identifying pathologies in MS subtypes. Annals of Clinical and Translational Neurology, 2019, 6, 2323-2327.	3.7	17
28	Fractional anisotropy to quantify cervical spondylotic myelopathy severity. Journal of Neurosurgical Sciences, 2018, 62, 406-412.	0.6	14
29	MRI-based assessment of function and dysfunction in myelinated axons. Proceedings of the National Academy of Sciences of the United States of America, 2018, 115, E10225-E10234.	7.1	13
30	Characterization of multiple sclerosis neuroinflammation and neurodegeneration with relaxation and diffusion basis spectrum imaging. Multiple Sclerosis Journal, 2022, 28, 418-428.	3.0	11
31	Phase-aligned multiple spin-echo averaging: a simple way to improve signal-to-noise ratio of in vivo mouse spinal cord diffusion tensor image. Magnetic Resonance Imaging, 2014, 32, 1335-1343.	1.8	10
32	The impact of edema and fiber crossing on diffusion MRI metrics assessed in an ex vivo nerve phantom: Multiâ€tensor model vs. diffusion orientation distribution function. NMR in Biomedicine, 2021, 34, e4414.	2.8	10
33	Signalâ€toâ€noise ratioâ€enhancing joint reconstruction for improved diffusion imaging of mouse spinal cord white matter injury. Magnetic Resonance in Medicine, 2016, 75, 852-858.	3.0	9
34	Diffusion histology imaging differentiates distinct pediatric brain tumor histology. Scientific Reports, 2021, 11, 4749.	3.3	9
35	Nucleus accumbens microstructure mediates the relationship between obesity and eating behavior in adults. Obesity, 2021, 29, 1328-1337.	3.0	8
36	Microstructural Periventricular White Matter Injury in Post-hemorrhagic Ventricular Dilatation. Neurology, 2022, 98, .	1.1	8

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37	Incorporating non-linear alignment and multi-compartmental modeling for improved human optic nerve diffusion imaging. NeuroImage, 2019, 196, 102-113.	4.2	6
38	Diffusion basis spectrum imaging measures anti-inflammatory and neuroprotective effects of fingolimod on murine optic neuritis. NeuroImage: Clinical, 2021, 31, 102732.	2.7	4
39	Diffusion Basis Spectrum Imaging Detects Axonal Loss After Transient Dexamethasone Treatment in Optic Neuritis Mice. Frontiers in Neuroscience, 2020, 14, 592063.	2.8	3
40	Analysis of combined clinical and diffusion basis spectrum imaging metrics to predict the outcome of chronic cervical spondylotic myelopathy following cervical decompression surgery. Journal of Neurosurgery: Spine, 2022, 37, 588-598.	1.7	2
41	338 Diffusion Basis Spectrum Imaging (DBSI) Prognosticates Outcomes for Cervical Spondylotic Myelopathy after Surgery. Journal of Clinical and Translational Science, 2022, 6, 62-62.	0.6	0