

Curtis L Johnson

List of Publications by Year in descending order

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Version: 2024-02-01

72
papers

2,515
citations

185998

28
h-index

214527

47
g-index

72
all docs

72
docs citations

72
times ranked

2288
citing authors

#	ARTICLE	IF	CITATIONS
1	Altered brain functional connectivity in the frontoparietal network following an ice hockey season. <i>European Journal of Sport Science</i> , 2023, 23, 684-692.	1.4	2
2	Quantitative effects of off-resonance related distortion on brain mechanical property estimation with magnetic resonance elastography. <i>NMR in Biomedicine</i> , 2022, 35, e4616.	1.6	6
3	Correlated noise in brain magnetic resonance elastography. <i>Magnetic Resonance in Medicine</i> , 2022, 87, 1313-1328.	1.9	9
4	Evaluation of cerebral cortex viscoelastic property estimation with nonlinear inversion magnetic resonance elastography. <i>Physics in Medicine and Biology</i> , 2022, 67, 095002.	1.6	6
5	Quantifying stability of parameter estimates for in vivo nearly incompressible transversely-isotropic brain MR elastography. <i>Biomedical Physics and Engineering Express</i> , 2022, 8, 035015.	0.6	3
6	Mapping heterogenous anisotropic tissue mechanical properties with transverse isotropic nonlinear inversion MR elastography. <i>Medical Image Analysis</i> , 2022, 78, 102432.	7.0	14
7	Effect of Arterial Stiffness and Cerebral Pulsatility on Hippocampal Tissue Integrity in Healthy Adults. <i>FASEB Journal</i> , 2022, 36, .	0.2	0
8	Relationships between aggression, sensation seeking, brain stiffness, and head impact exposure: Implications for head impact prevention in ice hockey. <i>Brain and Behavior</i> , 2022, 12, .	1.0	1
9	<sc>OSCILLATE</sc>: A low-rank approach for accelerated magnetic resonance elastography. <i>Magnetic Resonance in Medicine</i> , 2022, 88, 1659-1672.	1.9	12
10	Data-driven uncertainty quantification in computational human head models. <i>Computer Methods in Applied Mechanics and Engineering</i> , 2022, 398, 115108.	3.4	5
11	Anisotropic mechanical properties in the healthy human brain estimated with multi-excitation transversely isotropic MR elastography. <i>Brain Multiphysics</i> , 2022, 3, 100051.	0.8	12
12	Brain stiffness following recovery in a patient with an episode of low-pressure hydrocephalus: case report. <i>Child's Nervous System</i> , 2021, 37, 2695-2698.	0.6	3
13	A heterogenous, time harmonic, nearly incompressible transverse isotropic finite element brain simulation platform for MR elastography. <i>Physics in Medicine and Biology</i> , 2021, 66, 055029.	1.6	25
14	Blood lipid markers are associated with hippocampal viscoelastic properties and memory in humans. <i>Journal of Cerebral Blood Flow and Metabolism</i> , 2021, 41, 1417-1427.	2.4	8
15	Effect of Aging on the Viscoelastic Properties of Hippocampal Subfields Assessed with High-Resolution MR Elastography. <i>Cerebral Cortex</i> , 2021, 31, 2799-2811.	1.6	28
16	The construct and concurrent validity of brief standing sway assessments in children with and without cerebral palsy. <i>Gait and Posture</i> , 2021, 84, 293-299.	0.6	2
17	Relation between cerebrovascular function and hippocampal viscoelastic properties in humans. <i>FASEB Journal</i> , 2021, 35, .	0.2	0
18	Aging brain mechanics: Progress and promise of magnetic resonance elastography. <i>NeuroImage</i> , 2021, 232, 117889.	2.1	45

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19	Calibration of a Heterogeneous Brain Model Using a Subject-Specific Inverse Finite Element Approach. <i>Frontiers in Bioengineering and Biotechnology</i> , 2021, 9, 664268.	2.0	18
20	MR Imaging of Human Brain Mechanics In Vivo: New Measurements to Facilitate the Development of Computational Models of Brain Injury. <i>Annals of Biomedical Engineering</i> , 2021, 49, 2677-2692.	1.3	24
21	Expanding Alzheimer's Research at the University of Delaware and Beyond. <i>Delaware Journal of Public Health</i> , 2021, 7, 24-30.	0.2	0
22	Integrating material properties from magnetic resonance elastography into subject-specific computational models for the human brain. <i>Brain Multiphysics</i> , 2021, 2, 100038.	0.8	7
23	Hippocampal viscoelasticity and episodic memory performance in healthy older adults examined with magnetic resonance elastography. <i>Brain Imaging and Behavior</i> , 2020, 14, 175-185.	1.1	38
24	Standardized space atlas of the viscoelastic properties of the human brain. <i>Human Brain Mapping</i> , 2020, 41, 5282-5300.	1.9	48
25	Impact of pulse sequence, analysis method, and signal to noise ratio on the accuracy of intervertebral disc T2 measurement. <i>JOR Spine</i> , 2020, 3, e1102.	1.5	3
26	Magnetic Resonance Elastography of Human Hippocampal Subfields: CA3-Dentate Gyrus Viscoelasticity Predicts Relational Memory Accuracy. <i>Journal of Cognitive Neuroscience</i> , 2020, 32, 1704-1713.	1.1	17
27	Anteroposterior balance reactions in children with spastic cerebral palsy. <i>Developmental Medicine and Child Neurology</i> , 2020, 62, 700-708.	1.1	8
28	Brain Stiffness Relates to Dynamic Balance Reactions in Children With Cerebral Palsy. <i>Journal of Child Neurology</i> , 2020, 35, 463-471.	0.7	13
29	Hippocampal stiffness in mesial temporal lobe epilepsy measured with MR elastography: Preliminary comparison with healthy participants. <i>NeuroImage: Clinical</i> , 2020, 27, 102313.	1.4	10
30	Viscoelasticity of reward and control systems in adolescent risk taking. <i>NeuroImage</i> , 2020, 215, 116850.	2.1	12
31	Mechanical property alterations across the cerebral cortex due to Alzheimer's disease. <i>Brain Communications</i> , 2020, 2, fcz049.	1.5	57
32	Multi-Excitation Magnetic Resonance Elastography of the Brain: Wave Propagation in Anisotropic White Matter. <i>Journal of Biomechanical Engineering</i> , 2020, 142, .	0.6	32
33	The cross-sectional relationships between age, standing static balance, and standing dynamic balance reactions in typically developing children. <i>Gait and Posture</i> , 2019, 73, 20-25.	0.6	11
34	Structural and Functional MRI Evidence for Distinct Medial Temporal and Prefrontal Roles in Context-dependent Relational Memory. <i>Journal of Cognitive Neuroscience</i> , 2019, 31, 1857-1872.	1.1	22
35	Dynamic stability during walking in children with and without cerebral palsy. <i>Gait and Posture</i> , 2019, 72, 182-187.	0.6	32
36	Reliable preparation of agarose phantoms for use in quantitative magnetic resonance elastography. <i>Journal of the Mechanical Behavior of Biomedical Materials</i> , 2019, 97, 65-73.	1.5	23

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37	Insights Into Traumatic Brain Injury From MRI of Harmonic Brain Motion. Journal of Experimental Neuroscience, 2019, 13, 117906951984044.	2.3	22
38	Altered brain tissue viscoelasticity in pediatric cerebral palsy measured by magnetic resonance elastography. NeuroImage: Clinical, 2019, 22, 101750.	1.4	27
39	Association between large elastic artery stiffness and brain mechanical properties. FASEB Journal, 2019, 33, lb487.	0.2	0
40	Quantitative Elastography Methods in Liver Disease: Current Evidence and Future Directions. Radiology, 2018, 286, 738-763.	3.6	215
41	High-resolution magnetic resonance elastography reveals differences in subcortical gray matter viscoelasticity between young and healthy older adults. Neurobiology of Aging, 2018, 65, 158-167.	1.5	77
42	Mechanical properties of porcine brain tissue in vivo and ex vivo estimated by MR elastography. Journal of Biomechanics, 2018, 69, 10-18.	0.9	45
43	Double dissociation of structure-function relationships in memory and fluid intelligence observed with magnetic resonance elastography. NeuroImage, 2018, 171, 99-106.	2.1	31
44	Relationships between scalp, brain, and skull motion estimated using magnetic resonance elastography. Journal of Biomechanics, 2018, 73, 40-49.	0.9	13
45	Magnetic resonance elastography for examining developmental changes in the mechanical properties of the brain. Developmental Cognitive Neuroscience, 2018, 33, 176-181.	1.9	44
46	Quantitative Testing of fMRI-Compatibility of an Electrically Active Mechatronic Device for Robot-Assisted Sensorimotor Protocols. IEEE Transactions on Biomedical Engineering, 2018, 65, 1595-1606.	2.5	11
47	Associations of functional connectivity and walking performance in multiple sclerosis. Neuropsychologia, 2018, 117, 8-12.	0.7	16
48	Mechanical properties of the in vivo adolescent human brain. Developmental Cognitive Neuroscience, 2018, 34, 27-33.	1.9	55
49	High-resolution ¹ H-MRSI of the brain using short-TE SPICE. Magnetic Resonance in Medicine, 2017, 77, 467-479.	1.9	37
50	MR elastography measurement of the effect of passive warmup prior to eccentric exercise on thigh muscle mechanical properties. Journal of Magnetic Resonance Imaging, 2017, 46, 1115-1127.	1.9	12
51	The Relationship of Three-Dimensional Human Skull Motion to Brain Tissue Deformation in Magnetic Resonance Elastography Studies. Journal of Biomechanical Engineering, 2017, 139, .	0.6	25
52	Aerobic fitness, hippocampal viscoelasticity, and relational memory performance. NeuroImage, 2017, 153, 179-188.	2.1	87
53	Exercise training effects on memory and hippocampal viscoelasticity in multiple sclerosis: a novel application of magnetic resonance elastography. Neuroradiology, 2017, 59, 61-67.	1.1	88
54	Removal of nuisance signals from limited and sparse ¹ H MRSI data using a union-of-subspaces model. Magnetic Resonance in Medicine, 2016, 75, 488-497.	1.9	44

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55	High-resolution ¹ H-MRSI of the brain using SPICE: Data acquisition and image reconstruction. <i>Magnetic Resonance in Medicine</i> , 2016, 76, 1059-1070.	1.9	83
56	Aerobic fitness is associated with greater hippocampal cerebral blood flow in children. <i>Developmental Cognitive Neuroscience</i> , 2016, 20, 52-58.	1.9	72
57	Magnetic resonance elastography (MRE) of the human brain: technique, findings and clinical applications. <i>Physics in Medicine and Biology</i> , 2016, 61, R401-R437.	1.6	176
58	Medial temporal lobe viscoelasticity and relational memory performance. <i>NeuroImage</i> , 2016, 132, 534-541.	2.1	77
59	Magnetic Resonance Elastography Demonstrating Low Brain Stiffness in a Patient with Low-Pressure Hydrocephalus: Case Report. <i>Pediatric Neurosurgery</i> , 2016, 51, 257-262.	0.4	14
60	Viscoelasticity of subcortical gray matter structures. <i>Human Brain Mapping</i> , 2016, 37, 4221-4233.	1.9	88
61	Observation of direction-dependent mechanical properties in the human brain with multi-excitation MR elastography. <i>Journal of the Mechanical Behavior of Biomedical Materials</i> , 2016, 59, 538-546.	1.5	58
62	A novel head-neck cooling device for concussion injury in contact sports. <i>Translational Neuroscience</i> , 2015, 6, 20-31.	0.7	20
63	Simultaneous, multidirectional acquisition of displacement fields in magnetic resonance elastography of the in vivo human brain. <i>Journal of Magnetic Resonance Imaging</i> , 2015, 42, 297-304.	1.9	37
64	Real-time 4D phase unwrapping applied to magnetic resonance elastography. <i>Magnetic Resonance in Medicine</i> , 2015, 73, 2321-2331.	1.9	35
65	Improved Low-Rank Filtering of Magnetic Resonance Spectroscopic Imaging Data Corrupted by Noise and B_0 Field Inhomogeneity. <i>IEEE Transactions on Biomedical Engineering</i> , 2015, 63, 1-1.	2.5	22
66	3D multislab, multishot acquisition for fast, whole-brain MR elastography with high signal-to-noise efficiency. <i>Magnetic Resonance in Medicine</i> , 2014, 71, 477-485.	1.9	84
67	Including Spatial Information in Nonlinear Inversion MR Elastography Using Soft Prior Regularization. <i>IEEE Transactions on Medical Imaging</i> , 2013, 32, 1901-1909.	5.4	59
68	Local mechanical properties of white matter structures in the human brain. <i>NeuroImage</i> , 2013, 79, 145-152.	2.1	158
69	Micromechanical properties of hydrogels measured with MEMS resonant sensors. <i>Biomedical Microdevices</i> , 2013, 15, 311-319.	1.4	28
70	Magnetic resonance elastography of the brain using multishot spiral readouts with self-navigated motion correction. <i>Magnetic Resonance in Medicine</i> , 2013, 70, 404-412.	1.9	93
71	Effect of off-frequency sampling in magnetic resonance elastography. <i>Magnetic Resonance Imaging</i> , 2012, 30, 205-212.	1.0	6
72	Effects of weight loss or exercise on muscle quality in obese older women. <i>FASEB Journal</i> , 2012, 26, 367.3.	0.2	0