

Michael I Miller

List of Publications by Year in descending order

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206
papers

16,155
citations

17405

63
h-index

18075

120
g-index

222
all docs

222
docs citations

222
times ranked

14699
citing authors

#	ARTICLE	IF	CITATIONS
1	Stereotaxic white matter atlas based on diffusion tensor imaging in an ICBM template. <i>NeuroImage</i> , 2008, 40, 570-582.	2.1	1,528
2	Computing Large Deformation Metric Mappings via Geodesic Flows of Diffeomorphisms. <i>International Journal of Computer Vision</i> , 2005, 61, 139-157.	10.9	1,231
3	Evidence of Structural Remodeling in the Dyssynchronous Failing Heart. <i>Circulation Research</i> , 2006, 98, 125-132.	2.0	573
4	Computational anatomy: an emerging discipline. <i>Quarterly of Applied Mathematics</i> , 1998, 56, 617-694.	0.5	482
5	Atlas-based whole brain white matter analysis using large deformation diffeomorphic metric mapping: Application to normal elderly and Alzheimer's disease participants. <i>NeuroImage</i> , 2009, 46, 486-499.	2.1	456
6	Mapping visual cortex in monkeys and humans using surface-based atlases. <i>Vision Research</i> , 2001, 41, 1359-1378.	0.7	401
7	On the Metrics and Euler-Lagrange Equations of Computational Anatomy. <i>Annual Review of Biomedical Engineering</i> , 2002, 4, 375-405.	5.7	377
8	Variational problems on flows of diffeomorphisms for image matching. <i>Quarterly of Applied Mathematics</i> , 1998, 56, 587-600.	0.5	341
9	DTI tractography based parcellation of white matter: Application to the mid-sagittal morphology of corpus callosum. <i>NeuroImage</i> , 2005, 26, 195-205.	2.1	335
10	Anatomical Characterization of Human Fetal Brain Development with Diffusion Tensor Magnetic Resonance Imaging. <i>Journal of Neuroscience</i> , 2009, 29, 4263-4273.	1.7	308
11	Geodesic Shooting for Computational Anatomy. <i>Journal of Mathematical Imaging and Vision</i> , 2006, 24, 209-228.	0.8	291
12	Multi-contrast human neonatal brain atlas: Application to normal neonate development analysis. <i>NeuroImage</i> , 2011, 56, 8-20.	2.1	277
13	Changes in hippocampal volume and shape across time distinguish dementia of the Alzheimer type from healthy aging. <i>NeuroImage</i> , 2003, 20, 667-682.	2.1	239
14	Basal Ganglia Volume and Shape in Children With Attention Deficit Hyperactivity Disorder. <i>American Journal of Psychiatry</i> , 2009, 166, 74-82.	4.0	217
15	Measuring and Mapping Cardiac Fiber and Laminar Architecture Using Diffusion Tensor MR Imaging. <i>Annals of the New York Academy of Sciences</i> , 2005, 1047, 296-307.	1.8	216
16	High-Dimensional Mapping of the Hippocampus in Depression. <i>American Journal of Psychiatry</i> , 2003, 160, 83-89.	4.0	187
17	Large deformation diffeomorphic metric mapping of vector fields. <i>IEEE Transactions on Medical Imaging</i> , 2005, 24, 1216-1230.	5.4	184
18	Multi-contrast large deformation diffeomorphic metric mapping for diffusion tensor imaging. <i>NeuroImage</i> , 2009, 47, 618-627.	2.1	179

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19	Large Deformation Diffeomorphic Metric Curve Mapping. International Journal of Computer Vision, 2008, 80, 317-336.	10.9	175
20	Computational Medicine: Translating Models to Clinical Care. Science Translational Medicine, 2012, 4, 158rv11.	5.8	171
21	Representations of Knowledge in Complex Systems. Journal of the Royal Statistical Society Series B: Methodological, 1994, 56, 549-581.	0.8	169
22	Diffusion Tensor Magnetic Resonance Imaging of Wallerian Degeneration in Rat Spinal Cord after Dorsal Root Axotomy. Journal of Neuroscience, 2009, 29, 3160-3171.	1.7	167
23	Increasing the power of functional maps of the medial temporal lobe by using large deformation diffeomorphic metric mapping. Proceedings of the National Academy of Sciences of the United States of America, 2005, 102, 9685-9690.	3.3	164
24	Computational anatomy: shape, growth, and atrophy comparison via diffeomorphisms. NeuroImage, 2004, 23, S19-S33.	2.1	163
25	Abnormalities of hippocampal surface structure in very mild dementia of the Alzheimer type. NeuroImage, 2006, 30, 52-60.	2.1	158
26	Atlas-based analysis of neurodevelopment from infancy to adulthood using diffusion tensor imaging and applications for automated abnormality detection. NeuroImage, 2010, 52, 415-428.	2.1	152
27	Bayesian Parameter Estimation and Segmentation in the Multi-Atlas Random Orbit Model. PLoS ONE, 2013, 8, e65591.	1.1	150
28	MRICloud: Delivering High-Throughput MRI Neuroinformatics as Cloud-Based Software as a Service. Computing in Science and Engineering, 2016, 18, 21-35.	1.2	148
29	An MRI-based atlas and database of the developing mouse brain. NeuroImage, 2011, 54, 80-89.	2.1	147
30	Abnormalities of Thalamic Volume and Shape in Schizophrenia. American Journal of Psychiatry, 2004, 161, 896-902.	4.0	146
31	Regional shape abnormalities in mild cognitive impairment and Alzheimer's disease. NeuroImage, 2009, 45, 656-661.	2.1	146
32	Large Deformation Diffeomorphism and Momentum Based Hippocampal Shape Discrimination in Dementia of the Alzheimer type. IEEE Transactions on Medical Imaging, 2007, 26, 462-470.	5.4	136
33	Statistical Analysis of Hippocampal Asymmetry in Schizophrenia. NeuroImage, 2001, 14, 531-545.	2.1	134
34	Plasma ceramides are altered in mild cognitive impairment and predict cognitive decline and hippocampal volume loss. Alzheimer's and Dementia, 2010, 6, 378-385.	0.4	133
35	Atlas-based analysis of resting-state functional connectivity: Evaluation for reproducibility and multi-modal anatomy-function correlation studies. NeuroImage, 2012, 61, 613-621.	2.1	132
36	On the Geometry and Shape of Brain Sub-Manifolds. International Journal of Pattern Recognition and Artificial Intelligence, 1997, 11, 1317-1343.	0.7	124

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37	Smooth functional and structural maps on the neocortex via orthonormal bases of the Laplace-Beltrami operator. IEEE Transactions on Medical Imaging, 2006, 25, 1296-1306.	5.4	124
38	Shape abnormalities of subcortical and ventricular structures in mild cognitive impairment and Alzheimer's disease: Detecting, quantifying, and predicting. Human Brain Mapping, 2014, 35, 3701-3725.	1.9	122
39	Cognitive reserve and long-term change in cognition in aging and preclinical Alzheimer's disease. Neurobiology of Aging, 2017, 60, 164-172.	1.5	118
40	High-resolution fMRI investigation of the medial temporal lobe. Human Brain Mapping, 2007, 28, 959-966.	1.9	110
41	Evolutions equations in computational anatomy. NeuroImage, 2009, 45, S40-S50.	2.1	106
42	Basal Ganglia Shapes Predict Social, Communication, and Motor Dysfunctions in Boys With Autism Spectrum Disorder. Journal of the American Academy of Child and Adolescent Psychiatry, 2010, 49, 539-551.e4.	0.3	103
43	Bayesian Construction of Geometrically Based Cortical Thickness Metrics. NeuroImage, 2000, 12, 676-687.	2.1	100
44	Diffeomorphic metric surface mapping in subregion of the superior temporal gyrus. NeuroImage, 2007, 34, 1149-1159.	2.1	94
45	Inferring changepoint times of medial temporal lobe morphometric change in preclinical Alzheimer's disease. NeuroImage: Clinical, 2014, 5, 178-187.	1.4	94
46	Correction of B0 susceptibility induced distortion in diffusion-weighted images using large-deformation diffeomorphic metric mapping. Magnetic Resonance Imaging, 2008, 26, 1294-1302.	1.0	93
47	Multi-structure network shape analysis via normal surface momentum maps. NeuroImage, 2008, 42, 1430-1438.	2.1	92
48	The Brain Chart of Aging: Machine learning analytics reveals links between brain aging, white matter disease, amyloid burden, and cognition in the iSTAGING consortium of 10,216 harmonized MR scans. Alzheimer's and Dementia, 2021, 17, 89-102.	0.4	92
49	Resource atlases for multi-atlas brain segmentations with multiple ontology levels based on T1-weighted MRI. NeuroImage, 2016, 125, 120-130.	2.1	91
50	Computational anatomy and neuropsychiatric disease: probabilistic assessment of variation and statistical inference of group difference, hemispheric asymmetry, and time-dependent change. NeuroImage, 2004, 23, S56-S68.	2.1	90
51	Parallel transport in diffeomorphisms distinguishes the time-dependent pattern of hippocampal surface deformation due to healthy aging and the dementia of the Alzheimer's type. NeuroImage, 2008, 40, 68-76.	2.1	84
52	Bayesian template estimation in computational anatomy. NeuroImage, 2008, 42, 252-261.	2.1	84
53	Longitudinal characterization of brain atrophy of a Huntington's disease mouse model by automated morphological analyses of magnetic resonance images. NeuroImage, 2010, 49, 2340-2351.	2.1	84
54	Relationship of medial temporal lobe atrophy, APOE genotype, and cognitive reserve in preclinical Alzheimer's disease. Human Brain Mapping, 2015, 36, 2826-2841.	1.9	84

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55	Predicting progression from normal cognition to mild cognitive impairment for individuals at 5 years. <i>Brain</i> , 2018, 141, 877-887.	3.7	84
56	Mapping postnatal mouse brain development with diffusion tensor microimaging. <i>NeuroImage</i> , 2005, 26, 1042-1051.	2.1	81
57	Brain Segmentation and the Generation of Cortical Surfaces. <i>NeuroImage</i> , 1999, 9, 461-476.	2.1	80
58	The diffeomorphometry of temporal lobe structures in preclinical Alzheimer's disease. <i>NeuroImage: Clinical</i> , 2013, 3, 352-360.	1.4	80
59	Computational cardiac anatomy using MRI. <i>Magnetic Resonance in Medicine</i> , 2004, 52, 1167-1174.	1.9	67
60	APOE related hippocampal shape alteration in geriatric depression. <i>NeuroImage</i> , 2009, 44, 620-626.	2.1	67
61	The emerging discipline of Computational Functional Anatomy. <i>NeuroImage</i> , 2009, 45, S16-S39.	2.1	67
62	Estimating linear cortical magnification in human primary visual cortex via dynamic programming. <i>NeuroImage</i> , 2006, 31, 125-138.	2.1	66
63	Quantitative analysis of brain pathology based on MRI and brain atlases—Applications for cerebral palsy. <i>NeuroImage</i> , 2011, 54, 1854-1861.	2.1	65
64	Hamiltonian Systems and Optimal Control in Computational Anatomy: 100 Years Since D'Arcy Thompson. <i>Annual Review of Biomedical Engineering</i> , 2015, 17, 447-509.	5.7	63
65	Hippocampal deformities in the unaffected siblings of schizophrenia subjects. <i>Biological Psychiatry</i> , 2003, 54, 1234-1240.	0.7	62
66	Amygdala Volume Analysis in Female Twins with Major Depression. <i>Biological Psychiatry</i> , 2007, 62, 415-422.	0.7	61
67	A Bayesian Generative Model for Surface Template Estimation. <i>International Journal of Biomedical Imaging</i> , 2010, 2010, 1-14.	3.0	61
68	Identifying Changepoints in Biomarkers During the Preclinical Phase of Alzheimer's Disease. <i>Frontiers in Aging Neuroscience</i> , 2019, 11, 74.	1.7	59
69	Regionally selective atrophy of subcortical structures in prodromal HD as revealed by statistical shape analysis. <i>Human Brain Mapping</i> , 2014, 35, 792-809.	1.9	58
70	Linking white matter and deep gray matter alterations in premanifest Huntington disease. <i>NeuroImage: Clinical</i> , 2016, 11, 450-460.	1.4	58
71	Diffeomorphometry and geodesic positioning systems for human anatomy. <i>Technology</i> , 2014, 02, 36-43.	1.4	57
72	Using deep Siamese neural networks for detection of brain asymmetries associated with Alzheimer's Disease and Mild Cognitive Impairment. <i>Magnetic Resonance Imaging</i> , 2019, 64, 190-199.	1.0	56

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73	Multi-Contrast Multi-Atlas Parcellation of Diffusion Tensor Imaging of the Human Brain. PLoS ONE, 2014, 9, e96985.	1.1	55
74	Cortical thickness in relation to clinical symptom onset in preclinical AD. NeuroImage: Clinical, 2016, 12, 116-122.	1.4	55
75	The diffeomorphometry of regional shape change rates and its relevance to cognitive deterioration in mild cognitive impairment and Alzheimer's disease. Human Brain Mapping, 2015, 36, 2093-2117.	1.9	54
76	Multi-atlas tool for automated segmentation of brain gray matter nuclei and quantification of their magnetic susceptibility. NeuroImage, 2019, 191, 337-349.	2.1	54
77	Amygdalar atrophy in symptomatic Alzheimer's disease based on diffeomorphometry: the BIOCARD cohort. Neurobiology of Aging, 2015, 36, S3-S10.	1.5	53
78	Tools for multiple granularity analysis of brain MRI data for individualized image analysis. NeuroImage, 2014, 101, 168-176.	2.1	52
79	Segmentation of brain magnetic resonance images based on multi-atlas likelihood fusion: testing using data with a broad range of anatomical and photometric profiles. Frontiers in Neuroscience, 2015, 9, 61.	1.4	51
80	Neuroanatomical asymmetry patterns in individuals with schizophrenia and their non-psychotic siblings. NeuroImage, 2009, 47, 1221-1229.	2.1	50
81	Atlas-Based Neuroinformatics via MRI: Harnessing Information from Past Clinical Cases and Quantitative Image Analysis for Patient Care. Annual Review of Biomedical Engineering, 2013, 15, 71-92.	5.7	49
82	Collaborative computational anatomy: An MRI morphometry study of the human brain via diffeomorphic metric mapping. Human Brain Mapping, 2009, 30, 2132-2141.	1.9	48
83	Time sequence diffeomorphic metric mapping and parallel transport track time-dependent shape changes. NeuroImage, 2009, 45, S51-S60.	2.1	48
84	Shape and diffusion tensor imaging based integrative analysis of the hippocampus and the amygdala in Alzheimer's disease. Magnetic Resonance Imaging, 2016, 34, 1087-1099.	1.0	47
85	Effects of protocol and obesity on dose conversion factors in adult body CT. Medical Physics, 2012, 39, 6550-6571.	1.6	46
86	Cortical thickness atrophy in the transentorhinal cortex in mild cognitive impairment. NeuroImage: Clinical, 2019, 21, 101617.	1.4	46
87	Combining anatomical manifold information via diffeomorphic metric mappings for studying cortical thinning of the cingulate gyrus in schizophrenia. NeuroImage, 2007, 37, 821-833.	2.1	45
88	Cognitive reserve and cortical thickness in preclinical Alzheimer's disease. Brain Imaging and Behavior, 2017, 11, 357-367.	1.1	45
89	Transport of Relational Structures in Groups of Diffeomorphisms. Journal of Mathematical Imaging and Vision, 2008, 32, 41-56.	0.8	44
90	Large deformation diffeomorphic metric mapping registration of reconstructed 3D histological section images and in vivo MR images. Frontiers in Human Neuroscience, 2010, 4, 43.	1.0	44

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91	Strategies for the representation of a tone in background noise in the temporal aspects of the discharge patterns of auditory nerve fibers. <i>Journal of the Acoustical Society of America</i> , 1987, 81, 665-679.	0.5	43
92	Atlas Generation for Subcortical and Ventricular Structures With Its Applications in Shape Analysis. <i>IEEE Transactions on Image Processing</i> , 2010, 19, 1539-1547.	6.0	43
93	Network Neurodegeneration in Alzheimer's Disease via MRI Based Shape Diffeomorphometry and High-Field Atlasing. <i>Frontiers in Bioengineering and Biotechnology</i> , 2015, 3, 54.	2.0	43
94	Region-of-interest-based analysis with application of cortical thickness variation of left planum temporale in schizophrenia and psychotic bipolar disorder. <i>Human Brain Mapping</i> , 2008, 29, 973-985.	1.9	41
95	Magnetic Resonance Diffusion Tensor Microimaging Reveals a Role for Bcl-x in Brain Development and Homeostasis. <i>Journal of Neuroscience</i> , 2005, 25, 1881-1888.	1.7	39
96	Core Competencies for Undergraduates in Bioengineering and Biomedical Engineering: Findings, Consequences, and Recommendations. <i>Annals of Biomedical Engineering</i> , 2020, 48, 905-912.	1.3	37
97	Computational analysis of LDDMM for brain mapping. <i>Frontiers in Neuroscience</i> , 2013, 7, 151.	1.4	36
98	Population-averaged macaque brain atlas with high-resolution ex vivo DTI integrated into in vivo space. <i>Brain Structure and Function</i> , 2017, 222, 4131-4147.	1.2	36
99	Baseline Shape Diffeomorphometry Patterns of Subcortical and Ventricular Structures in Predicting Conversion of Mild Cognitive Impairment to Alzheimer's Disease. <i>Journal of Alzheimer's Disease</i> , 2015, 44, 599-611.	1.2	35
100	APOE Affects the Volume and Shape of the Amygdala and the Hippocampus in Mild Cognitive Impairment and Alzheimer's Disease: Age Matters. <i>Journal of Alzheimer's Disease</i> , 2015, 47, 645-660.	1.2	35
101	Evaluation of Cross-Protocol Stability of a Fully Automated Brain Multi-Atlas Parcellation Tool. <i>PLoS ONE</i> , 2015, 10, e0133533.	1.1	35
102	Diffeomorphic Matching of Diffusion Tensor Images. , 2006, 2006, 67.		34
103	Content-based image retrieval for brain MRI: An image-searching engine and population-based analysis to utilize past clinical data for future diagnosis. <i>NeuroImage: Clinical</i> , 2015, 7, 367-376.	1.4	34
104	Elucidation of White Matter Tracts of the Human Amygdala by Detailed Comparison between High-Resolution Postmortem Magnetic Resonance Imaging and Histology. <i>Frontiers in Neuroanatomy</i> , 2017, 11, 16.	0.9	33
105	ASL-MRCloud: An online tool for the processing of ASL MRI data. <i>NMR in Biomedicine</i> , 2019, 32, e4051.	1.6	33
106	Fully-automated, multi-stage hippocampus mapping in very mild Alzheimer disease. <i>Hippocampus</i> , 2009, 19, 541-548.	0.9	32
107	Distinct abnormalities of the primate prefrontal cortex caused by ionizing radiation in early or midgestation. <i>Journal of Comparative Neurology</i> , 2013, 521, 1040-1053.	0.9	32
108	Progressive medial temporal lobe atrophy during preclinical Alzheimer's disease. <i>NeuroImage: Clinical</i> , 2017, 16, 439-446.	1.4	32

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109	Structural-functional correlations between hippocampal volume and cortico-limbic emotional responses in depressed children. <i>Cognitive, Affective and Behavioral Neuroscience</i> , 2013, 13, 135-151.	1.0	31
110	Diffeomorphic Registration With Intensity Transformation and Missing Data: Application to 3D Digital Pathology of Alzheimer's Disease. <i>Frontiers in Neuroscience</i> , 2020, 14, 52.	1.4	31
111	Diffeomorphic brain mapping based on T1-weighted images: Improvement of registration accuracy by multichannel mapping. <i>Journal of Magnetic Resonance Imaging</i> , 2013, 37, 76-84.	1.9	29
112	Morphometry of the amygdala in schizophrenia and psychotic bipolar disorder. <i>Schizophrenia Research</i> , 2015, 164, 199-202.	1.1	28
113	Mapping the order and pattern of brain structural MRI changes using change-point analysis in premanifest Huntington's disease. <i>Human Brain Mapping</i> , 2017, 38, 5035-5050.	1.9	28
114	Principal Component Based Diffeomorphic Surface Mapping. <i>IEEE Transactions on Medical Imaging</i> , 2012, 31, 302-311.	5.4	27
115	Entorhinal and Transentorhinal Atrophy in Preclinical Alzheimer's Disease. <i>Frontiers in Neuroscience</i> , 2020, 14, 804.	1.4	27
116	Association of peripheral inflammatory markers with connectivity in large-scale functional brain networks of non-demented older adults. <i>Brain, Behavior, and Immunity</i> , 2020, 87, 388-396.	2.0	27
117	Landmark-referenced voxel-based analysis of diffusion tensor images of the brainstem white matter tracts. <i>NeuroImage</i> , 2009, 44, 906-913.	2.1	26
118	Spatiotemporal mapping of brain atrophy in mouse models of Huntington's disease using longitudinal in vivo magnetic resonance imaging. <i>NeuroImage</i> , 2012, 60, 2086-2095.	2.1	25
119	Test-retest reproducibility of a multi-atlas automated segmentation tool on multimodality brain MRI. <i>Brain and Behavior</i> , 2019, 9, e01363.	1.0	25
120	The Association of Adverse Pregnancy Outcomes and Cardiovascular Disease: Current Knowledge and Future Directions. <i>Current Treatment Options in Cardiovascular Medicine</i> , 2020, 22, 1.	0.4	25
121	Computational Method for Identifying and Quantifying Shape Features of Human Left Ventricular Remodeling. <i>Annals of Biomedical Engineering</i> , 2009, 37, 1043-1054.	1.3	24
122	Entorhinal and transentorhinal atrophy in mild cognitive impairment using longitudinal diffeomorphic morphometry. <i>Alzheimer's and Dementia: Diagnosis, Assessment and Disease Monitoring</i> , 2017, 9, 41-50.	1.2	24
123	Education is associated with sub-regions of the hippocampus and the amygdala vulnerable to neuropathologies of Alzheimer's disease. <i>Brain Structure and Function</i> , 2017, 222, 1469-1479.	1.2	24
124	Resting-State Functional Connectivity Is Associated With Cerebrospinal Fluid Levels of the Synaptic Protein NPTX2 in Non-demented Older Adults. <i>Frontiers in Aging Neuroscience</i> , 2019, 11, 132.	1.7	22
125	Evaluation of group-specific, whole-brain atlas generation using Volume-based Template Estimation (VTE): Application to normal and Alzheimer's populations. <i>NeuroImage</i> , 2014, 84, 406-419.	2.1	21
126	Cortical Hemisphere Registration Via Large Deformation Diffeomorphic Metric Curve Mapping. , 2007, 10, 186-193.		21

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127	Magnetic resonance imaging of mouse brain networks plasticity following motor learning. PLoS ONE, 2019, 14, e0216596.	1.1	20
128	Brain Oxygen Extraction by Using MRI in Older Individuals: Relationship to Apolipoprotein E Genotype and Amyloid Burden. Radiology, 2019, 292, 140-148.	3.6	20
129	Intrinsic and extrinsic analysis in computational anatomy. NeuroImage, 2008, 39, 1803-1814.	2.1	19
130	High-throughput neuro-imaging informatics. Frontiers in Neuroinformatics, 2013, 7, 31.	1.3	19
131	Cognitive reserve and rate of change in Alzheimer's and cerebrovascular disease biomarkers among cognitively normal individuals. Neurobiology of Aging, 2020, 88, 33-41.	1.5	19
132	Characterization of Mouse Brain and Its Development using Diffusion Tensor Imaging and Computational Techniques. , 2006, 2006, 2252-5.		18
133	Semisupervised learning from dissimilarity data. Computational Statistics and Data Analysis, 2008, 52, 4643-4657.	0.7	18
134	Robust Diffeomorphic Mapping via Geodesically Controlled Active Shapes. International Journal of Biomedical Imaging, 2013, 2013, 1-19.	3.0	18
135	Parametric Surface Diffeomorphometry for Low Dimensional Embeddings of Dense Segmentations and Imagery. IEEE Transactions on Pattern Analysis and Machine Intelligence, 2017, 39, 1195-1208.	9.7	18
136	On variational solutions for whole brain serial-section histology using a Sobolev prior in the computational anatomy random orbit model. PLoS Computational Biology, 2018, 14, e1006610.	1.5	17
137	Patient Specific Dosimetry Phantoms Using Multichannel LDDMM of the Whole Body. International Journal of Biomedical Imaging, 2011, 2011, 1-9.	3.0	15
138	Direct estimation of patient attributes from anatomical MRI based on multi-atlas voting. NeuroImage: Clinical, 2016, 12, 570-581.	1.4	15
139	Detection of Time-Varying Structures by Large Deformation Diffeomorphic Metric Mapping to Aid Reading of High-Resolution CT Images of the Lung. PLoS ONE, 2014, 9, e85580.	1.1	14
140	A Fully-Automated Subcortical and Ventricular Shape Generation Pipeline Preserving Smoothness and Anatomical Topology. Frontiers in Neuroscience, 2018, 12, 321.	1.4	14
141	Response control correlates of anomalous basal ganglia morphology in boys, but not girls, with attention-deficit/hyperactivity disorder. Behavioural Brain Research, 2019, 367, 117-127.	1.2	14
142	SPEECH ENCODING IN THE AUDITORY NERVE: IMPLICATIONS FOR COCHLEAR IMPLANTS. Annals of the New York Academy of Sciences, 1983, 405, 94-113.	1.8	13
143	Surface-based vertexwise analysis of morphometry and microstructural integrity for white matter tracts in diffusion tensor imaging: With application to the corpus callosum in Alzheimer's disease. Human Brain Mapping, 2017, 38, 1875-1893.	1.9	13
144	Multi-atlas based detection and localization (MADL) for location-dependent quantification of white matter hyperintensities. NeuroImage: Clinical, 2019, 22, 101772.	1.4	13

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145	Association of Lifestyle Activities with Functional Brain Connectivity and Relationship to Cognitive Decline among Older Adults. <i>Cerebral Cortex</i> , 2021, 31, 5637-5651.	1.6	13
146	Shape analysis of hypertrophic and hypertensive heart disease using MRI-based 3D surface models of left ventricular geometry. <i>Medical Image Analysis</i> , 2016, 29, 12-23.	7.0	12
147	Brain MRI Pattern Recognition Translated to Clinical Scenarios. <i>Frontiers in Neuroscience</i> , 2017, 11, 578.	1.4	12
148	A Bayesian approach to the creation of a study-customized neonatal brain atlas. <i>NeuroImage</i> , 2014, 101, 256-267.	2.1	11
149	Knowledge-based automated reconstruction of human brain white matter tracts using a path-finding approach with dynamic programming. <i>NeuroImage</i> , 2014, 88, 271-281.	2.1	11
150	Relation of koniocellular layers of dorsal lateral geniculate to inferior pulvinar nuclei in common marmosets. <i>European Journal of Neuroscience</i> , 2019, 50, 4004-4017.	1.2	11
151	Basal Ganglia Shapes Predict Social, Communication, and Motor Dysfunctions in Boys With Autism Spectrum Disorder. <i>Journal of the American Academy of Child and Adolescent Psychiatry</i> , 2010, 49, 539-551e4.	0.3	10
152	Quantization and analysis of hippocampal morphometric changes due to dementia of Alzheimer type using metric distances based on large deformation diffeomorphic metric mapping. <i>Computerized Medical Imaging and Graphics</i> , 2011, 35, 275-293.	3.5	10
153	A fast atlas pre-selection procedure for multi-atlas based brain segmentation. , 2015, 2015, 3053-6.		10
154	Semi-automated Basal Ganglia Segmentation Using Large Deformation Diffeomorphic Metric Mapping. <i>Lecture Notes in Computer Science</i> , 2005, 8, 238-245.	1.0	10
155	Affine Invariant Flows in the Beltrami Framework. <i>Journal of Mathematical Imaging and Vision</i> , 2004, 20, 133-146.	0.8	9
156	Novel automated morphometric and kinematic handwriting assessment: A validity study in children with ASD and ADHD. <i>Journal of Occupational Therapy, Schools, and Early Intervention</i> , 2017, 10, 185-201.	0.4	9
157	Unbiased Diffeomorphic Mapping of Longitudinal Data with Simultaneous Subject Specific Template Estimation. <i>Lecture Notes in Computer Science</i> , 2017, , 125-136.	1.0	9
158	Diffuse Abnormality of Low to Moderately Organized White Matter in Schizophrenia. <i>Brain Connectivity</i> , 2011, 1, 511-519.	0.8	8
159	Ontological labels for automated location of anatomical shape differences. <i>Journal of Biomedical Informatics</i> , 2012, 45, 522-527.	2.5	8
160	Diffeomorphic Surface Registration with Atrophy Constraints. <i>SIAM Journal on Imaging Sciences</i> , 2016, 9, 975-1003.	1.3	8
161	A Large Deformation Diffeomorphic Approach to Registration of CLARITY Images via Mutual Information. <i>Lecture Notes in Computer Science</i> , 2017, , 275-282.	1.0	8
162	Multimodal cross registration and quantification of metric distortions in marmoset whole brain histology using diffeomorphic mappings. <i>Journal of Comparative Neurology</i> , 2021, 529, 281-295.	0.9	8

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163	3D Mapping of Serial Histology Sections with Anomalies Using a Novel Robust Deformable Registration Algorithm. Lecture Notes in Computer Science, 2019, , 162-173.	1.0	8
164	Amygdala Atrophy in MCI/Alzheimer's Disease in the BIOCARD cohort based on Diffeomorphic Morphometry. , 2012, 2012, 155-166.		8
165	Computational anatomy and diffeomorphometry: A dynamical systems model of neuroanatomy in the soft condensed matter continuum. Wiley Interdisciplinary Reviews: Systems Biology and Medicine, 2018, 10, e1425.	6.6	7
166	Atlas pre-selection strategies to enhance the efficiency and accuracy of multi-atlas brain segmentation tools. PLoS ONE, 2018, 13, e0200294.	1.1	7
167	Special Issue on Mathematics in Brain Imaging. NeuroImage, 2009, 45, S1-S2.	2.1	6
168	A framework on surface-based connectivity quantification for the human brain. Journal of Neuroscience Methods, 2011, 197, 324-332.	1.3	6
169	Deformably registering and annotating whole CLARITY brains to an atlas via masked LDDMM. , 2016, , .		6
170	Tools for studying populations and timeseries of neuroanatomy enabled through GPU acceleration in the Computational Anatomy Gateway. , 2016, , .		6
171	Cardiac motion analysis in ischemic and non-ischemic cardiomyopathy using parallel transport. , 2009, , 899.		5
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