Dzung L Pham

List of Publications by Year
in descending order

126 papers	8,768 citations	101384 36 h-index	46693 89 g-index
131 all docs	131 docs citations	131 times ranked	10370 citing authors

#	Article	IF	Citations
1	Current Methods in Medical Image Segmentation. Annual Review of Biomedical Engineering, 2000, 2, 315-337.	5.7	1,820
2	Longitudinal Magnetic Resonance Imaging Studies of Older Adults: A Shrinking Brain. Journal of Neuroscience, 2003, 23, 3295-3301.	1.7	1,168
3	An adaptive fuzzy C-means algorithm for image segmentation in the presence of intensity inhomogeneities. Pattern Recognition Letters, 1999, 20, 57-68.	2.6	411
4	Spatial Models for Fuzzy Clustering. Computer Vision and Image Understanding, 2001, 84, 285-297.	3.0	351
5	Statistical normalization techniques for magnetic resonance imaging. NeuroImage: Clinical, 2014, 6, 9-19.	1.4	300
6	A topology-preserving approach to the segmentation of brain images with multiple sclerosis lesions. NeuroImage, 2010, 49, 1524-1535.	2.1	287
7	An Image-Processing System for Qualitative and Quantitative Volumetric Analysis of Brain Images. Journal of Computer Assisted Tomography, 1998, 22, 827-837.	0.5	264
8	CRUISE: Cortical reconstruction using implicit surface evolution. NeuroImage, 2004, 23, 997-1012.	2.1	239
9	Longitudinal multiple sclerosis lesion segmentation: Resource and challenge. NeuroImage, 2017, 148, 77-102.	2.1	215
10	Relationships Between Retinal Axonal and Neuronal Measures and Global Central Nervous System Pathology in Multiple Sclerosis. JAMA Neurology, 2013, 70, 34.	4.5	197
11	DeepHarmony: A deep learning approach to contrast harmonization across scanner changes. Magnetic Resonance Imaging, 2019, 64, 160-170.	1.0	150
12	Random forest regression for magnetic resonance image synthesis. Medical Image Analysis, 2017, 35, 475-488.	7.0	136
13	Time course and diagnostic utility of NfL, tau, GFAP, and UCH-L1 in subacute and chronic TBI. Neurology, 2020, 95, e623-e636.	1.5	136
14	Neurofilament light as a biomarker in traumatic brain injury. Neurology, 2020, 95, e610-e622.	1.5	127
15	The Java Image Science Toolkit (JIST) for Rapid Prototyping and Publishing of Neuroimaging Software. Neuroinformatics, 2010, 8, 5-17.	1.5	121
16	Volumetric neuroimage analysis extensions for the MIPAV software package. Journal of Neuroscience Methods, 2007, 165, 111-121.	1.3	114
17	Topology-Preserving Tissue Classification of Magnetic Resonance Brain Images. IEEE Transactions on Medical Imaging, 2007, 26, 487-496.	5.4	112
18	Homeomorphic brain image segmentation with topological and statistical atlases. Medical Image Analysis, 2008, 12, 616-625.	7.0	107

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19	A Three-Dimensional Computational Human Head Model That Captures Live Human Brain Dynamics. Journal of Neurotrauma, 2017, 34, 2154-2166.	1.7	99
20	Revisiting Brain Atrophy and Its Relationship to Disability in Multiple Sclerosis. PLoS ONE, 2012, 7, e37049.	1.1	97
21	Consistent cortical reconstruction and multi-atlas brain segmentation. NeuroImage, 2016, 138, 197-210.	2.1	94
22	Evaluating White Matter Lesion Segmentations with Refined SÃ¸rensen-Dice Analysis. Scientific Reports, 2020, 10, 8242.	1.6	94
23	Robust skull stripping using multiple MR image contrasts insensitive to pathology. NeuroImage, 2017, 146, 132-147.	2.1	84
24	OASIS is Automated Statistical Inference for Segmentation, with applications to multiple sclerosis lesion segmentation in MRI. NeuroImage: Clinical, 2013, 2, 402-413.	1.4	80
25	Reduction of Disease Activity and Disability With High-Dose Cyclophosphamide in Patients With Aggressive Multiple Sclerosis. Archives of Neurology, 2008, 65, 1044-51.	4.9	78
26	Decreased microglial activation in MS patients treated with glatiramer acetate. Journal of Neurology, 2012, 259, 1199-1205.	1.8	76
27	PET Attenuation Correction Using Synthetic CT from Ultrashort Echo-Time MR Imaging. Journal of Nuclear Medicine, 2014, 55, 2071-2077.	2.8	69
28	Brain and retinal atrophy in African-Americans versus Caucasian-Americans with multiple sclerosis: a longitudinal study. Brain, 2018, 141, 3115-3129.	3.7	67
29	Cortical surface segmentation and mapping. NeuroImage, 2004, 23, S108-S118.	2.1	64
30	Subject-Specific Sparse Dictionary Learning for Atlas-Based Brain MRI Segmentation. IEEE Journal of Biomedical and Health Informatics, 2015, 19, 1598-1609.	3.9	64
31	Automatic magnetic resonance spinal cord segmentation with topology constraints for variable fields of view. NeuroImage, 2013, 83, 1051-1062.	2.1	63
32	Direct segmentation of the major white matter tracts in diffusion tensor images. NeuroImage, 2011, 58, 458-468.	2.1	62
33	MR image synthesis by contrast learning on neighborhood ensembles. Medical Image Analysis, 2015, 24, 63-76.	7.0	59
34	Improved measurement of brain deformation during mild head acceleration using a novel tagged MRI sequence. Journal of Biomechanics, 2014, 47, 3475-3481.	0.9	58
35	Topology correction of segmented medical images using a fast marching algorithm. Computer Methods and Programs in Biomedicine, 2007, 88, 182-190.	2.6	46
36	Effects of Ginkgo biloba on cerebral blood flow assessed by quantitative MR perfusion imaging: a pilot study. Neuroradiology, 2011, 53, 185-191.	1.1	44

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37	MIMoSA: An Automated Method for Intermodal Segmentation Analysis of Multiple Sclerosis Brain Lesions. Journal of Neuroimaging, 2018, 28, 389-398.	1.0	44
38	In vivo estimates of axonal stretch and 3D brain deformation during mild head impact. Brain Multiphysics, 2020, 1, 100015.	0.8	43
39	Finding the brain cortex using fuzzy segmentation, isosurfaces, and deformable surface models. Lecture Notes in Computer Science, 1997, , 399-404.	1.0	41
40	Digital Homeomorphisms in Deformable Registration. Lecture Notes in Computer Science, 2007, 20, 211-222.	1.0	37
41	Connecting combat-related mild traumatic brain injury with posttraumatic stress disorder symptoms through brain imaging. Neuroscience Letters, 2014, 577, 11-15.	1.0	35
42	MR contrast synthesis for lesion segmentation. , 2010, 2010, 932-935.		34
43	Reconstruction of the human cerebral cortex robust to white matter lesions: Method and validation. Human Brain Mapping, 2014, 35, 3385-3401.	1.9	33
44	Trauma-Specific Brain Abnormalities in Suspected Mild Traumatic Brain Injury Patients Identified in the First 48 Hours after Injury: A Blinded Magnetic Resonance Imaging Comparative Study Including Suspected Acute Minor Stroke Patients. Journal of Neurotrauma, 2017, 34, 23-30.	1.7	32
45	Longitudinal multiple sclerosis lesion segmentation data resource. Data in Brief, 2017, 12, 346-350.	0.5	31
46	Statistical Characterization of Human Brain Deformation During Mild Angular Acceleration Measured In Vivo by Tagged Magnetic Resonance Imaging. Journal of Biomechanical Engineering, 2018, 140, .	0.6	31
47	Brain Volume, Connectivity, and Neuropsychological Performance in Mild Traumatic Brain Injury: The Impact of Post-Traumatic Stress Disorder Symptoms. Journal of Neurotrauma, 2017, 34, 16-22.	1.7	30
48	3-D Measurements of Acceleration-Induced Brain Deformation via Harmonic Phase Analysis and Finite-Element Models. IEEE Transactions on Biomedical Engineering, 2019, 66, 1456-1467.	2.5	30
49	Disrupted Gamma Synchrony after Mild Traumatic Brain Injury and Its Correlation with White Matter Abnormality. Frontiers in Neurology, 2017, 8, 571.	1.1	28
50	Distributed deep learning across multisite datasets for generalized CT hemorrhage segmentation. Medical Physics, 2020, 47, 89-98.	1.6	28
51	Gradient nonlinearity effects on upper cervical spinal cord area measurement from 3D T₁â€weighted brain MRI acquisitions. Magnetic Resonance in Medicine, 2018, 79, 1595-1601.	1.9	27
52	TBI contusion segmentation from MRI using convolutional neural networks. , 2018, , .		27
53	Effect of disease-modifying therapies on subcortical gray matter atrophy in multiple sclerosis. Multiple Sclerosis Journal, 2020, 26, 312-321.	1.4	27
54	Phase Vector Incompressible Registration Algorithm for Motion Estimation From Tagged Magnetic Resonance Images. IEEE Transactions on Medical Imaging, 2017, 36, 2116-2128.	5.4	26

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55	Pure-tone auditory thresholds are not chronically elevated in multiple sclerosis.. Behavioral Neuroscience, 2012, 126, 314-324.	0.6	24
56	MR Imaging of Human Brain Mechanics In Vivo: New Measurements to Facilitate the Development of Computational Models of Brain Injury. Annals of Biomedical Engineering, 2021, 49, 2677-2692.	1.3	24
57	Balance in multiple sclerosis: relationship to central brain regions. Experimental Brain Research, 2018, 236, 2739-2750.	0.7	22
58	Segmentation of Brain Images Using Adaptive Atlases with Application to Ventriculomegaly. Lecture Notes in Computer Science, 2011, 22, 1-12.	1.0	22
59	Lasting deficit in inhibitory control with mild traumatic brain injury. Scientific Reports, 2017, 7, 14902.	1.6	20
60	A deep learning framework for brain extraction in humans and animals with traumatic brain injury. , 2018, , .		20
61	Meningeal bloodâ€“brain barrier disruption in acute traumatic brain injury. Brain Communications, 2020, 2, fcaa143.	1.5	20
62	Quantitative assessment of susceptibilityâ€weighted imaging processing methods. Journal of Magnetic Resonance Imaging, 2014, 40, 1463-1473.	1.9	19
63	Taste dysfunction in multiple sclerosis. Journal of Neurology, 2016, 263, 677-688.	1.8	19
64	Subject Specific Sparse Dictionary Learning for Atlas Based Brain MRI Segmentation. Lecture Notes in Computer Science, 2014, 8679, 248-255.	1.0	19
65	Synthesizing CT from Ultrashort Echo-Time MR Images via Convolutional Neural Networks. Lecture Notes in Computer Science, 2017, , 24-32.	1.0	19
66	Combining multi-atlas segmentation with brain surface estimation. Proceedings of SPIE, 2016, 9784, .	0.8	18
67	Automatic classification of sulcal regions of the human brain cortex using pattern recognition. , 2003, , .		17
68	An Adaptive Fuzzy Segmentation Algorithm for Three-Dimensional Magnetic Resonance Images. Lecture Notes in Computer Science, 1999, , 140-153.	1.0	17
69	Central Vein Sign Profile of Newly Developing Lesions in Multiple Sclerosis. Neurology: Neuroimmunology and NeuroInflammation, 2022, 9, .	3.1	17
70	Reconstruction of the central layer of the human cerebral cortex from MR images. Lecture Notes in Computer Science, 1998, , 481-488.	1.0	16
71	Unilateral olfactory sensitivity in multiple sclerosis. Physiology and Behavior, 2017, 168, 24-30.	1.0	16
72	Statistical and Topological Atlas Based Brain Image Segmentation. , 2007, 10, 94-101.		14

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73	Fuzzy c-means with variable compactness. , 2008, 4541030, 452.		13
74	Segmentation and labeling of the ventricular system in normal pressure hydrocephalus using patch-based tissue classification and multi-atlas labeling. Proceedings of SPIE, 2016, 9784, .	0.8	12
75	Distributed deep learning for robust multi-site segmentation of CT imaging after traumatic brain injury. , 2019, 10949, .		12
76	Topology Correction Using Fast Marching Methods and Its Application to Brain Segmentation. Lecture Notes in Computer Science, 2005, 8, 484-491.	1.0	11
77	Motion Estimation with Finite-Element Biomechanical Models and Tracking Constraints from Tagged MRI. , 2017, 2017, 81-90.		11
78	Patch Based Synthesis of Whole Head MR Images: Application To EPI Distortion Correction. Lecture Notes in Computer Science, 2016, 9968, 146-156.	1.0	10
79	Federated Gradient Averaging for Multi-Site Training with Momentum-Based Optimizers. Lecture Notes in Computer Science, 2020, 12444, 170-180.	1.0	10
80	Opportunities for Understanding MS Mechanisms and Progression With MRI Using Large-Scale Data Sharing and Artificial Intelligence. Neurology, 2021, 97, 989-999.	1.5	10
81	Topology Preserving Tissue Classification with Fast Marching and Topology Templates. Lecture Notes in Computer Science, 2005, 19, 234-245.	1.0	9
82	Digital Topology in Brain Imaging. IEEE Signal Processing Magazine, 2010, 27, 51-59.	4.6	9
83	Whole Brain Parcellation with Pathology: Validation on Ventriculomegaly Patients. Lecture Notes in Computer Science, 2017, 10530, 20-28.	1.0	9
84	Free software tools for atlas-based volumetric neuroimage analysis. , 2005, , .		8
85	Random forest FLAIR reconstruction from T<inf>1</inf>, T<inf>2</inf>, and P<inf>D</inf>-weighted MRI. , 2014, 2014, 1079-1082.		8
86	Cerebral microbleed segmentation from susceptibility weighted images. Proceedings of SPIE, 2015, , .	0.8	8
87	Multiple Sclerosis Lesion Segmentation Using Statistical and Topological Atlases. , 2008, , .		8
88	Volumetric Segmentation. , 2000, , 185-194.		7
89	Multi-output decision trees for lesion segmentation in multiple sclerosis. Proceedings of SPIE, 2015, 9413, .	0.8	7
90	Automatic falx cerebri and tentorium cerebelli segmentation from magnetic resonance images. Proceedings of SPIE, 2017, 10137, .	0.8	7

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91	Integrating material properties from magnetic resonance elastography into subject-specific computational models for the human brain. Brain Multiphysics, 2021, 2, 100038.	0.8	7
92	Longitudinal intensity normalization in the presence of multiple sclerosis lesions. , 2013, , 1384-1387.		6
93	Artifactual microhemorrhage generated by susceptibility weighted image processing. Journal of Magnetic Resonance Imaging, 2015, 41, 1695-1700.	1.9	6
94	Longitudinal Patch-Based Segmentation of Multiple Sclerosis White Matter Lesions. Lecture Notes in Computer Science, 2015, 9352, 194-202.	1.0	6
95	Tree-Encoded Conditional Random Fields for Image Synthesis. Lecture Notes in Computer Science, 2015, 24, 733-745.	1.0	6
96	Falx Cerebri Segmentation via Multi-atlas Boundary Fusion. Lecture Notes in Computer Science, 2017, 10433, 92-99.	1.0	6
97	TAPAS: A Thresholding Approach for Probability Map Automatic Segmentation in Multiple Sclerosis. NeuroImage: Clinical, 2020, 27, 102256.	1.4	5
98	Group characterization of impact-induced, in vivo human brain kinematics. Journal of the Royal Society Interface, 2021, 18, 20210251.	1.5	5
99	Dice Overlap Measures for Objects of Unknown Number: Application to Lesion Segmentation. Lecture Notes in Computer Science, 2018, 10670, 3-14.	1.0	5
100	Belief Propagation Based Segmentation of White Matter Tracts in DTI. Lecture Notes in Computer Science, 2009, 12, 943-950.	1.0	5
101	Statistical image analysis of longitudinal RAVENS images. Frontiers in Neuroscience, 2015, 9, 368.	1.4	4
102	Temporal filtering of longitudinal brain magnetic resonance images for consistent segmentation. NeuroImage: Clinical, 2016, 11, 264-275.	1.4	4
103	Progressive multifocal leukoencephalopathy lesion and brain parenchymal segmentation from MRI using serial deep convolutional neural networks. NeuroImage: Clinical, 2020, 28, 102499.	1.4	4
104	3D Brain Deformation in Cadaveric Specimens Compared to Healthy Volunteers Under Non-injurious Loading Conditions. , 2021, , 113-122.		4
105	Topology Smoothing for Segmentation and Surface Reconstruction. Lecture Notes in Computer Science, 2004, , 111-118.	1.0	4
106	Extracting 2D weak labels from volume labels using multiple instance learning in CT hemorrhage detection. , 2020, 11313, .		4
107	Quantitative evaluation of phase processing approaches in susceptibility weighted imaging. Proceedings of SPIE, 2012, , .	0.8	3
108	Image synthesis and superresolution in medical imaging. , 2020, , 1-24.		3

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109	Joint Image and Label Self-super-Resolution. Lecture Notes in Computer Science, 2021, 12965, 14-23.	1.0	3
110	Joint Intensity Fusion Image Synthesis Applied to Multiple Sclerosis Lesion Segmentation. Lecture Notes in Computer Science, 2018, , 43-54.	1.0	3
111	Cascaded convolutional neural networks for spine chordoma tumor segmentation from MRI. , 2019, , .		3
112	Fiber tractography and tract segmentation in multiple sclerosis lesions. , 2011, , .		2
113	AdaBoosted Deep Ensembles: Getting Maximum Performance Out of Small Training Datasets. Lecture Notes in Computer Science, 2020, , 572-582.	1.0	2
114	Joint Intensity Fusion Image Synthesis Applied to Multiple Sclerosis Lesion Segmentation. , 2018, 10670, 43-54.		2
115	Clustering of High Dimensional Longitudinal Imaging Data. , 2013, , .		1
116	Characterizing the spatial distribution of microhemorrhages resulting from Traumatic Brain Injury (TBI). Proceedings of SPIE, 2014, , .	0.8	1
117	Abusive Head Trauma: Developing a Computational Adult Head Model to Predict Brain Deformations under Mild Accelerations. , 2017, , 147-157.		1
118	Alternating segmentation and simulation for contrast adaptive tissue classification. , 2018, , .		1
119	Multiple Sclerosis brain lesion segmentation with different architecture ensembles. , 2022, , .		1
120	BrainIACS: a system for web-based medical image processing. Proceedings of SPIE, 2009, , .	0.8	0
121	Intraparenchymal hemorrhage segmentation from clinical head CT of patients with traumatic brain injury. Proceedings of SPIE, 2015, , .	0.8	0
122	Evaluating model misspecification in independent component analysis. Journal of Statistical Computation and Simulation, 2015, 85, 1151-1164.	0.7	0
123	Atlas of Acceleration-Induced Brain Deformation from Measurements In Vivo. , 2019, , 3-14.		0
124	Quantitative Validation of MRI-Based Motion Estimation for Brain Impact Biomechanics. , 2020, , 61-71.		0
125	Digital Topology in Brain Image Segmentation and Registration. , 2011, , 339-375.		0
126	ErbB Signaling Pathway Genes Are Differentially Expressed in Monozygotic Twins Discordant for Sports-Related Concussion. Twin Research and Human Genetics, 0, , 1-8.	0.3	0