William M Wells

List of Publications by Year
in descending order

41 papers	850 citations	566801 15 h-index	525886 27 g-index
41 all docs	41 docs citations	41 times ranked	1602 citing authors

#	Article	IF	Citations
1	The DTI Challenge: Toward Standardized Evaluation of Diffusion Tensor Imaging Tractography for Neurosurgery. Journal of Neuroimaging, 2015, 25, 875-882.	1.0	147
2	Applications of Ultrasound in the Resection of Brain Tumors. Journal of Neuroimaging, 2017, 27, 5-15.	1.0	104
3	Automatic 3D Nonlinear Registration of Mass Spectrometry Imaging and Magnetic Resonance Imaging Data. Analytical Chemistry, 2019, 91, 6206-6216.	3.2	45
4	Peak learning of mass spectrometry imaging data using artificial neural networks. Nature Communications, 2021, 12, 5544.	5.8	43
5	Classification of clinical significance of MRI prostate findings using 3D convolutional neural networks. Proceedings of SPIE, 2017, 10134, .	0.8	42
6	Non-rigid registration of 3D ultrasound for neurosurgery using automatic feature detection and matching. International Journal of Computer Assisted Radiology and Surgery, 2018, 13, 1525-1538.	1.7	40
7	Adversarial Uni- and Multi-modal Stream Networks for Multimodal Image Registration. Lecture Notes in Computer Science, 2020, 12263, 222-232.	1.0	39
8	Group-wise parcellation of the cortex through multi-scale spectral clustering. NeuroImage, 2016, 136, 68-83.	2.1	38
9	Deep Learningâ€“Based Automatic Segmentation of Lumbosacral Nerves on CT for Spinal Intervention: A Translational Study. American Journal of Neuroradiology, 2019, 40, 1074-1081.	1.2	33
10	Concurrent tumor segmentation and registration with uncertainty-based sparse non-uniform graphs. Medical Image Analysis, 2014, 18, 647-659.	7.0	32
11	SIFT-Rank: Ordinal description for invariant feature correspondence. , 2009, , .		28
12	Direct neural current imaging in an intact cerebellum with magnetic resonance imaging. NeuroImage, 2016, 132, 477-490.	2.1	27
13	DeepInfer: open-source deep learning deployment toolkit for image-guided therapy. Proceedings of SPIE, 2017, 10135, .	0.8	27
14	Improving detection of prostate cancer foci via information fusion of MRI and temporal enhanced ultrasound. International Journal of Computer Assisted Radiology and Surgery, 2020, 15, 1215-1223.	1.7	20
15	Using the variogram for vector outlier screening: application to feature-based image registration. International Journal of Computer Assisted Radiology and Surgery, 2018, 13, 1871-1880.	1.7	17
16	Tumor associated seizures in glioblastomas are influenced by survival gene expression in a region-specific manner: A gene expression imaging study. Epilepsy Research, 2014, 108, 843-852.	0.8	15
17	Image registration: Maximum likelihood, minimum entropy and deep learning. Medical Image Analysis, 2021, 69, 101939.	7.0	13
18	massNet: integrated processing and classification of spatially resolved mass spectrometry data using deep learning for rapid tumor delineation. Bioinformatics, 2022, 38, 2015-2021.	1.8	13

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19	RF Heating of Gold Cup and Conductive Plastic Electrodes during Simultaneous EEG and MRI. Neurodiagnostic Journal,the, 2017, 57, 69-83.	0.1	12
20	Groupwise structural parcellation of the whole cortex: A logistic random effects model based approach. NeuroImage, 2018, 170, 307-320.	2.1	12
21	A comparison of thin-plate spline deformation and finite element modeling to compensate for brain shift during tumor resection. International Journal of Computer Assisted Radiology and Surgery, 2020, 15, 75-85.	1.7	10
22	A Likelihood-Free Approach for Characterizing Heterogeneous Diseases in Large-Scale Studies. Lecture Notes in Computer Science, 2017, 10265, 170-183.	1.0	9
23	Magnetic resonance imaging of ionic currents in solution: The effect of magnetohydrodynamic flow. Magnetic Resonance in Medicine, 2015, 74, 1145-1155.	1.9	8
24	Probabilistic modeling of anatomical variability using a low dimensional parameterization of diffeomorphisms. Medical Image Analysis, 2017, 41, 55-62.	7.0	8
25	Neuroimage signature from salient keypoints is highly specific to individuals and shared by close relatives. NeuroImage, 2020, 204, 116208.	2.1	8
26	Comparison between two white matter segmentation strategies: An investigation into white matter segmentation consistency. , 2017, , .		7
27	Deformation Aware Augmented Reality for Craniotomy Using 3D/2D Non-rigid Registration of Cortical Vessels. Lecture Notes in Computer Science, 2020, 12264, 735-744.	1.0	7
28	Hybrid Utrasound and MRI Acquisitions for High-Speed Imaging of Respiratory Organ Motion. Lecture Notes in Computer Science, 2015, 9349, 315-322.	1.0	6
29	SIFT-Rank: Ordinal description for invariant feature correspondence. , 2009, , .		6
30	Robust spatio-temporal registration of 4D cardiac ultrasound sequences. Proceedings of SPIE, 2016, 9790, .	0.8	5
31	Automated connectivity-based groupwise cortical atlas generation: Application to data of neurosurgical patients with brain tumors for cortical parcellation prediction. , 2017, , .		5
32	Detection of Brain Metastases with Deep Learning Single-Shot Detector Algorithms. Radiology, 2020, 295, 416-417.	3.6	5
33	Model and Predict Age and Sex in Healthy Subjects Using Brain White Matter Features: A Deep Learning Approach. , 2022, , .		4
34	Robust non-rigid registration and characterization of uncertainty. , 2012, , .		3
35	Alignment of cortical vessels viewed through the surgical microscope with preoperative imaging to compensate for brain shift. , 2020, 11315, .		3
36	A mutual-information scale-space for image feature detection and feature-based classification of volumetric brain images. , 2010, , .		2

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37	Uncertainty-Driven Efficiently-Sampled Sparse Graphical Models for Concurrent Tumor Segmentation and Atlas Registration. , 2013, , .		2
38	Registration uncertainty quantification via low-dimensional characterization of geometric deformations. Magnetic Resonance Imaging, 2019, 64, 122-131.	1.0	2
39	Unimodal Cyclic Regularization For Training Multimodal Image Registration Networks. , 2021, 2021, .		2
40	Incorporating Uncertainty Into Path Planning for Minimally Invasive Robotic Neurosurgery. IEEE Transactions on Medical Robotics and Bionics, 2022, 4, 5-16.	2.1	1
41	Guest editorial of the IJCARS MICCAI 2016 special issue. International Journal of Computer Assisted Radiology and Surgery, 2017, 12, 1243-1244.	1.7	0