Martin Rajchl

List of Publications by Year
in descending order

45 papers	2,195 citations	361045 20 h-index	264894 42 g-index
45 all docs	45 docs citations	45 times ranked	3665 citing authors

#	Article	IF	Citations
1	Fully automated segmentation of left ventricular scar from 3D late gadolinium enhancement magnetic resonance imaging using a cascaded multi‐planar U‐Net (CMPU‐Net). Medical Physics, 2020, 47, 1645-1655.	1.6	32
2	Weakly Supervised Estimation of Shadow Confidence Maps in Fetal Ultrasound Imaging. IEEE Transactions on Medical Imaging, 2019, 38, 2755-2767.	5.4	38
3	Metric learning with spectral graph convolutions on brain connectivity networks. NeuroImage, 2018, 169, 431-442.	2.1	237
4	Automatic Shadow Detection in 2D Ultrasound Images. Lecture Notes in Computer Science, 2018, , 66-75.	1.0	6
5	Automated cardiovascular magnetic resonance image analysis with fully convolutional networks. Journal of Cardiovascular Magnetic Resonance, 2018, 20, 65.	1.6	468
6	Directed Acyclic Graph Continuous Max-Flow Image Segmentation for Unconstrained Label Orderings. International Journal of Computer Vision, 2017, 123, 415-434.	10.9	7
7	Contribution of mitral valve leaflet length and septal wall thickness to outflow tract obstruction in patients with hypertrophic cardiomyopathy. International Journal of Cardiovascular Imaging, 2017, 33, 1201-1211.	0.7	8
8	DeepCut: Object Segmentation From Bounding Box Annotations Using Convolutional Neural Networks. IEEE Transactions on Medical Imaging, 2017, 36, 674-683.	5.4	260
9	PVR: Patch-to-Volume Reconstruction for Large Area Motion Correction of Fetal MRI. IEEE Transactions on Medical Imaging, 2017, 36, 2031-2044.	5.4	33
10	Optimization-based interactive segmentation interface for multiregion problems. Journal of Medical Imaging, 2016, 3, 024003.	0.8	4
11	Hierarchical max-flow segmentation framework for multi-atlas segmentation with Kohonen self-organizing map based Gaussian mixture modeling. Medical Image Analysis, 2016, 27, 45-56.	7.0	27
12	Abnormal Lymphatic Channels Detected by T2-Weighted MR Imaging as a Substrate for Ventricular Arrhythmia in HCM. JACC: Cardiovascular Imaging, 2016, 9, 1354-1356.	2.3	10
13	A mitral annulus tracking approach for navigation of off‐pump beating heart mitral valve repair. Medical Physics, 2015, 42, 456-468.	1.6	10
14	MRBrainS Challenge: Online Evaluation Framework for Brain Image Segmentation in 3T MRI Scans. Computational Intelligence and Neuroscience, 2015, 2015, 1-16.	1.1	179
15	Optimization-based interactive segmentation interface for multi-region problems. , 2015, , .		2
16	3D MR ventricle segmentation in pre-term infants with post-hemorrhagic ventricle dilatation (PHVD) using multi-phase geodesic level-sets. NeuroImage, 2015, 118, 13-25.	2.1	19
17	Globally optimal co-segmentation of three-dimensional pulmonary 1H and hyperpolarized 3He MRI with spatial consistence prior. Medical Image Analysis, 2015, 23, 43-55.	7.0	30
18	Image-based reconstruction of 3D myocardial infarct geometry for patient specific applications. Proceedings of SPIE, 2015, 9413, .	0.8	7

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19	Multi-atlas Segmentation as a Graph Labelling Problem: Application to Partially Annotated Atlas Data. Lecture Notes in Computer Science, 2015, 24, 221-232.	1.0	13
20	Comparison of semi-automated scar quantification techniques using high-resolution, 3-dimensional late-gadolinium-enhancement magnetic resonance imaging. International Journal of Cardiovascular Imaging, 2015, 31, 349-357.	0.7	20
21	Image‐based reconstruction of three‐dimensional myocardial infarct geometry for patient‐specific modeling of cardiac electrophysiology. Medical Physics, 2015, 42, 4579-4590.	1.6	38
22	Ultrasound Guidance for Beating Heart Mitral Valve Repair Augmented by Synthetic Dynamic CT. IEEE Transactions on Medical Imaging, 2015, 34, 2025-2035.	5.4	10
23	Joint segmentation of lumen and outer wall from femoral artery MR images: Towards 3D imaging measurements of peripheral arterial disease. Medical Image Analysis, 2015, 26, 120-132.	7.0	8
24	Right ventricle segmentation from cardiac MRI: A collation study. Medical Image Analysis, 2015, 19, 187-202.	7.0	189
25	Variational Time-Implicit Multiphase Level-Sets. Lecture Notes in Computer Science, 2015, , 278-291.	1.0	2
26	Automatic 3D US Brain Ventricle Segmentation in Pre-Term Neonates Using Multi-phase Geodesic Level-Sets with Shape Prior. Lecture Notes in Computer Science, 2015, , 89-96.	1.0	1
27	Longitudinal Analysis of Pre-term Neonatal Brain Ventricle in Ultrasound Images Based on Convex Optimization. Lecture Notes in Computer Science, 2015, , 476-483.	1.0	1
28	Model-Based Navigation of Left and Right Ventricular Leads to Optimal Targets for Cardiac Resynchronization Therapy. Circulation: Arrhythmia and Electrophysiology, 2014, 7, 1040-1047.	2.1	20
29	High-resolution 3-dimensional late gadolinium enhancement scar imaging in surgically corrected Tetralogy of Fallot: clinical feasibility of volumetric quantification and visualization. Journal of Cardiovascular Magnetic Resonance, 2014, 16, 76.	1.6	21
30	Accuracy and reproducibility of semi-automated late gadolinium enhancement quantification techniques in patients with hypertrophic cardiomyopathy. Journal of Cardiovascular Magnetic Resonance, 2014, 16, 85.	1.6	76
31	Prostate Segmentation: An Efficient Convex Optimization Approach With Axial Symmetry Using 3-D TRUS and MR Images. IEEE Transactions on Medical Imaging, 2014, 33, 947-960.	5.4	64
32	Interactive Hierarchical-Flow Segmentation of Scar Tissue From Late-Enhancement Cardiac MR Images. IEEE Transactions on Medical Imaging, 2014, 33, 159-172.	5.4	57
33	Dual optimization based prostate zonal segmentation in 3D MR images. Medical Image Analysis, 2014, 18, 660-673.	7.0	46
34	Ultrasound based mitral valve annulus tracking for off-pump beating heart mitral valve repair. Proceedings of SPIE, 2014, , .	0.8	0
35	Distribution of guidance models for cardiac resynchronization therapy in the setting of multi-center clinical trials. , 2014, , .		0
36	3D Prostate TRUS Segmentation Using Globally Optimized Volume-Preserving Prior. Lecture Notes in Computer Science, 2014, 17, 796-803.	1.0	4

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37	3-D Carotid Multi-Region MRI Segmentation by Globally Optimal Evolution of Coupled Surfaces. IEEE Transactions on Medical Imaging, 2013, 32, 770-785.	5.4	39
38	Left ventricle segmentation in MRI via convex relaxed distribution matching. Medical Image Analysis, 2013, 17, 1010-1024.	7.0	57
39	A Navigation Platform for Guidance of Beating Heart Transapical Mitral Valve Repair. IEEE Transactions on Biomedical Engineering, 2013, 60, 1034-1040.	2.5	18
40	Active Cardiac Sarcoidosis. Circulation, 2013, 127, e639-41.	1.6	84
41	Efficient 3D Multi-region Prostate MRI Segmentation Using Dual Optimization. Lecture Notes in Computer Science, 2013, 23, 304-315.	1.0	9
42	Jointly Segmenting Prostate Zones in 3D MRIs by Globally Optimized Coupled Level-Sets. Lecture Notes in Computer Science, 2013, , 12-25.	1.0	5
43	Joint Segmentation of 3D Femoral Lumen and Outer Wall Surfaces from MR Images. Lecture Notes in Computer Science, 2013, 16, 534-541.	1.0	2
44	Augmented Reality Image Guidance Improves Navigation for Beating Heart Mitral Valve Repair. Innovations: Technology and Techniques in Cardiothoracic and Vascular Surgery, 2012, 7, 274-281.	0.4	25
45	A Fast Convex Optimization Approach to Segmenting 3D Scar Tissue from Delayed-Enhancement Cardiac MR Images. Lecture Notes in Computer Science, 2012, 15, 659-666.	1.0	9