Ziyue Xu

List of Publications by Citations

74 papers	4,676 citations	24 h-index	68 g-index
84 ext. papers	6,139 ext. citations	4.7 avg, IF	5.62 L-index

#	Paper	IF	Citations
74	Deep Convolutional Neural Networks for Computer-Aided Detection: CNN Architectures, Dataset Characteristics and Transfer Learning. *IEEE Transactions on Medical Imaging*, **2016**, 35, 1285-98	11.7	2653
73	A review on segmentation of positron emission tomography images. *Computers in Biology and Medicine*, **2014**, 50, 76-96	7	219
72	Artificial intelligence for the detection of COVID-19 pneumonia on chest CT using multinational datasets. *Nature Communications*, **2020**, 11, 4080	17.4	202
71	Segmentation and Image Analysis of Abnormal Lungs at CT: Current Approaches, Challenges, and Future Trends. *Radiographics*, **2015**, 35, 1056-76	5.4	126
70	Holistic classification of CT attenuation patterns for interstitial lung diseases via deep convolutional neural networks. *Computer Methods in Biomechanics and Biomedical Engineering: Imaging and Visualization*, **2018**, 6, 1-6	0.9	124
69	Joint segmentation of anatomical and functional images: applications in quantification of lesions from PET, PET-CT, MRI-PET, and MRI-PET-CT images. *Medical Image Analysis*, **2013**, 17, 929-45	15.4	117
68	A generic approach to pathological lung segmentation. *IEEE Transactions on Medical Imaging*, **2014**, 33, 2293-310	11.7	98
67	Standardized Assessment of Automatic Segmentation of White Matter Hyperintensities and Results of the WMH Segmentation Challenge. *IEEE Transactions on Medical Imaging*, **2019**, 38, 2556-2568	11.7	87
66	Generalizing Deep Learning for Medical Image Segmentation to Unseen Domains via Deep Stacked Transformation. *IEEE Transactions on Medical Imaging*, **2020**, 39, 2531-2540	11.7	82
65	Mycobacterium tuberculosis dysregulates MMP/TIMP balance to drive rapid cavitation and unrestrained bacterial proliferation. *Journal of Pathology*, **2015**, 235, 431-44	9.4	68
64	CT-Realistic Lung Nodule Simulation from 3D Conditional Generative Adversarial Networks for Robust Lung Segmentation. *Lecture Notes in Computer Science*, **2018**, 732-740	0.9	57
63	Progressive and Multi-path Holistically Nested Neural Networks for Pathological Lung Segmentation from CT Images. *Lecture Notes in Computer Science*, **2017**, 621-629	0.9	56
62	Segmentation of PET images for computer-aided functional quantification of tuberculosis in small animal models. *IEEE Transactions on Biomedical Engineering*, **2014**, 61, 711-24	5	48
61	Federated semi-supervised learning for COVID region segmentation in chest CT using multi-national data from China, Italy, Japan. *Medical Image Analysis*, **2021**, 70, 101992	15.4	45
60	Mouse model of pulmonary cavitary tuberculosis and expression of matrix metalloproteinase-9. *DMM Disease Models and Mechanisms*, **2016**, 9, 779-88	4.1	39
59	Deep vessel tracking: A generalized probabilistic approach via deep learning **2016**,		35
58	Lymphocyte-driven regional immunopathology in pneumonitis caused by impaired central immune tolerance. *Science Translational Medicine*, **2019**, 11,	17.5	31

57	3D Convolutional Neural Networks with Graph Refinement for Airway Segmentation Using Incomplete Data Labels. *Lecture Notes in Computer Science*, **2017**, 141-149	0.9	30
56	When Radiology Report Generation Meets Knowledge Graph. *Proceedings of the AAAI Conference on Artificial Intelligence*, **2020**, 34, 12910-12917	5	25
55	Capsules for biomedical image segmentation. *Medical Image Analysis*, **2021**, 68, 101889	15.4	25
54	Federated learning improves site performance in multicenter deep learning without data sharing. *Journal of the American Medical Informatics Association: JAMIA*, **2021**, 28, 1259-1264	8.6	25
53	Joint solution for PET image segmentation, denoising, and partial volume correction. *Medical Image Analysis*, **2018**, 46, 229-243	15.4	24
52	A hybrid method for airway segmentation and automated measurement of bronchial wall thickness on CT. *Medical Image Analysis*, **2015**, 24, 1-17	15.4	24
51	Loss in lung volume and changes in the immune response demonstrate disease progression in African green monkeys infected by small-particle aerosol and intratracheal exposure to Nipah virus. *PLoS Neglected Tropical Diseases*, **2017**, 11, e0005532	4.8	24
50	Determination of disease severity in COVID-19 patients using deep learning in chest X-ray images. *Diagnostic and Interventional Radiology*, **2021**, 27, 20-27	3.2	24
49	Characterization of Lung Nodule Malignancy Using Hybrid Shape and Appearance Features. *Lecture Notes in Computer Science*, **2016**, 662-670	0.9	21
48	Segmentation label propagation using deep convolutional neural networks and dense conditional random field **2016**,		21
47	Characterization of trabecular bone plate-rod microarchitecture using multirow detector CT and the tensor scale: Algorithms, validation, and applications to pilot human studies. *Medical Physics*, **2015**, 42, 5410-25	4.4	18
46	Computer-aided detection and quantification of cavitary tuberculosis from CT scans. *Medical Physics*, **2013**, 40, 113701	4.4	18
45	Pathological Pulmonary Lobe Segmentation from CT Images Using Progressive Holistically Nested Neural Networks and Random Walker. *Lecture Notes in Computer Science*, **2017**, 195-203	0.9	18
44	A multichannel block-matching denoising algorithm for spectral photon-counting CT images. *Medical Physics*, **2017**, 44, 2447-2452	4.4	15
43	Data Augmentation and Transfer Learning to Improve Generalizability of an Automated Prostate Segmentation Model. *American Journal of Roentgenology*, **2020**, 215, 1403-1410	5.4	15
42	Segmentation based denoising of PET images: an iterative approach via regional means and affinity propagation. *Lecture Notes in Computer Science*, **2014**, 17, 698-705	0.9	14
41	Atlas-based rib-bone detection in chest X-rays. *Computerized Medical Imaging and Graphics*, **2016**, 51, 32-9	7.6	13
40	Spatially constrained random walk approach for accurate estimation of airway wall surfaces. *Lecture Notes in Computer Science*, **2013**, 16, 559-66	0.9	12

39	Searching Learning Strategy with Reinforcement Learning for 3D Medical Image Segmentation. *Lecture Notes in Computer Science*, **2019**, 3-11	0.9	12
38	NeurReg: Neural Registration and Its Application to Image Segmentation **2020**,		12
37	Quantitative Image Quality Comparison of Reduced- and Standard-Dose Dual-Energy Multiphase Chest, Abdomen, and Pelvis CT. *Tomography*, **2017**, 3, 114-122	3.1	10
36	Cough Frequency During Treatment Associated With Baseline Cavitary Volume and Proximity to the Airway in Pulmonary TB. *Chest*, **2018**, 153, 1358-1367	5.3	9
35	A hybrid multi-scale approach to automatic airway tree segmentation from CT scans **2013**,		9
34	Quantitative characterization of trabecular bone micro-architecture using tensor scale and multi-detector CT imaging. *Lecture Notes in Computer Science*, **2012**, 15, 124-31	0.9	9
33	Tensor scale: An analytic approach with efficient computation and applications. *Computer Vision and Image Understanding*, **2012**, 116, 1060-1075	4.3	8
32	Rapid Artificial Intelligence Solutions in a Pandemic - The COVID-19-20 Lung CT Lesion Segmentation Challenge **2021**,		8
31	Going to Extremes: Weakly Supervised Medical Image Segmentation. *Machine Learning and Knowledge Extraction*, **2021**, 3, 507-524	3.1	8
30	Robust segmentation and accurate target definition for positron emission tomography images using Affinity Propagation **2013**,		7
29	CT and clinical assessment in asymptomatic and pre-symptomatic patients with early SARS-CoV-2 in outbreak settings. *European Radiology*, **2021**, 31, 3165-3176	8	7
28	Federated Whole Prostate Segmentation in MRI with Personalized Neural Architectures. *Lecture Notes in Computer Science*, **2021**, 357-366	0.9	7
27	Three Aspects on Using Convolutional Neural Networks for Computer-Aided Detection in Medical Imaging. *Advances in Computer Vision and Pattern Recognition*, **2017**, 113-136	1.1	6
26	Efficient ribcage segmentation from CT scans using shape features. *Annual International Conference of the IEEE Engineering in Medicine and Biology Society IEEE Engineering in Medicine and Biology Society Annual International Conference*, **2014**, 2014, 2899-902	0.9	6
25	Weakly Supervised Segmentation from Extreme Points. *Lecture Notes in Computer Science*, **2019**, 42-50	0.9	6
24	Fuzzy Connectedness Image Co-segmentation for HybridPET/MRI and PET/CT Scans. *Lecture Notes in Computational Vision and Biomechanics*, **2015**, 15-24	0.3	5
23	Tunable CT Lung Nodule Synthesis Conditioned on Background Image and Semantic Features. *Lecture Notes in Computer Science*, **2019**, 62-70	0.9	5
22	Cardiac Segmentation of LGE MRI with Noisy Labels. *Lecture Notes in Computer Science*, **2020**, 228-236	0.9	5

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21	Multi-label Deep Regression and Unordered Pooling for Holistic Interstitial Lung Disease Pattern Detection. *Lecture Notes in Computer Science*, **2016**, 147-155	0.9	5
20	Accounting for Dependencies in Deep Learning Based Multiple Instance Learning for Whole Slide Imaging. *Lecture Notes in Computer Science*, **2021**, 329-338	0.9	5
19	Computer-aided pulmonary image analysis in small animal models. *Medical Physics*, **2015**, 42, 3896-910	4.4	4
18	Highly precise partial volume correction for PET images: An iterative approach via shape consistency **2015**,		4
17	Can artificial intelligence predict the need for oxygen therapy in early stage COVID-19 pneumonia?		4
16	Generalized chest CT and lab curves throughout the course of COVID-19. *Scientific Reports*, **2021**, 11, 6940	4.9	4
15	A deep-learning based artificial intelligence (AI) approach for differentiation of clear cell renal cell carcinoma from oncocytoma on multi-phasic MRI. *Clinical Imaging*, **2021**, 77, 291-298	2.7	4
14	White matter hyperintensity segmentation from T1 and FLAIR images using fully convolutional neural networks enhanced with residual connections **2018**,		4
13	CIDI-lung-seg: a single-click annotation tool for automatic delineation of lungs from CT scans. *Annual International Conference of the IEEE Engineering in Medicine and Biology Society IEEE Engineering in Medicine and Biology Society Annual International Conference*, **2014**, 2014, 1087-90	0.9	3
12	Accurate and efficient separation of left and right lungs from 3D CT scans: A generic hysteresis approach. *Annual International Conference of the IEEE Engineering in Medicine and Biology Society IEEE Engineering in Medicine and Biology Society Annual International Conference*, **2014**, 2014, 6036-9	0.9	3
11	Improved tensor scale computation with application to medical image interpolation. *Computerized Medical Imaging and Graphics*, **2011**, 35, 64-80	7.6	3
10	Tensor scale-based anisotropic region growing for segmentation of elongated biological structures **2012**,		3
9	**2012**,		3
8	Computer automated algorithm to evaluate cavitary lesions in adults with pulmonary tuberculosis. *Journal of Thoracic Disease*, **2017**, 9, E93-E96	2.6	2
7	An Analytic Approach To Tensor Scale with An Efficient Algorithm and Applications to Image Filtering **2010**, 2010, 429-434		2
6	3D Lightweight Network for Simultaneous Registration and Segmentation of Organs-at-Risk in CT Images of Head and Neck Cancer. *IEEE Transactions on Medical Imaging*, **2021**, PP,	11.7	2
5	GANDALF: Generative Adversarial Networks with Discriminator-Adaptive Loss Fine-Tuning for Alzheimer's Disease Diagnosis from MRI. *Lecture Notes in Computer Science*, **2020**, 688-697	0.9	2
4	LAMP: Large Deep Nets with Automated Model Parallelism for Image Segmentation. *Lecture Notes in Computer Science*, **2020**, 374-384	0.9	2

3   Interactive 3D Segmentation Editing and Refinement via Gated Graph Neural Networks. *Lecture Notes in Computer Science*, **2019**, 9-17   0.9   1

2   Interstitial Lung Diseases via Deep Convolutional Neural Networks: Segmentation Label Propagation, Unordered Pooling and Cross-Dataset Learning. *Advances in Computer Vision and Pattern Recognition*, **2017**, 97-111   1.1   1

1   Image Analyses **2017**, 223-237