Jelmer M Wolterink

List of Publications by Year
in descending order

55 papers	4,318 citations	201385 27 h-index	233125 45 g-index
57 all docs	57 docs citations	57 times ranked	4807 citing authors

#	Article	IF	Citations
1	Deep Learning Techniques for Automatic MRI Cardiac Multi-Structures Segmentation and Diagnosis: Is the Problem Solved?. IEEE Transactions on Medical Imaging, 2018, 37, 2514-2525.	5.4	926
2	Generative Adversarial Networks for Noise Reduction in Low-Dose CT. IEEE Transactions on Medical Imaging, 2017, 36, 2536-2545.	5.4	738
3	Deep MR to CT Synthesis Using Unpaired Data. Lecture Notes in Computer Science, 2017, , 14-23.	1.0	320
4	State-of-the-Art Deep Learning in Cardiovascular Image Analysis. JACC: Cardiovascular Imaging, 2019, 12, 1549-1565.	2.3	238
5	Automatic coronary artery calcium scoring in cardiac CT angiography using paired convolutional neural networks. Medical Image Analysis, 2016, 34, 123-136.	7.0	228
6	A Recurrent CNN for Automatic Detection and Classification of Coronary Artery Plaque and Stenosis in Coronary CT Angiography. IEEE Transactions on Medical Imaging, 2019, 38, 1588-1598.	5.4	172
7	Deep Learning for Multi-task Medical Image Segmentation in Multiple Modalities. Lecture Notes in Computer Science, 2016, , 478-486.	1.0	165
8	Deep learning analysis of the myocardium in coronary CT angiography for identification of patients with functionally significant coronary artery stenosis. Medical Image Analysis, 2018, 44, 72-85.	7.0	154
9	Coronary artery centerline extraction in cardiac CT angiography using a CNN-based orientation classifier. Medical Image Analysis, 2019, 51, 46-60.	7.0	129
10	MR-Only Brain Radiation Therapy: Dosimetric Evaluation of Synthetic CTs Generated by a Dilated Convolutional Neural Network. International Journal of Radiation Oncology Biology Physics, 2018, 102, 801-812.	0.4	102
11	Automatic Coronary Calcium Scoring in Non-Contrast-Enhanced ECG-Triggered Cardiac CT With Ambiguity Detection. IEEE Transactions on Medical Imaging, 2015, 34, 1867-1878.	5.4	96
12	ConvNet-Based Localization of Anatomical Structures in 3-D Medical Images. IEEE Transactions on Medical Imaging, 2017, 36, 1470-1481.	5.4	94
13	Direct Automatic Coronary Calcium Scoring in Cardiac and Chest CT. IEEE Transactions on Medical Imaging, 2019, 38, 2127-2138.	5.4	82
14	Deep Learning-Based Regression and Classification for Automatic Landmark Localization in Medical Images. IEEE Transactions on Medical Imaging, 2020, 39, 4011-4022.	5.4	70
15	An evaluation of automatic coronary artery calcium scoring methods with cardiac CT using the orCaScore framework. Medical Physics, 2016, 43, 2361-2373.	1.6	63
16	The effect of menaquinone-7 supplementation on vascular calcification in patients with diabetes: a randomized, double-blind, placebo-controlled trial. American Journal of Clinical Nutrition, 2019, 110, 883-890.	2.2	53
17	Automatic determination of cardiovascular risk by CT attenuation correction maps in Rb-82 PET/CT. Journal of Nuclear Cardiology, 2018, 25, 2133-2142.	1.4	49
18	Deep Learning Analysis of Coronary Arteries in Cardiac CT Angiography for Detection of Patients Requiring Invasive Coronary Angiography. IEEE Transactions on Medical Imaging, 2020, 39, 1545-1557.	5.4	43

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19	Machine Learning for Assessment of Coronary Artery Disease in Cardiac CT: A Survey. Frontiers in Cardiovascular Medicine, 2019, 6, 172.	1.1	41
20	Etidronate halts systemic arterial calcification in pseudoxanthoma elasticum. Atherosclerosis, 2020, 292, 37-41.	0.4	40
21	2D image classification for 3D anatomy localization: employing deep convolutional neural networks. Proceedings of SPIE, 2016, , .	0.8	39
22	Automatic Segmentation and Disease Classification Using Cardiac Cine MR Images. Lecture Notes in Computer Science, 2018, , 101-110.	1.0	38
23	Dilated Convolutional Neural Networks for Cardiovascular MR Segmentation in Congenital Heart Disease. Lecture Notes in Computer Science, 2017, , 95-102.	1.0	36
24	Graph Convolutional Networks for Coronary Artery Segmentation in Cardiac CT Angiography. Lecture Notes in Computer Science, 2019, , 62-69.	1.0	35
25	Automatic Coronary Calcium Scoring in Cardiac CT Angiography Using Convolutional Neural Networks. Lecture Notes in Computer Science, 2015, , 589-596.	1.0	35
26	Anatomy-aided deep learning for medical image segmentation: a review. Physics in Medicine and Biology, 2021, 66, 11TR01.	1.6	32
27	Towards increased trustworthiness of deep learning segmentation methods on cardiac MRI. , 2019, , .		30
28	Deep learning from dualâ€energy information for wholeâ€heart segmentation in dualâ€energy and singleâ€energy nonâ€contrastâ€enhanced cardiac CT. Medical Physics, 2020, 47, 5048-5060.	1.6	29
29	Generative Adversarial Networks: A Primer for Radiologists. Radiographics, 2021, 41, 840-857.	1.4	28
30	Submillisievert coronary calcium quantification using model-based iterative reconstruction: A within-patient analysis. European Journal of Radiology, 2016, 85, 2152-2159.	1.2	26
31	Six months vitamin K treatment does not affect systemic arterial calcification or bone mineral density in diabetes mellitus 2. European Journal of Nutrition, 2021, 60, 1691-1699.	1.8	21
32	Automatic segmentation of thoracic aorta segments in low-dose chest CT. , 2018, , .		18
33	Adversarial Optimization for Joint Registration and Segmentation in Prostate CT Radiotherapy. Lecture Notes in Computer Science, 2019, , 366-374.	1.0	15
34	Vascular uptake on 18F-sodium fluoride positron emission tomography: precursor of vascular calcification?. Journal of Nuclear Cardiology, 2021, 28, 2244-2254.	1.4	13
35	Determinants of 18F-NaF uptake in femoral arteries in patients with type 2 diabetes mellitus. Journal of Nuclear Cardiology, 2021, 28, 2700-2705.	1.4	11
36	Commonly available hematological biomarkers are associated with the extent of coronary calcifications. Atherosclerosis, 2018, 275, 166-173.	0.4	10

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37	AI-Based Quantification of Planned Radiation Therapy Dose to Cardiac Structures and Coronary Arteries in Patients With Breast Cancer. International Journal of Radiation Oncology Biology Physics, 2022, 112, 611-620.	0.4	9
38	Improving myocardium segmentation in cardiac CT angiography using spectral information. , 2019, , .		8
39	Deep learning-based whole-heart segmentation in 4D contrast-enhanced cardiac CT. Computers in Biology and Medicine, 2022, 142, 105191.	3.9	8
40	Mesh Convolutional Neural Networks forÂWall Shear Stress Estimation inÂ3D Artery Models. Lecture Notes in Computer Science, 2022, , 93-102.	1.0	8
41	An automatic machine learning system for coronary calcium scoring in clinical non-contrast enhanced, ECG-triggered cardiac CT. Proceedings of SPIE, 2014, , .	0.8	7
42	Left ventricle segmentation in the era of deep learning. Journal of Nuclear Cardiology, 2020, 27, 988-991.	1.4	7
43	Deep-learning-based carotid artery vessel wall segmentation in black-blood MRI using anatomical priors. , 2022, , .		7
44	Knowledgeâ€based and deep learningâ€based automated chest wall segmentation in magnetic resonance images of extremely dense breasts. Medical Physics, 2019, 46, 4405-4416.	1.6	6
45	Deep learning: Generative adversarial networks and adversarial methods. , 2020, , 547-574.		6
46	Graph attention networks for segment labeling in coronary artery trees. , 2021, , .		5
47	Embedding artificial intelligence in society: looking beyond the EU AI master plan using the culture cycle. AI and Society, 2023, 38, 1465-1484.	3.1	5
48	A Statistical Shape Model of the Morphological Variation of the Infrarenal Abdominal Aortic Aneurysm Neck. Journal of Clinical Medicine, 2022, 11, 1687.	1.0	5
49	Deep Learningâ€“Based Intraoperative Stent Graft Segmentation on Completion Digital Subtraction Angiography During Endovascular Aneurysm Repair. Journal of Endovascular Therapy, 2023, 30, 822-827.	0.8	5
50	Automatic online quality control of synthetic CTs. , 2020, , .		4
51	Automatic machine learning based prediction of cardiovascular events in lung cancer screening data. Proceedings of SPIE, 2015, , .	0.8	3
52	Cardiovascular Diseases. , 2019, , 167-185.		3
53	Automatic detection of cardiovascular risk in CT attenuation correction maps in Rb-82 PET/CTs. Proceedings of SPIE, 2016, , .	0.8	2
54	Deep Learning Techniques for Automatic MRI Cardiac Multi-Structures Segmentation and Diagnosis: Is the Problem Solved?. , 0, .		1

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55	Artificial Intelligence-Based Intraoperative Endoleak Visualization on Completion Digital Subtraction Angiography during Endovascular Aneurysm Repair. Aorta, 2022, , .	0.1	0