Lei Xu

List of Publications by Year in Descending Order

71 papers	897 citations	16 h-index	27 g-index
79 ext. papers	1,243 ext. citations	4.7 avg, IF	4.5 L-index

#	Paper	IF	Citations
71	Influence of diabetes mellitus on the diagnostic performance of machine learning-based coronary CT angiography-derived fractional flow reserve: a multicenter study.. *European Radiology*, **2022**, 1	8	1
70	Assessment of Image Quality of Coronary Computed Tomography Angiography in Obese Patients by Comparing Deep Learning Image Reconstruction With Adaptive Statistical Iterative Reconstruction Veo.. *Journal of Computer Assisted Tomography*, **2022**, 46, 34-40	2.2	
69	Impact of Sublingual Nitroglycerin on the Assessment of Computed Tomography-derived Fractional Flow Reserve: An Intraindividual Comparison Study.. *Journal of Computer Assisted Tomography*, **2022**, 46, 23-28	2.2	
68	An automated quantification method for the Agatston coronary artery calcium score on coronary computed tomography angiography.. *Quantitative Imaging in Medicine and Surgery*, **2022**, 12, 1787-1799	3.6	1
67	Functional CAD-RADS using FFR on therapeutic management and prognosis in patients with coronary artery disease.. *European Radiology*, **2022**, 1	8	0
66	Comparison of Different Thoracic Aortic Wall Characteristics for Assessment of Disease Activity in Takayasu Arteritis: A Quantitative Study with 3.0 T Magnetic Resonance Imaging.. *Reviews in Cardiovascular Medicine*, **2022**, 23, 92	3.9	0
65	Lesion-Specific Peri-Coronary Fat Attenuation Index Is Associated With Functional Myocardial Ischemia Defined by Abnormal Fractional Flow Reserve. *Frontiers in Cardiovascular Medicine*, **2021**, 8, 755295	5.4	1
64	Association Between Left Ventricular Global Function Index and Outcomes in Patients With Dilated Cardiomyopathy. *Frontiers in Cardiovascular Medicine*, **2021**, 8, 751907	5.4	0
63	Monitoring of anthracycline-induced myocardial injury using serial cardiac magnetic resonance: An animal study. *International Journal of Cardiology*, **2021**, 328, 111-116	3.2	
62	Coronary plaque assessment of Vasodilative capacity by CT angiography effectively estimates fractional flow reserve. *International Journal of Cardiology*, **2021**, 331, 307-315	3.2	1
61	CT Findings of Pulmonary Metastases from Primary Cardiac Angiosarcoma. *Current Medical Imaging*, **2021**, 17, 1216-1220	1.2	1
60	Multi-task learning with Multi-view Weighted Fusion Attention for artery-specific calcification analysis. *Information Fusion*, **2021**, 71, 64-76	16.7	9
59	Association Between OSA and Quantitative Atherosclerotic Plaque Burden: A Coronary CT Angiography Study. *Chest*, **2021**, 160, 1864-1874	5.3	1
58	Fully automatic framework for comprehensive coronary artery calcium scores analysis on non-contrast cardiac-gated CT scan: Total and vessel-specific quantifications. *European Journal of Radiology*, **2021**, 134, 109420	4.7	8
57	The effect of coronary calcification on diagnostic performance of machine learning-based CT-FFR: a Chinese multicenter study. *European Radiology*, **2021**, 31, 1482-1493	8	8
56	Rationale, design, and baseline characteristics of Chinese registry in early detection and risk stratification of coronary plaques (C-STRAT) study. *Chinese Medical Journal*, **2021**, 134, 870-872	2.9	
55	Myocardial extracellular volume fraction quantification in an animal model of the doxorubicin-induced myocardial fibrosis: a synthetic hematocrit method using 3T cardiac magnetic resonance. *Quantitative Imaging in Medicine and Surgery*, **2021**, 11, 510-520	3.6	2

54	Myocardial extracellular volume fraction analysis in doxorubicin-induced beagle models: comparison of dual-energy CT with equilibrium contrast-enhanced single-energy CT. *Cardiovascular Diagnosis and Therapy*, **2021**, 11, 102-110	2.6	1
53	Cardiac involvement in COVID-19 patients: mid-term follow up by cardiovascular magnetic resonance. *Journal of Cardiovascular Magnetic Resonance*, **2021**, 23, 14	6.9	39
52	Quantitative analysis of three-dimensional left ventricular global strain using coronary computed tomography angiography in patients with heart failure: Comparison with 3T cardiac MR. *European Journal of Radiology*, **2021**, 135, 109485	4.7	5
51	Diagnostic and Prognostic Value of Cardiac Magnetic Resonance Strain in Suspected Myocarditis With Preserved LV-EF: A Comparison Between Patients With Negative and Positive Late Gadolinium Enhancement Findings. *Journal of Magnetic Resonance Imaging*, **2021**,	5.6	2
50	Spatio-temporal multi-task network cascade for accurate assessment of cardiac CT perfusion. *Medical Image Analysis*, **2021**, 74, 102207	15.4	0
49	Association between right ventricular strain and outcomes in patients with dilated cardiomyopathy. *Heart*, **2020**,	5.1	9
48	Relation between quantity and quality of peri-coronary epicardial adipose tissue and its underlying hemodynamically significant coronary stenosis. *BMC Cardiovascular Disorders*, **2020**, 20, 226	2.3	3
47	Spontaneous interventricular septum dissecting hematoma with endocardial fibroelastosis: imaging, diagnosis, surgical therapy and 6-year follow-up outcomes. *Quantitative Imaging in Medicine and Surgery*, **2020**, 10, 878-882	3.6	1
46	Simultaneous left atrium anatomy and scar segmentations via deep learning in multiview information with attention. *Future Generation Computer Systems*, **2020**, 107, 215-228	7.5	44
45	Contrast agent-free synthesis and segmentation of ischemic heart disease images using progressive sequential causal GANs. *Medical Image Analysis*, **2020**, 62, 101668	15.4	20
44	The influence of image quality on diagnostic performance of a machine learning-based fractional flow reserve derived from coronary CT angiography. *European Radiology*, **2020**, 30, 2525-2534	8	11
43	Quantitative Assessment of Extracellular Volume in Doxorubicin-Induced Liver Injury in Beagle Models by Equilibrium Computed Tomography. *Journal of Computer Assisted Tomography*, **2020**, 44, 204-208	2.2	
42	Cardiac magnetic resonance imaging of primary cardiac tumors. *Quantitative Imaging in Medicine and Surgery*, **2020**, 10, 294-313	3.6	11
41	Clinical and Imaging Features of Primary Cardiac Angiosarcoma. *Diagnostics*, **2020**, 10,	3.8	5
40	Spatiotemporal transfer of nitric oxide in patient-specific atherosclerotic carotid artery bifurcations with MRI and computational fluid dynamics modeling. *Computers in Biology and Medicine*, **2020**, 125, 104015	7	2
39	CT FFR for Ischemia-Specific CAD With a New Computational Fluid Dynamics Algorithm: A Chinese Multicenter Study. *JACC: Cardiovascular Imaging*, **2020**, 13, 980-990	8.4	29
38	Effect of a calcium deblooming algorithm on accuracy of coronary computed tomography angiography. *Journal of Cardiovascular Computed Tomography*, **2020**, 14, 131-136	2.8	2
37	Diagnostic Performance of Machine Learning Based CT-FFR in Detecting Ischemia in Myocardial Bridging and Concomitant Proximal Atherosclerotic Disease. *Canadian Journal of Cardiology*, **2019**, 35, 1523-1533	3.8	10

36	Quantification of doxorubicin-induced interstitial myocardial fibrosis in a beagle model using equilibrium contrast-enhanced computed tomography: A comparative study with cardiac magnetic resonance T1-mapping. *International Journal of Cardiology*, **2019**, 281, 150-155	3.2	9
35	Diagnostic performance of fractional flow reserve derived from coronary CT angiography for detection of lesion-specific ischemia: A multi-center study and meta-analysis. *European Journal of Radiology*, **2019**, 116, 90-97	4.7	18
34	Deep Learning for Diagnosis of Chronic Myocardial Infarction on Nonenhanced Cardiac Cine MRI. *Radiology*, **2019**, 291, 606-617	20.5	87
33	Morphometry and hemodynamics of coronary artery aneurysms caused by atherosclerosis. *Atherosclerosis*, **2019**, 284, 187-193	3.1	8
32	Morphometric and hemodynamic parameter dataset for coronary artery aneurysms caused by atherosclerosis. *Data in Brief*, **2019**, 25, 104293	1.2	2
31	Second-generation motion correction algorithm improves diagnostic accuracy of single-beat coronary CT angiography in patients with increased heart rate. *European Radiology*, **2019**, 29, 4215-4227	8	12
30	A Preliminary Study of Computed Tomography Coronary Angiography Within a Single Cardiac Cycle in Patients With Atrial Fibrillation Using 256-Row Detector Computed Tomography. *Journal of Computer Assisted Tomography*, **2018**, 42, 277-281	2.2	6
29	Impact of SSF on Diagnostic Performance of Coronary Computed Tomography Angiography Within 1 Heart Beat in Patients With High Heart Rate Using a 256-Row Detector Computed Tomography. *Journal of Computer Assisted Tomography*, **2018**, 42, 54-61	2.2	18
28	Blooming Artifact Reduction in Coronary Artery Calcification by A New De-blooming Algorithm: Initial Study. *Scientific Reports*, **2018**, 8, 6945	4.9	16
27	Clinical value of patient-specific three-dimensional printing of congenital heart disease: Quantitative and qualitative assessments. *PLoS ONE*, **2018**, 13, e0194333	3.7	41
26	Chinese expert consensus on the non-invasive imaging examination pathways of stable coronary artery disease. *Journal of Geriatric Cardiology*, **2018**, 15, 30-40	1.7	3
25	Direct delineation of myocardial infarction without contrast agents using a joint motion feature learning architecture. *Medical Image Analysis*, **2018**, 50, 82-94	15.4	65
24	Extracellular volume quantitation using dual-energy CT in patients with heart failure: Comparison with 3T cardiac MR. *International Journal of Cardiology*, **2018**, 268, 236-240	3.2	9
23	Quantitative analysis of late gadolinium enhancement in hypertrophic cardiomyopathy: comparison of diagnostic performance in myocardial fibrosis between gadobutrol and gadopentetate dimeglumine. *International Journal of Cardiovascular Imaging*, **2017**, 33, 1191-1200	2.5	10
22	Direct Detection of Pixel-Level Myocardial Infarction Areas via a Deep-Learning Algorithm. *Lecture Notes in Computer Science*, **2017**, 240-249	0.9	16
21	Clinical evaluation of new automatic coronary-specific best cardiac phase selection algorithm for single-beat coronary CT angiography. *PLoS ONE*, **2017**, 12, e0172686	3.7	5
20	Coronary CT angiography in calcified coronary plaques: Comparison of diagnostic accuracy between bifurcation angle measurement and coronary lumen assessment for diagnosing significant coronary stenosis. *International Journal of Cardiology*, **2016**, 203, 78-86	3.2	13
19	Quantification of regional aortic stiffness using MR elastography: A phantom and ex-vivo porcine aorta study. *Magnetic Resonance Imaging*, **2016**, 34, 91-6	3.3	6

18	Late Gadolinium Enhancement Amount As an Independent Risk Factor for the Incidence of Adverse Cardiovascular Events in Patients with Stage C or D Heart Failure. *Frontiers in Physiology*, **2016**, 7, 484	4.6	12
17	Molecular subgroups of adult medulloblastoma: a long-term single-institution study. *Neuro-Oncology*, **2016**, 18, 982-90	1	55
16	Coronary CT Angiography in Heavily Calcified Coronary Arteries: Improvement of Coronary Lumen Visualization and Coronary Stenosis Assessment With Image Postprocessing Methods. *Medicine (United States)*, **2015**, 94, e2148	1.8	13
15	Prospectively ECG-Triggered Sequential Dual-Source Coronary CT Angiography in Patients with Atrial Fibrillation: Influence of Heart Rate on Image Quality and Evaluation of Diagnostic Accuracy. *PLoS ONE*, **2015**, 10, e0134194	3.7	11
14	Noninvasive physiologic assessment of coronary stenoses using cardiac CT. *BioMed Research International*, **2015**, 2015, 435737	3	7
13	Virtual intravascular endoscopy visualization of calcified coronary plaques: a novel approach of identifying plaque features for more accurate assessment of coronary lumen stenosis. *Medicine (United States)*, **2015**, 94, e805	1.8	12
12	Coronary CT angiography evaluation of calcified coronary plaques by measurement of left coronary bifurcation angle. *International Journal of Cardiology*, **2015**, 182, 229-31	3.2	9
11	Computational fluid dynamics in coronary artery disease. *Computerized Medical Imaging and Graphics*, **2014**, 38, 651-63	7.6	27
10	Coronary CT angiography in the quantitative assessment of coronary plaques. *BioMed Research International*, **2014**, 2014, 346380	3	14
9	Molecular imaging of plaques in coronary arteries with PET and SPECT. *Journal of Geriatric Cardiology*, **2014**, 11, 259-73	1.7	12
8	Prospectively ECG-triggered sequential dual-source coronary CT angiography in patients with atrial fibrillation: comparison with retrospectively ECG-gated helical CT. *European Radiology*, **2013**, 23, 1822-8	8	19
7	MR elastography of the human abdominal aorta: a preliminary study. *Journal of Magnetic Resonance Imaging*, **2013**, 38, 1549-53	5.6	13
6	Assessment of stiffness changes in the ex vivo porcine aortic wall using magnetic resonance elastography. *Magnetic Resonance Imaging*, **2012**, 30, 122-7	3.3	16
5	Low dose prospective ECG-gated delayed enhanced dual-source computed tomography in reperfused acute myocardial infarction comparison with cardiac magnetic resonance. *European Journal of Radiology*, **2011**, 80, 326-30	4.7	10
4	Diagnostic performance of 320-detector CT coronary angiography in patients with atrial fibrillation: preliminary results. *European Radiology*, **2011**, 21, 936-43	8	39
3	Low-dose adaptive sequential scan for dual-source CT coronary angiography in patients with high heart rate: comparison with retrospective ECG gating. *European Journal of Radiology*, **2010**, 76, 183-7	4.7	23
2	Coronary CT angiography with low radiation dose. *International Journal of Cardiovascular Imaging*, **2010**, 26 Suppl 1, 17-25	2.5	31
1	"Palpation by imaging": magnetic resonance elastography. *Chinese Medical Sciences Journal*, **2006**, 21, 281-6	1.3	3