Tim Leiner

List of Publications by Citations

258 papers	7,742 citations	44 h-index	78 g-index
285 ext. papers	9,744 ext. citations	5.5 avg, IF	6.2 L-index

#	Paper	IF	Citations
258	Generative Adversarial Networks for Noise Reduction in Low-Dose CT. *IEEE Transactions on Medical Imaging*, **2017**, 36, 2536-2545	11.7	464
257	Diagnostic performance of noninvasive myocardial perfusion imaging using single-photon emission computed tomography, cardiac magnetic resonance, and positron emission tomography imaging for the detection of obstructive coronary artery disease: a meta-analysis. *Journal of the American College of Cardiology*, **2012**, 59, 1719-28	15.1	325
256	Iterative reconstruction techniques for computed tomography Part 1: technical principles. *European Radiology*, **2013**, 23, 1623-31	8	284
255	Accuracy of computed tomographic angiography and magnetic resonance angiography for diagnosing renal artery stenosis. *Annals of Internal Medicine*, **2004**, 141, 674-82; discussion 682	8	269
254	Diagnostic accuracy of stress myocardial perfusion imaging compared to invasive coronary angiography with fractional flow reserve meta-analysis. *Circulation: Cardiovascular Imaging*, **2015**, 8,	3.9	211
253	25 Years of Contrast-Enhanced MRI: Developments, Current Challenges and Future Perspectives. *Advances in Therapy*, **2016**, 33, 1-28	4.1	211
252	Myocardial injury after noncardiac surgery and its association with short-term mortality. *Circulation*, **2013**, 127, 2264-71	16.7	203
251	Iterative reconstruction techniques for computed tomography part 2: initial results in dose reduction and image quality. *European Radiology*, **2013**, 23, 1632-42	8	199
250	Peripheral arterial disease: meta-analysis of the diagnostic performance of MR angiography. *Radiology*, **2000**, 217, 105-14	20.5	184
249	Automatic coronary artery calcium scoring in cardiac CT angiography using paired convolutional neural networks. *Medical Image Analysis*, **2016**, 34, 123-136	15.4	156
248	Accuracy of gadofosveset-enhanced MRI for nodal staging and restaging in rectal cancer. *Annals of Surgery*, **2011**, 253, 539-45	7.8	120
247	State-of-the-Art Deep Learning in Cardiovascular Image Analysis. *JACC: Cardiovascular Imaging*, **2019**, 12, 1549-1565	8.4	117
246	Accuracy of iodine quantification using dual energy CT in latest generation dual source and dual layer CT. *European Radiology*, **2017**, 27, 3904-3912	8	111
245	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	15.4	103
244	The extent of coronary atherosclerosis is associated with increasing circulating levels of high sensitive cardiac troponin T. *Arteriosclerosis, Thrombosis, and Vascular Biology*, **2010**, 30, 1269-75	9.4	102
243	Cardiac magnetic resonance imaging findings and the risk of cardiovascular events in patients with recent myocardial infarction or suspected or known coronary artery disease: a systematic review of prognostic studies. *Journal of the American College of Cardiology*, **2014**, 63, 1031-45	15.1	98
242	Three-dimensional contrast-enhanced moving-bed infusion-tracking (MoBI-track) peripheral MR angiography with flexible choice of imaging parameters for each field of view. *Journal of Magnetic Resonance Imaging*, **2000**, 11, 368-77	5.6	90

241	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	11.7	90
240	Chronic coumarin treatment is associated with increased extracoronary arterial calcification in humans. *Blood*, **2010**, 115, 5121-3	2.2	87
239	Peripheral arterial disease: comparison of color duplex US and contrast-enhanced MR angiography for diagnosis. *Radiology*, **2005**, 235, 699-708	20.5	81
238	Nephrogenic systemic fibrosis: review of 370 biopsy-confirmed cases. *JACC: Cardiovascular Imaging*, **2011**, 4, 1206-16	8.4	77
237	Comparison of magnetic resonance with computed tomography angiography for preoperative localization of the Adamkiewicz artery in thoracoabdominal aortic aneurysm patients. *Journal of Vascular Surgery*, **2007**, 45, 677-85	3.5	77
236	Machine learning in cardiovascular magnetic resonance: basic concepts and applications. *Journal of Cardiovascular Magnetic Resonance*, **2019**, 21, 61	6.9	74
235	Diagnosis, imaging and clinical management of aortic coarctation. *Heart*, **2017**, 103, 1148-1155	5.1	73
234	Cardiac magnetic resonance findings predicting mortality in patients with pulmonary arterial hypertension: a systematic review and meta-analysis. *European Radiology*, **2016**, 26, 3771-3780	8	71
233	Coronary artery centerline extraction in cardiac CT angiography using a CNN-based orientation classifier. *Medical Image Analysis*, **2019**, 51, 46-60	15.4	69
232	Automatic Coronary Calcium Scoring in Non-Contrast-Enhanced ECG-Triggered Cardiac CT With Ambiguity Detection. *IEEE Transactions on Medical Imaging*, **2015**, 34, 1867-78	11.7	67
231	ConvNet-Based Localization of Anatomical Structures in 3-D Medical Images. *IEEE Transactions on Medical Imaging*, **2017**, 36, 1470-1481	11.7	65
230	RF coils: A practical guide for nonphysicists. *Journal of Magnetic Resonance Imaging*, **2018**, 48, 590	5.6	65
229	Gadobutrol-enhanced moving-table magnetic resonance angiography in patients with peripheral vascular disease: a prospective, multi-centre blinded comparison with digital subtraction angiography. *European Radiology*, **2003**, 13, 2103-14	8	65
228	Deep Learning for Automatic Calcium Scoring in CT: Validation Using Multiple Cardiac CT and Chest CT Protocols. *Radiology*, **2020**, 295, 66-79	20.5	64
227	Automated coronary artery calcification scoring in non-gated chest CT: agreement and reliability. *PLoS ONE*, **2014**, 9, e91239	3.7	60
226	Replacement and reactive myocardial fibrosis in idiopathic dilated cardiomyopathy: comparison of magnetic resonance imaging with right ventricular biopsy. *European Journal of Heart Failure*, **2010**, 12, 227-31	12.3	59
225	Spinal cord feeding arteries at MR angiography for thoracoscopic spinal surgery: feasibility study and implications for surgical approach. *Radiology*, **2004**, 233, 541-7	20.5	57
224	Coronary artery calcification scoring with state-of-the-art CT scanners from different vendors has substantial effect on risk classification. *Radiology*, **2014**, 273, 695-702	20.5	56

223	Contrast-enhanced peripheral MR angiography at 3.0 Tesla: initial experience with a whole-body scanner in healthy volunteers. *Journal of Magnetic Resonance Imaging*, **2003**, 17, 609-14	5.6	56
222	Anatomical and Functional Computed Tomography for Diagnosing Hemodynamically Significant Coronary Artery Disease: A Meta-Analysis. *JACC: Cardiovascular Imaging*, **2019**, 12, 1316-1325	8.4	55
221	The effect of iterative reconstruction on computed tomography assessment of emphysema, air trapping and airway dimensions. *European Radiology*, **2012**, 22, 2103-9	8	51
220	Magnetic resonance imaging in peripheral arterial disease: reproducibility of the assessment of morphological and functional vascular status. *Investigative Radiology*, **2011**, 46, 11-24	10.1	49
219	Magnetic resonance angiography of abdominal and lower extremity vasculature. *Topics in Magnetic Resonance Imaging*, **2005**, 16, 21-66	2.3	49
218	Deep learning analysis of left ventricular myocardium in CT angiographic intermediate-degree coronary stenosis improves the diagnostic accuracy for identification of functionally significant stenosis. *European Radiology*, **2019**, 29, 2350-2359	8	49
217	Image quality in coronary CT angiography: challenges and technical solutions. *British Journal of Radiology*, **2017**, 90, 20160567	3.4	48
216	Direct Automatic Coronary Calcium Scoring in Cardiac and Chest CT. *IEEE Transactions on Medical Imaging*, **2019**, 38, 2127-2138	11.7	47
215	Sublingual Nitroglycerin Administration in Coronary Computed Tomography Angiography: a Systematic Review. *European Radiology*, **2015**, 25, 3536-42	8	46
214	Multimodality Imaging Assessment of Prosthetic Heart Valves. *Circulation: Cardiovascular Imaging*, **2015**, 8, e003703	3.9	44
213	Clinical implications of microvascular obstruction and intramyocardial haemorrhage in acute myocardial infarction using cardiovascular magnetic resonance imaging. *European Radiology*, **2010**, 20, 2572-8	8	44
212	SCMR Position Paper (2020) on clinical indications for cardiovascular magnetic resonance. *Journal of Cardiovascular Magnetic Resonance*, **2020**, 22, 76	6.9	43
211	Achievable dose reduction using iterative reconstruction for chest computed tomography: A systematic review. *European Journal of Radiology*, **2015**, 84, 2307-13	4.7	41
210	Magnetic resonance imaging T1- and T2-mapping to assess renal structure and function: a systematic review and statement paper. *Nephrology Dialysis Transplantation*, **2018**, 33, ii41-ii50	4.3	41
209	Gadofosveset-enhanced magnetic resonance imaging of human carotid atherosclerotic plaques: a proof-of-concept study. *Investigative Radiology*, **2010**, 45, 275-81	10.1	41
208	An evaluation of automatic coronary artery calcium scoring methods with cardiac CT using the orCaScore framework. *Medical Physics*, **2016**, 43, 2361	4.4	40
207	Relation between brown adipose tissue and measures of obesity and metabolic dysfunction in patients with cardiovascular disease. *Journal of Magnetic Resonance Imaging*, **2017**, 46, 497-504	5.6	39
206	Accuracy of bone mineral density quantification using dual-layer spectral detector CT: a phantom study. *European Radiology*, **2017**, 27, 4351-4359	8	39

205	Comparison of lipid-rich necrotic core size in symptomatic and asymptomatic carotid atherosclerotic plaque: Initial results. *Journal of Magnetic Resonance Imaging*, **2008**, 27, 1356-61	5.6	39
204	Diameter measurements of the forearm cephalic vein prior to vascular access creation in end-stage renal disease patients: graduated pressure cuff versus tourniquet vessel dilatation. *Nephrology Dialysis Transplantation*, **2006**, 21, 802-6	4.3	38
203	Safety of contrast-enhanced MR angiography employing gadobutrol 1.0 M as contrast material. *European Radiology*, **2003**, 13, 2067-74	8	38
202	Use of a three-station phased array coil to improve peripheral contrast-enhanced magnetic resonance angiography. *Journal of Magnetic Resonance Imaging*, **2004**, 20, 417-25	5.6	38
201	Quantification of coronary artery calcium in nongated CT to predict cardiovascular events in male lung cancer screening participants: results of the NELSON study. *Journal of Cardiovascular Computed Tomography*, **2015**, 9, 50-7	2.8	37
200	Atherosclerosis: contrast-enhanced MR imaging of vessel wall in rabbit model--comparison of gadofosveset and gadopentetate dimeglumine. *Radiology*, **2009**, 250, 682-91	20.5	37
199	Forearm cephalic vein cross-sectional area changes at incremental congestion pressures: towards a standardized and reproducible vein mapping protocol. *Journal of Vascular Surgery*, **2006**, 44, 353-8	3.5	37
198	Does the aortic annulus undergo conformational change throughout the cardiac cycle? A systematic review. *European Heart Journal Cardiovascular Imaging*, **2015**, 16, 1307-17	4.1	36
197	Dose reduction with iterative reconstruction for coronary CT angiography: a systematic review and meta-analysis. *British Journal of Radiology*, **2016**, 89, 20150068	3.4	36
196	Comparison of the prognostic value of negative non-invasive cardiac investigations in patients with suspected or known coronary artery disease-a meta-analysis. *European Heart Journal Cardiovascular Imaging*, **2017**, 18, 980-987	4.1	35
195	Correction for heart rate variability improves coronary magnetic resonance angiography. *Journal of Magnetic Resonance Imaging*, **2005**, 22, 577-82	5.6	35
194	Relation between cardiovascular disease risk factors and epicardial adipose tissue density on cardiac computed tomography in patients at high risk of cardiovascular events. *European Journal of Preventive Cardiology*, **2017**, 24, 660-670	3.9	34
193	Medical imaging techniques in the evaluation of strategies for therapeutic angiogenesis. *Current Pharmaceutical Design*, **2002**, 8, 1467-96	3.3	34
192	Finding the optimal dose reduction and iterative reconstruction level for coronary calcium scoring. *Journal of Cardiovascular Computed Tomography*, **2016**, 10, 69-75	2.8	33
191	The impact of CT radiation dose reduction and iterative reconstruction algorithms from four different vendors on coronary calcium scoring. *European Radiology*, **2014**, 24, 2201-12	8	32
190	An 8-channel Tx/Rx dipole array combined with 16 Rx loops for high-resolution functional cardiac imaging at 7T. *Magnetic Resonance Materials in Physics, Biology, and Medicine*, **2018**, 31, 7-18	2.8	30
189	Comparison of treatment plans for peripheral arterial disease made with multi-station contrast medium-enhanced magnetic resonance angiography and duplex ultrasound scanning. *Journal of Vascular Surgery*, **2003**, 37, 1255-62	3.5	30
188	Automatic Coronary Calcium Scoring in Cardiac CT Angiography Using Convolutional Neural Networks. *Lecture Notes in Computer Science*, **2015**, 589-596	0.9	30

187	Dilated Convolutional Neural Networks for Cardiovascular MR Segmentation in Congenital Heart Disease. *Lecture Notes in Computer Science*, **2017**, 95-102	0.9	29
186	The effect of iterative reconstruction on quantitative computed tomography assessment of coronary plaque composition. *International Journal of Cardiovascular Imaging*, **2014**, 30, 155-63	2.5	28
185	Computed tomography radiation dose reduction: effect of different iterative reconstruction algorithms on image quality. *Journal of Computer Assisted Tomography*, **2014**, 38, 815-23	2.2	28
184	Comparison of single-sequence T1w TFE MRI with multisequence MRI for the quantification of lipid-rich necrotic core in atherosclerotic plaque. *Journal of Magnetic Resonance Imaging*, **2008**, 27, 1347-55	5.6	27
183	Comparison of contrast-enhanced magnetic resonance angiography and digital subtraction angiography in patients with chronic critical ischemia and tissue loss. *Investigative Radiology*, **2004**, 39, 435-44	10.1	27
182	Automatic Coronary Artery Calcium Scoring on Radiotherapy Planning CT Scans of Breast Cancer Patients: Reproducibility and Association with Traditional Cardiovascular Risk Factors. *PLoS ONE*, **2016**, 11, e0167925	3.7	27
181	The effects of computed tomography with iterative reconstruction on solid pulmonary nodule volume quantification. *PLoS ONE*, **2013**, 8, e58053	3.7	26
180	Contrast agent concentration optimization in CTA using low tube voltage and dual-energy CT in multiple vendors: a phantom study. *International Journal of Cardiovascular Imaging*, **2018**, 34, 1265-1275	2.5	25
179	The impact of a new model-based iterative reconstruction algorithm on prosthetic heart valve related artifacts at reduced radiation dose MDCT. *International Journal of Cardiovascular Imaging*, **2014**, 30, 785-93	2.5	25
178	Inhibition of the renin-angiotensin system affects kidney tissue oxygenation evaluated by magnetic resonance imaging in patients with chronic kidney disease. *Journal of Clinical Hypertension*, **2014**, 16, 214-8	2.3	25
177	A novel iterative reconstruction algorithm allows reduced dose multidetector-row CT imaging of mechanical prosthetic heart valves. *International Journal of Cardiovascular Imaging*, **2012**, 28, 1567-75	2.5	25
176	Relation of Epicardial Adipose Tissue Radiodensity to Coronary Artery Calcium on Cardiac Computed Tomography in Patients at High Risk for Cardiovascular Disease. *American Journal of Cardiology*, **2017**, 119, 1359-1365	3	24
175	Subtractionless first-pass single contrast medium dose peripheral MR angiography using two-point Dixon fat suppression. *European Radiology*, **2013**, 23, 2228-35	8	24
174	Comprehensive MR evaluation of renal disease: added clinical value of quantified renal perfusion values over single MR angiography. *Journal of Magnetic Resonance Imaging*, **2010**, 31, 125-33	5.6	24
173	Tricuspid flow and regurgitation in congenital heart disease and pulmonary hypertension: comparison of 4D flow cardiovascular magnetic resonance and echocardiography. *Journal of Cardiovascular Magnetic Resonance*, **2018**, 20, 5	6.9	23
172	Hybrid and model-based iterative reconstruction techniques for pediatric CT. *American Journal of Roentgenology*, **2015**, 204, 645-53	5.4	23
171	Machine Learning for Assessment of Coronary Artery Disease in Cardiac CT: A Survey. *Frontiers in Cardiovascular Medicine*, **2019**, 6, 172	5.4	23
170	Iterative reconstruction does not substantially delay CT imaging in an emergency setting. *Insights Into Imaging*, **2013**, 4, 391-7	5.6	22

169	Deep Learning-Based Regression and Classification for Automatic Landmark Localization in Medical Images. *IEEE Transactions on Medical Imaging*, **2020**, 39, 4011-4022	11.7	22
168	Artificial Intelligence Will Transform Cardiac Imaging-Opportunities and Challenges. *Frontiers in Cardiovascular Medicine*, **2019**, 6, 133	5.4	21
167	Automatic determination of cardiovascular risk by CT attenuation correction maps in Rb-82 PET/CT. *Journal of Nuclear Cardiology*, **2018**, 25, 2133-2142	2.1	21
166	3D black blood VISTA vessel wall cardiovascular magnetic resonance of the thoracic aorta wall in young, healthy adults: reproducibility and implications for efficacy trial sample sizes: a cross-sectional study. *Journal of Cardiovascular Magnetic Resonance*, **2016**, 18, 20	6.9	21
165	Emphysema quantification using chest CT: influence of radiation dose reduction and reconstruction technique. *European Radiology Experimental*, **2018**, 2, 30	4.5	21
164	Automatic Segmentation and Disease Classification Using Cardiac Cine MR Images. *Lecture Notes in Computer Science*, **2018**, 101-110	0.9	20
163	Submillisievert coronary calcium quantification using model-based iterative reconstruction: A within-patient analysis. *European Journal of Radiology*, **2016**, 85, 2152-2159	4.7	20
162	Dose reduction for coronary calcium scoring with hybrid and model-based iterative reconstruction: an ex vivo study. *International Journal of Cardiovascular Imaging*, **2014**, 30, 1125-33	2.5	19
161	Detection of coronary plaques using MR coronary vessel wall imaging: validation of findings with intravascular ultrasound. *European Radiology*, **2013**, 23, 115-24	8	19
160	Visualization of coronary wall atherosclerosis in asymptomatic subjects and patients with coronary artery disease using magnetic resonance imaging. *PLoS ONE*, **2010**, 5, e12998	3.7	19
159	Optimized pharmacokinetic modeling for the detection of perfusion differences in skeletal muscle with DCE-MRI: effect of contrast agent size. *Medical Physics*, **2010**, 37, 5746-55	4.4	19
158	Effects of renal denervation on end organ damage in hypertensive patients. *European Journal of Preventive Cardiology*, **2015**, 22, 558-67	3.9	18
157	Transcatheter aortic valve replacement: postoperative CT findings of Sapien and CoreValve transcatheter heart valves. *Radiographics*, **2014**, 34, 1517-36	5.4	18
156	Accuracy of semiautomated analysis of 3D contrast-enhanced magnetic resonance angiography for detection and quantification of aortoiliac stenoses. *Investigative Radiology*, **2005**, 40, 495-503	10.1	18
155	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	11.7	18
154	Prognostic Value of Coronary Computed Tomography Angiography in Patients With Diabetes: A Meta-analysis. *Diabetes Care*, **2016**, 39, 1274-80	14.6	17
153	Reliability and agreement of adipose tissue fat fraction measurements with water-fat MRI in patients with manifest cardiovascular disease. *NMR in Biomedicine*, **2016**, 29, 48-56	4.4	17
152	Effect of radiation dose reduction and iterative reconstruction on computer-aided detection of pulmonary nodules: Intra-individual comparison. *European Journal of Radiology*, **2016**, 85, 346-51	4.7	17

151	Pressure overloaded right ventricles: a multicenter study on the importance of trabeculae in RV function measured by CMR. *International Journal of Cardiovascular Imaging*, **2014**, 30, 599-608	2.5	17
150	MR angiography of collateral arteries in a hind limb ischemia model: comparison between blood pool agent Gadomer and small contrast agent Gd-DTPA. *PLoS ONE*, **2011**, 6, e16159	3.7	17
149	Consensus-based technical recommendations for clinical translation of renal T1 and T2 mapping MRI. *Magnetic Resonance Materials in Physics, Biology, and Medicine*, **2020**, 33, 163-176	2.8	17
148	An international survey on AI in radiology in 1,041 radiologists and radiology residents part 1: fear of replacement, knowledge, and attitude. *European Radiology*, **2021**, 31, 7058-7066	8	17
147	Dose of CT protocols acquired in clinical routine using a dual-layer detector CT scanner: A preliminary report. *European Journal of Radiology*, **2019**, 112, 65-71	4.7	16
146	Artifact reduction strategies for prosthetic heart valve CT imaging. *International Journal of Cardiovascular Imaging*, **2012**, 28, 2099-108	2.5	16
145	Need for background suppression in contrast-enhanced peripheral magnetic resonance angiography. *Journal of Magnetic Resonance Imaging*, **2001**, 14, 724-33	5.6	16
144	Graph Convolutional Networks for Coronary Artery Segmentation in Cardiac CT Angiography. *Lecture Notes in Computer Science*, **2019**, 62-69	0.9	16
143	Cardiac valve calcifications on low-dose unenhanced ungated chest computed tomography: inter-observer and inter-examination reliability, agreement and variability. *European Radiology*, **2014**, 24, 1557-64	8	15
142	The impact of dose reduction on the quantification of coronary artery calcifications and risk categorization: A systematic review. *Journal of Cardiovascular Computed Tomography*, **2018**, 12, 352-363	2.8	15
141	Feasibility and accuracy of dual-layer spectral detector computed tomography for quantification of gadolinium: a phantom study. *European Radiology*, **2017**, 27, 3677-3686	8	14
140	The interdependence between cardiovascular calcifications in different arterial beds and vascular risk factors in patients at high cardiovascular risk. *Atherosclerosis*, **2015**, 238, 140-6	3.1	14
139	Radiation dose reduction for CT assessment of urolithiasis using iterative reconstruction: A prospective intra-individual study. *European Radiology*, **2018**, 28, 143-150	8	14
138	Advanced cardiac MRI techniques for evaluation of left-sided valvular heart disease. *Journal of Magnetic Resonance Imaging*, **2018**, 48, 318-329	5.6	14
137	Xenotransplantation of Human Cardiomyocyte Progenitor Cells Does Not Improve Cardiac Function in a Porcine Model of Chronic Ischemic Heart Failure. Results from a Randomized, Blinded, Placebo Controlled Trial. *PLoS ONE*, **2015**, 10, e0143953	3.7	14
136	Coronary calcium scores are systematically underestimated at a large chest size: A multivendor phantom study. *Journal of Cardiovascular Computed Tomography*, **2015**, 9, 415-21	2.8	13
135	Advances in cardiac magnetic resonance imaging of congenital heart disease. *Pediatric Radiology*, **2015**, 45, 5-19	2.8	13
134	Magnetic resonance angiographic assessment of upper extremity vessels prior to vascular access surgery: feasibility and accuracy. *European Radiology*, **2008**, 18, 158-67	8	13

133	Multicenter phase-II trial of safety and efficacy of NC100150 for steady-state contrast-enhanced peripheral magnetic resonance angiography. *European Radiology*, **2003**, 13, 1620-7	8	13
132	Endogenous assessment of diffuse myocardial fibrosis in patients with T -mapping. *Journal of Magnetic Resonance Imaging*, **2017**, 45, 132-138	5.6	12
131	Prognostic value of heart valve calcifications for cardiovascular events in a lung cancer screening population. *International Journal of Cardiovascular Imaging*, **2015**, 31, 1243-9	2.5	12
130	Influence of dose reduction and iterative reconstruction on CT calcium scores: a multi-manufacturer dynamic phantom study. *International Journal of Cardiovascular Imaging*, **2017**, 33, 899-914	2.5	11
129	Quantification of abdominal aortic aneurysm wall enhancement with dynamic contrast-enhanced MRI: feasibility, reproducibility, and initial experience. *Journal of Magnetic Resonance Imaging*, **2014**, 39, 1449-56	5.6	11
128	Dynamic contrast-enhanced MRI assessment of hyperemic fractional microvascular blood plasma volume in peripheral arterial disease: initial findings. *PLoS ONE*, **2012**, 7, e37756	3.7	11
127	Machine learning in cardiovascular radiology: ESCR position statement on design requirements, quality assessment, current applications, opportunities, and challenges. *European Radiology*, **2021**, 31, 3909-3922	8	11
126	Coronary calcium scoring with partial volume correction in anthropomorphic thorax phantom and screening chest CT images. *PLoS ONE*, **2018**, 13, e0209318	3.7	11
125	Influence of heart rate on coronary calcium scores: a multi-manufacturer phantom study. *International Journal of Cardiovascular Imaging*, **2018**, 34, 959-966	2.5	10
124	Ultra low-dose chest ct with iterative reconstructions as an alternative to conventional chest x-ray prior to heart surgery (CRICKET study): Rationale and design of a multicenter randomized trial. *Journal of Cardiovascular Computed Tomography*, **2016**, 10, 242-5	2.8	10
123	Effect of computed tomography before cardiac surgery on surgical strategy, mortality and stroke. *European Journal of Radiology*, **2016**, 85, 744-50	4.7	10
122	Iterative reconstruction improves evaluation of native aortic and mitral valves by retrospectively ECG-gated thoracoabdominal CTA. *European Radiology*, **2013**, 23, 968-74	8	10
121	Suitability of pharmacokinetic models for dynamic contrast-enhanced MRI of abdominal aortic aneurysm vessel wall: a comparison. *PLoS ONE*, **2013**, 8, e75173	3.7	10
120	Advances in contrast-enhanced MR angiography of the renal arteries. *Magnetic Resonance Imaging Clinics of North America*, **2008**, 16, 561-72, vii	1.6	10
119	Contemporary rationale for non-invasive imaging of adverse coronary plaque features to identify the vulnerable patient: a Position Paper from the European Society of Cardiology Working Group on Atherosclerosis and Vascular Biology and the European Association of Cardiovascular Imaging. *European Heart Journal Cardiovascular Imaging*, **2020**, 21, 1177-1183	4.1	10
118	Reference Values for Cardiac and Aortic Magnetic Resonance Imaging in Healthy, Young Caucasian Adults. *PLoS ONE*, **2016**, 11, e0164480	3.7	10
117	Cardiovascular surveillance in breast cancer treatment: A more individualized approach is needed. *Maturitas*, **2016**, 89, 58-62	5	10
116	High ratios of kidney function to kidney size are related to mortality and kidney function decline in high-risk patients. *European Journal of Preventive Cardiology*, **2017**, 24, 926-933	3.9	9

115	PET Molecular Targets and Near-Infrared Fluorescence Imaging of Atherosclerosis. *Current Cardiology Reports*, **2018**, 20, 11	4.2	9
114	Long-term results of balloon angioplasty for native coarctation of the aorta in childhood in comparison with surgery. *European Journal of Cardio-thoracic Surgery*, **2018**, 53, 262-268	3	9
113	Effect of New Cerebral Ischemic Lesions on the Delirium Occurrence After Transcatheter Aortic Valve Replacement. *Journal of the American College of Cardiology*, **2016**, 68, 1489-1490	15.1	9
112	Diagnosis of abdominal aortic hypoplasia by state-of-the-art MR angiography. *Pediatric Radiology*, **2006**, 36, 57-60	2.8	9
111	MRI of arterial flow reserve in patients with intermittent claudication: feasibility and initial experience. *PLoS ONE*, **2012**, 7, e31514	3.7	9
110	Data mining information from electronic health records produced high yield and accuracy for current smoking status. *Journal of Clinical Epidemiology*, **2020**, 118, 100-106	5.7	9
109	Comparison of multi-delay FAIR and pCASL labeling approaches for renal perfusion quantification at 3T MRI. *Magnetic Resonance Materials in Physics, Biology, and Medicine*, **2020**, 33, 81-94	2.8	9
108	Three-dimensional and four-dimensional flow assessment in congenital heart disease. *Heart*, **2020**, 106, 421-426	5.1	9
107	Deep learning from dual-energy information for whole-heart segmentation in dual-energy and single-energy non-contrast-enhanced cardiac CT. *Medical Physics*, **2020**, 47, 5048-5060	4.4	9
106	Single Breath-Hold T1 Mapping of the Heart for Endogenous Assessment of Myocardial Fibrosis. *Investigative Radiology*, **2016**, 51, 505-12	10.1	9
105	Improving the diagnosis of peripheral arterial disease in below-the-knee arteries by adding time-resolved CT scan series to conventional run-off CT angiography. First experience with a 256-slice CT scanner. *European Journal of Radiology*, **2019**, 110, 136-141	4.7	9
104	Unexpected Cardiac Computed Tomography Findings in Patients With Postoperative Myocardial Injury. *Anesthesia and Analgesia*, **2018**, 126, 1462-1468	3.9	9
103	First Report of IgG4 Related Disease Primary Presenting as Vertebral Bone Marrow Lesions. *Frontiers in Immunology*, **2019**, 10, 1910	8.4	8
102	7 T renal MRI: challenges and promises. *Magnetic Resonance Materials in Physics, Biology, and Medicine*, **2016**, 29, 417-33	2.8	8
101	Pulmonary Nodule Volumetry at Different Low Computed Tomography Radiation Dose Levels With Hybrid and Model-Based Iterative Reconstruction: A Within Patient Analysis. *Journal of Computer Assisted Tomography*, **2016**, 40, 578-83	2.2	8
100	Subjective cognitive decline, brain imaging biomarkers, and cognitive functioning in patients with a history of vascular disease: the SMART-Medea study. *Neurobiology of Aging*, **2019**, 84, 33-40	5.6	8
99	Diagnostic Performance of On-Site Coronary CT Angiography-derived Fractional Flow Reserve Based on Patient-specific Lumped Parameter Models. *Radiology: Cardiothoracic Imaging*, **2019**, 1, e190036	8.3	8
98	A systematic comparison of cardiovascular magnetic resonance and high resolution histological fibrosis quantification in a chronic porcine infarct model. *International Journal of Cardiovascular Imaging*, **2017**, 33, 1797-1807	2.5	8

97	AI-Based Reconstruction for Fast MRI—A Systematic Review and Meta-Analysis. *Proceedings of the IEEE*, **2022**, 110, 224-245	14.3	8
96	Time-efficient black blood RCA wall imaging at 3T using improved motion sensitized driven equilibrium (iMSDE): feasibility and reproducibility. *PLoS ONE*, **2011**, 6, e26567	3.7	8
95	Bringing AI to the clinic: blueprint for a vendor-neutral AI deployment infrastructure. *Insights Into Imaging*, **2021**, 12, 11	5.6	8
94	Influence of iterative reconstruction on coronary calcium scores at multiple heart rates: a multivendor phantom study on state-of-the-art CT systems. *International Journal of Cardiovascular Imaging*, **2018**, 34, 947-957	2.5	7
93	Extracellular vesicle protein CD14 relates to common carotid intima-media thickness in eight-year-old children. *Atherosclerosis*, **2014**, 236, 270-6	3.1	7
92	Magnetic resonance imaging-based monitoring of collateral artery development in patients with intermittent claudication during supervised exercise therapy. *Journal of Vascular Surgery*, **2013**, 58, 1236-43	3.5	7
91	Innovative Perspective: Gadolinium-Free Magnetic Resonance Imaging in Long-Term Follow-Up after Kidney Transplantation. *Frontiers in Physiology*, **2017**, 8, 296	4.6	7
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