Reza Nezafat

List of Publications by Year in Descending Order

59 papers	2,693 citations	24 h-index	51 g-index
71 ext. papers	3,649 ext. citations	6.1 avg, IF	5.05 L-index

#	Paper	IF	Citations
59	Accelerated cardiac T mapping in four heartbeats with inline MyoMapNet: a deep learning-based T estimation approach.. *Journal of Cardiovascular Magnetic Resonance*, **2022**, 24, 6	6.9	1
58	Machine learning phenotyping of scarred myocardium from cine in hypertrophic cardiomyopathy. *European Heart Journal Cardiovascular Imaging*, **2021**,	4.1	4
57	Artifact reduction in free-breathing, free-running myocardial perfusion imaging with interleaved non-selective RF excitations. *Magnetic Resonance in Medicine*, **2021**, 86, 954-963	4.4	0
56	Sensitivity of Myocardial Radiomic Features to Imaging Parameters in Cardiac MR Imaging. *Journal of Magnetic Resonance Imaging*, **2021**, 54, 787-794	5.6	1
55	Highly accelerated free-breathing real-time phase contrast cardiovascular MRI via complex-difference deep learning. *Magnetic Resonance in Medicine*, **2021**, 86, 804-819	4.4	4
54	Self-Supervised Physics-Guided Deep Learning Reconstruction for High-Resolution 3D LGE CMR **2021**,		3
53	Maximal Wall Thickness Measurement in Hypertrophic Cardiomyopathy: Biomarker Variability and its Impact on Clinical Care. *JACC: Cardiovascular Imaging*, **2021**, 14, 2123-2134	8.4	2
52	Free-breathing simultaneous myocardial T and T mapping with whole left ventricle coverage. *Magnetic Resonance in Medicine*, **2021**, 85, 1308-1321	4.4	3
51	Improved Quantification of Myocardium Scar in Late Gadolinium Enhancement Images: Deep Learning Based Image Fusion Approach. *Journal of Magnetic Resonance Imaging*, **2021**, 54, 303-312	5.6	4
50	Comparison of Complex k-Space Data and Magnitude-Only for Training of Deep Learning-Based Artifact Suppression for Real-Time Cine MRI. *Frontiers in Physics*, **2021**, 9,	3.9	1
49	Automated Myocardial T2 and Extracellular Volume Quantification in Cardiac MRI Using Transfer Learning-based Myocardium Segmentation. *Radiology: Artificial Intelligence*, **2020**, 2, e190034	8.7	10
48	Reproducibility of Segmentation-based Myocardial Radiomic Features with Cardiac MRI. *Radiology: Cardiothoracic Imaging*, **2020**, 2, e190216	8.3	14
47	Characterization of interstitial diffuse fibrosis patterns using texture analysis of myocardial native T1 mapping. *PLoS ONE*, **2020**, 15, e0233694	3.7	4
46	T mapping performance and measurement repeatability: results from the multi-national T mapping standardization phantom program (T1MES). *Journal of Cardiovascular Magnetic Resonance*, **2020**, 22, 31	6.9	10
45	Negative synergism of diabetes mellitus and obesity in patients with heart failure with preserved ejection fraction: a cardiovascular magnetic resonance study. *International Journal of Cardiovascular Imaging*, **2020**, 36, 2027-2038	2.5	6
44	Texture signatures of native myocardial T as novel imaging markers for identification of hypertrophic cardiomyopathy patients without scar. *Journal of Magnetic Resonance Imaging*, **2020**, 52, 906-919	5.6	10
43	A novel multielectrode catheter for high-density ventricular mapping: electrogram characterization and utility for scar mapping. *Europace*, **2020**, 22, 440-449	3.9	6

42	Deep complex convolutional network for fast reconstruction of 3D late gadolinium enhancement cardiac MRI. *NMR in Biomedicine*, **2020**, 33, e4312	4.4	13
41	Three-dimensional Deep Convolutional Neural Networks for Automated Myocardial Scar Quantification in Hypertrophic Cardiomyopathy: A Multicenter Multivendor Study. *Radiology*, **2020**, 294, 52-60	20.5	23
40	Association Between Left Ventricular Mechanical Deformation and Myocardial Fibrosis in Nonischemic Cardiomyopathy. *Journal of the American Heart Association*, **2020**, 9, e016797	6	4
39	Aortic regurgitation assessment by cardiovascular magnetic resonance imaging and transthoracic echocardiography: intermodality disagreement impacting on prediction of post-surgical left ventricular remodeling. *International Journal of Cardiovascular Imaging*, **2020**, 36, 91-100	2.5	5
38	Changes in Myocardial Native T and T After Exercise Stress: A Noncontrast CMR Pilot Study. *JACC: Cardiovascular Imaging*, **2020**, 13, 667-680	8.4	16
37	Cardiovascular magnetic resonance feature tracking strain analysis for discrimination between hypertensive heart disease and hypertrophic cardiomyopathy. *PLoS ONE*, **2019**, 14, e0221061	3.7	27
36	Automated analysis of cardiovascular magnetic resonance myocardial native T mapping images using fully convolutional neural networks. *Journal of Cardiovascular Magnetic Resonance*, **2019**, 21, 7	6.9	47
35	Local Conduction Velocity in the Presence of Late Gadolinium Enhancement and Myocardial Wall Thinning: A Cardiac Magnetic Resonance Study in a Swine Model of Healed Left Ventricular Infarction. *Circulation: Arrhythmia and Electrophysiology*, **2019**, 12, e007175	6.4	12
34	Machine learning in cardiovascular magnetic resonance: basic concepts and applications. *Journal of Cardiovascular Magnetic Resonance*, **2019**, 21, 61	6.9	74
33	Radiomic Analysis of Myocardial Native T Imaging Discriminates Between Hypertensive Heart Disease and Hypertrophic Cardiomyopathy. *JACC: Cardiovascular Imaging*, **2019**, 12, 1946-1954	8.4	59
32	Cardiac MR Characterization of left ventricular remodeling in a swine model of infarct followed by reperfusion. *Journal of Magnetic Resonance Imaging*, **2018**, 48, 808	5.6	16
31	Nonrigid active shape model-based registration framework for motion correction of cardiac T mapping. *Magnetic Resonance in Medicine*, **2018**, 80, 780-791	4.4	8
30	Gray blood late gadolinium enhancement cardiovascular magnetic resonance for improved detection of myocardial scar. *Journal of Cardiovascular Magnetic Resonance*, **2018**, 20, 22	6.9	19
29	Improved dark blood late gadolinium enhancement (DB-LGE) imaging using an optimized joint inversion preparation and T magnetization preparation. *Magnetic Resonance in Medicine*, **2018**, 79, 351-360	4.4	25
28	Highly conductive, stretchable and biocompatible Ag-Au core-sheath nanowire composite for wearable and implantable bioelectronics. *Nature Nanotechnology*, **2018**, 13, 1048-1056	28.7	440
27	Automated Cardiac MR Scar Quantification in Hypertrophic Cardiomyopathy Using Deep Convolutional Neural Networks. *JACC: Cardiovascular Imaging*, **2018**, 11, 1917-1918	8.4	34
26	Increased myocardial native T relaxation time in patients with nonischemic dilated cardiomyopathy with complex ventricular arrhythmia. *Journal of Magnetic Resonance Imaging*, **2018**, 47, 779-786	5.6	25
25	From Improved Diagnostics to Presurgical Planning: High-Resolution Functionally Graded Multimaterial 3D Printing of Biomedical Tomographic Data Sets. *3D Printing and Additive Manufacturing*, **2018**, 5, 103-113	4	19

24	Diffuse myocardial fibrosis in patients with mitral valve prolapse and ventricular arrhythmia. *Heart*, **2017**, 103, 204-209	5.1	49
23	High-Resolution Mapping of Ventricular Scar: Evaluation of a Novel Integrated Multielectrode Mapping and Ablation Catheter. *JACC: Clinical Electrophysiology*, **2017**, 3, 220-231	4.6	33
22	Clinical performance of high-resolution late gadolinium enhancement imaging with compressed sensing. *Journal of Magnetic Resonance Imaging*, **2017**, 46, 1829-1838	5.6	37
21	Interlead heterogeneity of R- and T-wave morphology in standard 12-lead ECGs predicts sustained ventricular tachycardia/fibrillation and arrhythmic death in patients with cardiomyopathy. *Journal of Cardiovascular Electrophysiology*, **2017**, 28, 1324-1333	2.7	16
20	Clinical recommendations for cardiovascular magnetic resonance mapping of T1, T2, T2* and extracellular volume: A consensus statement by the Society for Cardiovascular Magnetic Resonance (SCMR) endorsed by the European Association for Cardiovascular Imaging (EACVI). *Journal of Cardiovascular Magnetic Resonance*, **2017**, 19, 75	6.9	588
19	Myocardial Native T1 Time in Patients With Hypertrophic Cardiomyopathy. *American Journal of Cardiology*, **2016**, 118, 1057-62	3	24
18	A medical device-grade T1 and ECV phantom for global T1 mapping quality assurance-the T Mapping and ECV Standardization in cardiovascular magnetic resonance (T1MES) program. *Journal of Cardiovascular Magnetic Resonance*, **2016**, 18, 58	6.9	101
17	Reproducibility of myocardial T and T relaxation time measurement using slice-interleaved T and T mapping sequences. *Journal of Magnetic Resonance Imaging*, **2016**, 44, 1159-1167	5.6	10
16	High-Resolution Mapping of Ventricular Scar: Comparison Between Single and Multielectrode Catheters. *Circulation: Arrhythmia and Electrophysiology*, **2016**, 9,	6.4	87
15	Native Myocardial T1 as a Biomarker of Cardiac Structure in Non-Ischemic Cardiomyopathy. *American Journal of Cardiology*, **2016**, 117, 282-8	3	17
14	Joint myocardial T1 and T2 mapping using a combination of saturation recovery and T2 -preparation. *Magnetic Resonance in Medicine*, **2016**, 76, 888-96	4.4	34
13	Free-breathing slice-interleaved myocardial T2 mapping with slice-selective T2 magnetization preparation. *Magnetic Resonance in Medicine*, **2016**, 76, 555-65	4.4	11
12	Impact of motion correction on reproducibility and spatial variability of quantitative myocardial T2 mapping. *Journal of Cardiovascular Magnetic Resonance*, **2015**, 17, 46	6.9	19
11	Accelerated cardiac MR stress perfusion with radial sampling after physical exercise with an MR-compatible supine bicycle ergometer. *Magnetic Resonance in Medicine*, **2015**, 74, 384-95	4.4	13
10	Adaptive registration of varying contrast-weighted images for improved tissue characterization (ARCTIC): application to T1 mapping. *Magnetic Resonance in Medicine*, **2015**, 73, 1469-82	4.4	54
9	Free-breathing multislice native myocardial T mapping using the slice-interleaved T (STONE) sequence. *Magnetic Resonance in Medicine*, **2015**, 74, 115-124	4.4	70
8	Improved quantitative myocardial T mapping: Impact of the fitting model. *Magnetic Resonance in Medicine*, **2015**, 74, 93-105	4.4	41
7	Mapping of a Post-Infarction Left Ventricular Aneurysm-Dependent Macroreentrant Ventricular Tachycardia. *HeartRhythm Case Reports*, **2015**, 1, 472-476	1	7

6	Combined saturation/inversion recovery sequences for improved evaluation of scar and diffuse fibrosis in patients with arrhythmia or heart rate variability. *Magnetic Resonance in Medicine*, **2014**, 71, 1024-34	4.4	116
5	Accuracy, precision, and reproducibility of four T1 mapping sequences: a head-to-head comparison of MOLLI, ShMOLLI, SASHA, and SAPPHIRE. *Radiology*, **2014**, 272, 683-9	20.5	204
4	Accelerated late gadolinium enhancement cardiac MR imaging with isotropic spatial resolution using compressed sensing: initial experience. *Radiology*, **2012**, 264, 691-9	20.5	70
3	Robust Atlas-Based Segmentation of Highly Variable Anatomy: Left Atrium Segmentation. *Lecture Notes in Computer Science*, **2010**, 6364, 85-94	0.9	32
2	Inflow quantification in three-dimensional cardiovascular MR imaging. *Journal of Magnetic Resonance Imaging*, **2008**, 28, 1273-9	5.6	27
1	Coronary magnetic resonance vein imaging: imaging contrast, sequence, and timing. *Magnetic Resonance in Medicine*, **2007**, 58, 1196-206	4.4	58