Xiaodan Zhao

List of Publications by Year
in descending order

49 papers	873 citations	471061 17 h-index	525886 27 g-index
49 all docs	49 docs citations	49 times ranked	1068 citing authors

#	Article	IF	Citations
1	Left Atrial Phasic Function in Older Adults Is Associated with Fibrotic and Low-Grade Inflammatory Pathways. Gerontology, 2023, 69, 47-56.	1.4	3
2	Cardiovascular magnetic resonanceâ€•assessed fast global longitudinal strain parameters add diagnostic and prognostic insights in right ventricular volume and pressure loading disease conditions. Journal of Cardiovascular Magnetic Resonance, 2021, 23, 38.	1.6	14
3	Exacerbation of cardiovascular ageing by diabetes mellitus and its associations with acyl-carnitines. Aging, 2021, 13, 14785-14805.	1.4	10
4	Age- and Sex-Specific Changes in CMR Feature Tracking-Based Right Atrial and Ventricular Functional Parameters in Healthy Asians. Frontiers in Cardiovascular Medicine, 2021, 8, 664431.	1.1	3
5	Amino acid differences between diabetic older adults and non-diabetic older adults and their associations with cardiovascular function. Journal of Molecular and Cellular Cardiology, 2021, 158, 63-71.	0.9	12
6	Detection of persistent systolic and diastolic abnormalities in asymptomatic pediatric repaired tetralogy of Fallot patients with preserved ejection fraction: a CMR feature tracking study. European Radiology, 2021, 31, 6156-6168.	2.3	10
7	Long-term Prognostic Value of Cardiac MRI Left Atrial Strain in ST-Segment Elevation Myocardial Infarction. Radiology, 2020, 296, 299-309.	3.6	43
8	Fast long-axis strain: a simple, automatic approach for assessing left ventricular longitudinal function with cine cardiovascular magnetic resonance. European Radiology, 2020, 30, 3672-3683.	2.3	23
9	Three-dimensional biventricular strains in pulmonary arterial hypertension patients using hyperelastic warping. Computer Methods and Programs in Biomedicine, 2020, 189, 105345.	2.6	7
10	Patient-Specific Computational Analysis of Hemodynamics and Wall Mechanics and Their Interactions in Pulmonary Arterial Hypertension. Frontiers in Bioengineering and Biotechnology, 2020, 8, 611149.	2.0	8
11	Reference Ranges for Left Ventricular Curvedness and Curvedness-Based Functional Indices Using Cardiovascular Magnetic Resonance in Healthy Asian Subjects. Scientific Reports, 2020, 10, 8465.	1.6	2
12	Automatic Segmentation of Coronary Artery Lumen via Anisotropic Graph-cuts*. , 2019, 2019, 4871-4874.		1
13	Elevated Right Atrial Pressure Associated with Alteration of Left Ventricular Contractility and Ventricular-Arterial Coupling in Pulmonary Artery Hypertension*. , 2019, 2019, 820-823.		2
14	A Multi-channel Deep Learning Approach for Segmentation of the Left Ventricular Endocardium from Cardiac Images. , 2019, 2019, 4016-4019.		5
15	Computational quantification of patient-specific changes in ventricular dynamics associated with pulmonary hypertension. American Journal of Physiology - Heart and Circulatory Physiology, 2019, 317, H1363-H1375.	1.5	16
16	Impaired Cardiovascular Magnetic Resonanceâ€"Derived Rapid Semiautomated Right Atrial Longitudinal Strain Is Associated With Decompensated Hemodynamics in Pulmonary Arterial Hypertension. Circulation: Cardiovascular Imaging, 2019, 12, e008582.	1.3	48
17	In-silico assessment of the effects of right ventricular assist device on pulmonary arterial hypertension using an image based biventricular modeling framework. Mechanics Research Communications, 2019, 97, 101-111.	1.0	20
18	Age-related changes in four-dimensional CMR-derived atrioventricular junction velocities and displacements: Implications for the identification of altered annular dynamics for ventricular function assessment. IJC Heart and Vasculature, 2019, 22, 6-12.	0.6	3

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19	Imaging 4D morphology and dynamics of mitral annulus in humans using cardiac cine MR feature tracking. Scientific Reports, 2018, 8, 81.	1.6	19
20	Image-based computational assessment of vascular wall mechanics and hemodynamics in pulmonary arterial hypertension patients. Journal of Biomechanics, 2018, 68, 84-92.	0.9	44
21	Advanced analyses of computed tomography coronary angiography can help discriminate ischemic lesions. International Journal of Cardiology, 2018, 267, 208-214.	0.8	14
22	Analysis of three-dimensional endocardial and epicardial strains from cardiac magnetic resonance in healthy subjects and patients with hypertrophic cardiomyopathy. Medical and Biological Engineering and Computing, 2018, 56, 159-172.	1.6	9
23	Validation of a rapid semi-automated method to assess left atrial longitudinal phasic strains on cine cardiovascular magnetic resonance imaging. Journal of Cardiovascular Magnetic Resonance, 2018, 20, 71.	1.6	57
24	Normal Values of Myocardial Deformation Assessed by Cardiovascular Magnetic Resonance Feature Tracking in a Healthy Chinese Population: A Multicenter Study. Frontiers in Physiology, 2018, 9, 1181.	1.3	48
25	Quantification of Biventricular Strains in Heart Failure With Preserved Ejection Fraction Patient Using Hyperelastic Warping Method. Frontiers in Physiology, 2018, 9, 1295.	1.3	12
26	Metabolomic correlates of aerobic capacity among elderly adults. Clinical Cardiology, 2018, 41, 1300-1307.	0.7	15
27	Left Ventricular Wall Stress Is Sensitive Marker of Hypertrophic Cardiomyopathy With Preserved Ejection Fraction. Frontiers in Physiology, 2018, 9, 250.	1.3	14
28	Dissecting Clinical and Metabolomics Associations of Left Atrial Phasic Function by Cardiac Magnetic Resonance Feature Tracking. Scientific Reports, 2018, 8, 8138.	1.6	24
29	A Software Tool for Heart AVJ Motion Tracking Using Cine Cardiovascular Magnetic Resonance Images. IEEE Journal of Translational Engineering in Health and Medicine, 2017, 5, 1-12.	2.2	4
30	Patient-Specific Computational Analysis of Ventricular Mechanics in Pulmonary Arterial Hypertension. Journal of Biomechanical Engineering, 2016, 138, .	0.6	32
31	Characterization of patient-specific biventricular mechanics in heart failure with preserved ejection fraction: Hyperelastic warping. , 2016, 2016, 4149-4152.		3
32	Fast Marching and Runge–Kutta Based Method for Centreline Extraction of Right Coronary Artery in Human Patients. Cardiovascular Engineering and Technology, 2016, 7, 159-169.	0.7	11
33	Atrioventricular junction (AVJ) motion tracking: A software tool with ITK/VTK/Qt. , 2016, 2016, 4141-4144.		1
34	Correcting motion in multiplanar cardiac magnetic resonance images. BioMedical Engineering OnLine, 2016, 15, 93.	1.3	1
35	Cardiac MRI based numerical modeling of left ventricular fluid dynamics with mitral valve incorporated. Journal of Biomechanics, 2016, 49, 1199-1205.	0.9	38
36	Simplified Models of Non-Invasive Fractional Flow Reserve Based on CT Images. PLoS ONE, 2016, 11, e0153070.	1.1	44

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37	Novel method for atrioventricular motion assessment from three-dimensional cine magnetic resonance imaging. , 2015, 2015, 319-22.		4
38	Variational Reconstruction of Left Cardiac Structure from CMR Images. PLoS ONE, 2015, 10, e0145570.	1.1	2
39	Computer-based assessment of ventricular mechanical synchrony from magnetic resonance imaging. , 2015, 2015, 6536-9.		5
40	Hemodynamic analysis of patient€specific coronary artery tree. International Journal for Numerical Methods in Biomedical Engineering, 2015, 31, e02708.	1.0	38
41	Automatic Localization of the Left Ventricle from Cardiac Cine Magnetic Resonance Imaging: A New Spectrum-Based Computer-Aided Tool. PLoS ONE, 2014, 9, e92382.	1.1	22
42	Numerical Simulation and Clinical Implications of Stenosis in Coronary Blood Flow. BioMed Research International, 2014, 2014, 1-10.	0.9	19
43	A Well-Conditioned Collocation Method Using a Pseudospectral Integration Matrix. SIAM Journal of Scientific Computing, 2014, 36, A907-A929.	1.3	44
44	Coronary artery segmentation via Hessian filter and curve-skeleton extraction. , 2014, , .		9
45	Superconvergence of Jacobi€"Gauss-Type Spectral Interpolation. Journal of Scientific Computing, 2014, 59, 667-687.	1.1	18
46	Patient-specific blood flows and vortex formations in patients with hypertrophic cardiomyopathy using computational fluid dynamics. , 2014, , .		13
47	Sharp Error Bounds for Jacobi Expansions and Gegenbauer--Gauss Quadrature of Analytic Functions. SIAM Journal on Numerical Analysis, 2013, 51, 1443-1469.	1.1	35
48	Fast and Accurate Computation of Time-Domain Acoustic Scattering Problems with Exact Nonreflecting Boundary Conditions. SIAM Journal on Applied Mathematics, 2012, 72, 1869-1898.	0.8	23
49	On exponential convergence of Gegenbauer interpolation and spectral differentiation. Mathematics of Computation, 2012, 82, 1017-1036.	1.1	21