Vicky Y Wang

List of Publications by Year
in descending order

43 papers	829 citations	840776 11 h-index	501196 28 g-index
48 all docs	48 docs citations	48 times ranked	1053 citing authors

#	Article	IF	Citations
1	Myocardial Laminar Organization Is Retained in Angiotensin-Converting Enzyme Inhibitor Treated SHRs. Experimental Mechanics, 2021, 61, 31-40.	2.0	6
2	Sensitivity of Myocardial Stiffness Estimates to Inter-observer Variability in LV Geometric Modelling. Lecture Notes in Computer Science, 2021, , 287-295.	1.3	1
3	A kinematic modelâ€based analysis framework for 3D Cineâ€DENSEâ€"validation with an axially compressed gel phantom and application in sheep before and after anteroâ€apical myocardial infarction. Magnetic Resonance in Medicine, 2021, 86, 2105-2121.	3.0	0
4	Finite-element based optimization of left ventricular passive stiffness in normal volunteers and patients after myocardial infarction: Utility of an inverse deformation gradient calculation of regional diastolic strain. Journal of the Mechanical Behavior of Biomedical Materials, 2021, 119, 104431.	3.1	12
5	Systematic Comparison of Left Ventricular Geometry Between 3D-Echocardiography and Cardiac Magnetic Resonance Imaging. Frontiers in Cardiovascular Medicine, 2021, 8, 728205.	2.4	10
6	A finite element model of the cardiac ventricles with coupled circulation: Biventricular mesh generation with hexahedral elements, airbags and a functional mockup interface to the circulation. Computers in Biology and Medicine, 2021, 137, 104840.	7.0	4
7	Left ventricular geometry during unloading and the end-systolic pressure volume relationship: Measurement with a modified real-time MRI-based method in normal sheep. PLoS ONE, 2020, 15, e0234896.	2.5	3
8	A Novel MRI-Based Finite Element Modeling Method for Calculation of Myocardial Ischemia Effect in Patients With Functional Mitral Regurgitation. Frontiers in Physiology, 2020, 11, 158.	2.8	9
9	Calibration of a fully coupled electromechanical meshless computational model of the heart with experimental data. Computer Methods in Applied Mechanics and Engineering, 2020, 364, 112869.	6.6	6
10	Efficient estimation of loadâ€free left ventricular geometry and passive myocardial properties using principal component analysis. International Journal for Numerical Methods in Biomedical Engineering, 2020, 36, e3313.	2.1	7
11	Comparison of 2D Echocardiography and Cardiac Cine MRI in the Assessment of Regional Left Ventricular Wall Thickness. Lecture Notes in Computer Science, 2020, , 52-62.	1.3	2
12	Mechanical effects of MitraClip on leaflet stress and myocardial strain in functional mitral regurgitation â€" A finite element modeling study. PLoS ONE, 2019, 14, e0223472.	2.5	19
13	Microstructurally Motivated Constitutive Modeling of Heart Failure Mechanics. Biophysical Journal, 2019, 117, 2273-2286.	0.5	12
14	A Human iPSC Double-Reporter System Enables Purification of Cardiac Lineage Subpopulations with Distinct Function and Drug Response Profiles. Cell Stem Cell, 2019, 24, 802-811.e5.	11.1	102
15	Quantitative Analysis of Blood Flow in Cerebral Venous Sinus With Stenosis by Patient-Specific CFD Modeling. IEEE Access, 2019, 7, 3848-3854.	4.2	8
16	Left Ventricular Diastolic Myocardial Stiffness and End-Diastolic Myofibre Stress in Human Heart Failure Using Personalised Biomechanical Analysis. Journal of Cardiovascular Translational Research, 2018, 11, 346-356.	2.4	34
17	Title is missing!. , 2018, , .		0
18	Abstract 217: *TBX5 Clover2/NKX2-5 TagRFP* hiPSCs for Simultaneously Isolating Lineage-Specific Cardiovascular Cells. Circulation Research, 2018, 123, .	4.5	0

#	ARTICLE	IF	CITATIONS
19	Increased cardiac work provides a link between systemic hypertension and heart failure. Physiological Reports, 2017, 5, e13104.	1.7	14
20	Three-Dimensional Quantification of Myocardial Collagen Morphology from Confocal Images. Lecture Notes in Computer Science, 2017, , 3-12.	1.3	2
21	Modelling Cardiac Tissue Growth and Remodelling. Journal of Elasticity, 2017, 129, 283-305.	1.9	19
22	Multiphysics and multiscale modelling, dataâ€"model fusion and integration of organ physiology in the clinic: ventricular cardiac mechanics. Interface Focus, 2016, 6, 20150083.	3.0	165
23	Image-driven constitutive modeling of myocardial fibrosis. International Journal for Computational Methods in Engineering Science and Mechanics, 2016, 17, 211-221.	2.1	12
24	Quantifying passive myocardial stiffness and wall stress in heart failure patients using personalized ventricular mechanics. Journal of Cardiovascular Magnetic Resonance, 2016, 18, O17.	3.3	3
25	Image-Based Investigation of Human in Vivo Myofibre Strain. IEEE Transactions on Medical Imaging, 2016, 35, 2486-2496.	8.9	17
26	Parameterisation of Multi-directional Diffusion Weighted Magnetic Resonance Images of the Heart. Lecture Notes in Computer Science, 2016, , 60-68.	1.3	0
27	Image-Based Predictive Modeling of Heart Mechanics. Annual Review of Biomedical Engineering, 2015, 17, 351-383.	12.3	51
28	Field-Based Parameterisation of Cardiac Muscle Structure from Diffusion Tensors. Lecture Notes in Computer Science, 2015, , 146-154.	1.3	2
29	Microstructural Remodelling and Mechanics of Hypertensive Heart Disease. Lecture Notes in Computer Science, 2015, , 382-389.	1.3	5
30	Image-Based Computational Cardiology: From Data to Understanding. Computational and Mathematical Methods in Medicine, 2014, 2014, 1-2.	1.3	0
31	Investigating heart failure mechanics using personalised human biophysical models. Journal of Cardiovascular Magnetic Resonance, 2013, 15, E32.	3.3	0
32	Automated Personalised Human Left Ventricular FE Models to Investigate Heart Failure Mechanics. Lecture Notes in Computer Science, 2013, , 307-316.	1.3	4
33	Changes in In Vivo Myocardial Tissue Properties Due to Heart Failure. Lecture Notes in Computer Science, 2013, , 216-223.	1.3	9
34	Estimation of In Vivo Myocardial Fibre Strain Using an Architectural Atlas of the Human Heart. Lecture Notes in Computer Science, 2013, , 208-215.	1.3	2
35	Unsupervised segmentation and personalised FE modelling of in vivo human myocardial mechanics based on an MRI atlas. , 2012, , .		1
36	Estimation of in vivo human myocardial fibre strain by integrating diffusion tensor and tagged MRI using FE modelling. , 2012, , .		7

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37	Myocardial Contractility and Regional Work throughout the Cardiac Cycle Using FEM and MRI. Lecture Notes in Computer Science, 2012, , 149-159.	1.3	11
38	Mathematical models of cardiac structure and function: mechanistic insights from models of heart failure. , 2011, , 241-250.		4
39	Electromechanical wavebreak in a model of the human left ventricle. American Journal of Physiology - Heart and Circulatory Physiology, 2010, 299, H134-H143.	3.2	90
40	Cardiac Active Contraction Parameters Estimated from Magnetic Resonance Imaging. Lecture Notes in Computer Science, 2010, , 194-203.	1.3	9
41	Investigating Heart Failure Using Ventricular Imaging and Modelling. Lecture Notes in Computer Science, 2010, , 164-173.	1.3	0
42	Modelling passive diastolic mechanics with quantitative MRI of cardiac structure and function. Medical Image Analysis, 2009, 13, 773-784.	11.6	155
43	Passive Ventricular Mechanics Modelling Using MRI of Structure and Function. Lecture Notes in Computer Science, 2008, 11, 814-821.	1.3	7