

Henggui Zhang

List of Publications by Year in descending order

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Version: 2024-02-01

221
papers

6,452
citations

61857

43
h-index

91712

69
g-index

224
all docs

224
docs citations

224
times ranked

5663
citing authors

#	ARTICLE	IF	CITATIONS
1	Identification through action potential clamp of proarrhythmic consequences of the short QT syndrome T618I hERG "hotspot" mutation. <i>Biochemical and Biophysical Research Communications</i> , 2022, 596, 49-55.	1.0	4
2	Editorial: Multi-Scale Computational Cardiology. <i>Frontiers in Physiology</i> , 2022, 13, 847118.	1.3	0
3	Generalizable Beat-by-Beat Arrhythmia Detection by Using Weakly Supervised Deep Learning. <i>Frontiers in Physiology</i> , 2022, 13, 850951.	1.3	3
4	Frequency-Dependent Properties of the Hyperpolarization-Activated Cation Current, I_f , in Adult Mouse Heart Primary Pacemaker Myocytes. <i>International Journal of Molecular Sciences</i> , 2022, 23, 4299.	1.8	1
5	Inter-subject registration-based one-shot segmentation with alternating union network for cardiac MRI images. <i>Medical Image Analysis</i> , 2022, 79, 102455.	7.0	3
6	Pro-Arrhythmic Effects of Discontinuous Conduction at the Purkinje Fiber-Ventricle Junction Arising From Heart Failure-Induced Ionic Remodeling " Insights From Computational Modelling. <i>Frontiers in Physiology</i> , 2022, 13, 877428.	1.3	1
7	Mechanisms of ventricular arrhythmias elicited by coexistence of multiple electrophysiological remodeling in ischemia: A simulation study. <i>PLoS Computational Biology</i> , 2022, 18, e1009388.	1.5	3
8	A circadian clock in the sinus node mediates day-night rhythms in <i>Hcn4</i> and heart rate. <i>Heart Rhythm</i> , 2021, 18, 801-810.	0.3	46
9	Automatic Detection of QRS Complexes Using Dual Channels Based on U-Net and Bidirectional Long Short-Term Memory. <i>IEEE Journal of Biomedical and Health Informatics</i> , 2021, 25, 1052-1061.	3.9	26
10	In Silico Assessment of Class I Antiarrhythmic Drug Effects on Pitx2-Induced Atrial Fibrillation: Insights from Populations of Electrophysiological Models of Human Atrial Cells and Tissues. <i>International Journal of Molecular Sciences</i> , 2021, 22, 1265.	1.8	9
11	The corrected left ventricular ejection fraction: a potential new measure of ventricular function. <i>International Journal of Cardiovascular Imaging</i> , 2021, 37, 1987-1997.	0.7	8
12	Arrhythmogenic Mechanisms in Hypokalaemia: Insights From Pre-clinical Models. <i>Frontiers in Cardiovascular Medicine</i> , 2021, 8, 620539.	1.1	14
13	Electrophysiological Mechanisms Underlying T-Wave Alternans and Their Role in Arrhythmogenesis. <i>Frontiers in Physiology</i> , 2021, 12, 614946.	1.3	20
14	Automatic Detection for Multi-Labeled Cardiac Arrhythmia Based on Frame Blocking Preprocessing and Residual Networks. <i>Frontiers in Cardiovascular Medicine</i> , 2021, 8, 616585.	1.1	2
15	Reciprocal interaction between I_{K1} and I_f in biological pacemakers: A simulation study. <i>PLoS Computational Biology</i> , 2021, 17, e1008177.	1.5	4
16	Physiological Roles of the Rapidly Activated Delayed Rectifier K^+ Current in Adult Mouse Heart Primary Pacemaker Activity. <i>International Journal of Molecular Sciences</i> , 2021, 22, 4761.	1.8	6
17	Regulation of sinus node pacemaking and atrioventricular node conduction by HCN channels in health and disease. <i>Progress in Biophysics and Molecular Biology</i> , 2021, 166, 61-85.	1.4	16
18	Understanding PITX2-Dependent Atrial Fibrillation Mechanisms through Computational Models. <i>International Journal of Molecular Sciences</i> , 2021, 22, 7681.	1.8	6

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19	Effects of long-term fasting and confinement on the cardiovascular activity. <i>Medical and Biological Engineering and Computing</i> , 2021, 59, 1901-1915.	1.6	2
20	The Functional Role of Hyperpolarization Activated Current (I _f) on Cardiac Pacemaking in Human vs. in the Rabbit Sinoatrial Node: A Simulation and Theoretical Study. <i>Frontiers in Physiology</i> , 2021, 12, 582037.	1.3	1
21	Electrophysiological and Proarrhythmic Effects of Hydroxychloroquine Challenge in Guinea-Pig Hearts. <i>ACS Pharmacology and Translational Science</i> , 2021, 4, 1639-1653.	2.5	6
22	In silico investigation of pro-arrhythmic effects of azithromycin on the human ventricle. <i>Biochemistry and Biophysics Reports</i> , 2021, 27, 101043.	0.7	0
23	Air Pollution and Cardiac Arrhythmias: From Epidemiological and Clinical Evidences to Cellular Electrophysiological Mechanisms. <i>Frontiers in Cardiovascular Medicine</i> , 2021, 8, 736151.	1.1	15
24	Computational Analysis of the Effects of KCNJ2-linked E299V Mutation Short QT Syndrome and Its Potential Therapeutic Targets. , 2021, , .		0
25	Modeling the Chronotropic Effect of Isoprenaline on Bio-pacemaker: A Simulation Study. , 2021, , .		0
26	Alternans and 2-D Spiral Wave Dynamics in Human Atria with Short QT Syndrome Variant 3: A Simulation Study. , 2021, , .		0
27	Investigation of the Effects of the Short QT Syndrome D172N Kir2.1 Mutation on Ventricular Action Potential Profile Using Dynamic Clamp. <i>Frontiers in Pharmacology</i> , 2021, 12, 794620.	1.6	7
28	Commensal correlation network between segmentation and direct area estimation for bi-ventricle quantification. <i>Medical Image Analysis</i> , 2020, 59, 101591.	7.0	21
29	FWAVina: A novel optimization algorithm for protein-ligand docking based on the fireworks algorithm. <i>Computational Biology and Chemistry</i> , 2020, 88, 107363.	1.1	4
30	Heart failure-induced atrial remodelling promotes electrical and conduction alternans. <i>PLoS Computational Biology</i> , 2020, 16, e1008048.	1.5	5
31	Populations of in silico myocytes and tissues reveal synergy of multiatrial I _K current block in atrial fibrillation. <i>British Journal of Pharmacology</i> , 2020, 177, 4497-4515.	2.7	23
32	Biological pacemaker: from biological experiments to computational simulation. <i>Journal of Zhejiang University: Science B</i> , 2020, 21, 524-536.	1.3	4
33	Mechanistic Insights Into the Reduced Pacemaking Rate of the Rabbit Sinoatrial Node During Postnatal Development: A Simulation Study. <i>Frontiers in Physiology</i> , 2020, 11, 547577.	1.3	2
34	Alternans in Mouse Atrial Cardiomyocytes: A Computational Study on the Influence of Cell-Cell Coupling and I ² -Adrenergic Stimulation. <i>IEEE Access</i> , 2020, 8, 84806-84820.	2.6	1
35	A Mathematical Model of the Mouse Atrial Myocyte With Inter-Atrial Electrophysiological Heterogeneity. <i>Frontiers in Physiology</i> , 2020, 11, 972.	1.3	7
36	Cardiac Pacemaker Dysfunction Arising From Different Studies of Ion Channel Remodeling in the Aging Rat Heart. <i>Frontiers in Physiology</i> , 2020, 11, 546508.	1.3	17

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37	The Role of CaMKII Overexpression and Oxidation in Atrial Fibrillation—A Simulation Study. <i>Frontiers in Physiology</i> , 2020, 11, 607809.	1.3	4
38	cAMP-dependent regulation of HCN4 controls the tonic entrainment process in sinoatrial node pacemaker cells. <i>Nature Communications</i> , 2020, 11, 5555.	5.8	63
39	PITX2 upregulation increases the risk of chronic atrial fibrillation in a dose-dependent manner by modulating IKs and I _{CaL} —insights from human atrial modelling. <i>Annals of Translational Medicine</i> , 2020, 8, 191-191.	0.7	12
40	Role of Oxidation-Dependent CaMKII Activation in the Genesis of Abnormal Action Potentials in Atrial Cardiomyocytes: A Simulation Study. <i>BioMed Research International</i> , 2020, 2020, 1-13.	0.9	5
41	Deep Atlas Network for Efficient 3D Left Ventricle Segmentation on Echocardiography. <i>Medical Image Analysis</i> , 2020, 61, 101638.	7.0	38
42	In silico study of the effects of anti-arrhythmic drug treatment on sinoatrial node function for patients with atrial fibrillation. <i>Scientific Reports</i> , 2020, 10, 305.	1.6	16
43	Serine mutation of a conserved threonine in the hERG K ⁺ channel S6-pore region leads to loss-of-function through trafficking impairment. <i>Biochemical and Biophysical Research Communications</i> , 2020, 526, 1085-1091.	1.0	8
44	Dynamically constructed network with error correction for accurate ventricle volume estimation. <i>Medical Image Analysis</i> , 2020, 64, 101723.	7.0	9
45	Generating electrocardiogram signals by deep learning. <i>Neurocomputing</i> , 2020, 404, 122-136.	3.5	38
46	Automatic Cardiac Arrhythmia Classification Using Combination of Deep Residual Network and Bidirectional LSTM. <i>IEEE Access</i> , 2019, 7, 102119-102135.	2.6	120
47	Quantitative proteomics and single-nucleus transcriptomics of the sinus node elucidates the foundation of cardiac pacemaking. <i>Nature Communications</i> , 2019, 10, 2889.	5.8	84
48	Influence of the distribution of fibrosis within an area of myocardial infarction on wave propagation in ventricular tissue. <i>Scientific Reports</i> , 2019, 9, 14151.	1.6	9
49	Proarrhythmia in the p.Met207Val PITX2c-Linked Familial Atrial Fibrillation—Insights From Modeling. <i>Frontiers in Physiology</i> , 2019, 10, 1314.	1.3	11
50	Learning from studying very rare cardiac conditions: the example of short QT syndrome. <i>Journal of Congenital Cardiology</i> , 2019, 3, .	0.5	5
51	ECC Imaging to Detect the Site of Ventricular Ischemia Using Torso Electrodes: A Computational Study. <i>Frontiers in Physiology</i> , 2019, 10, 50.	1.3	4
52	Mechanistic insights from targeted molecular profiling of repolarization alternans in the intact human heart. <i>Europace</i> , 2019, 21, 981-989.	0.7	11
53	Pro-arrhythmic Effects of Hydrogen Sulfide in Healthy and Ischemic Cardiac Tissues: Insight From a Simulation Study. <i>Frontiers in Physiology</i> , 2019, 10, 1482.	1.3	7
54	Different Effects of Species-dependent Funny Channel Current on Engineered Biological Pacemaking Activity., 2019, , .		0

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55	Pharmacotherapeutic Effects of Quinidine on Short QT Syndrome by Using Purkinje-Ventricle Model: A Simulation Study. , 2019, 2019, 2856-2859.		0
56	Transient outward K ⁺ current can strongly modulate action potential duration and initiate alternans in the human atrium. American Journal of Physiology - Heart and Circulatory Physiology, 2019, 316, H527-H542.	1.5	20
57	Multi-Views Fusion CNN for Left Ventricular Volumes Estimation on Cardiac MR Images. IEEE Transactions on Biomedical Engineering, 2018, 65, 1924-1934.	2.5	51
58	Emerging therapeutic targets in the short QT syndrome. Expert Opinion on Therapeutic Targets, 2018, 22, 439-451.	1.5	46
59	The end of the unique myocardial band: Part II. Clinical and functional considerations. European Journal of Cardio-thoracic Surgery, 2018, 53, 120-128.	0.6	24
60	Detecting atrial fibrillation by deep convolutional neural networks. Computers in Biology and Medicine, 2018, 93, 84-92.	3.9	247
61	Computational Analysis of the Action of Chloroquine on Short QT Syndrome Variant 1 and Variant 3 in Human Ventricles. , 2018, 2018, 5462-5465.		4
62	Mechanistic insight into spontaneous transition from cellular alternans to arrhythmia—A simulation study. PLoS Computational Biology, 2018, 14, e1006594.	1.5	11
63	Automatic Detection of Atrial Fibrillation Based on Continuous Wavelet Transform and 2D Convolutional Neural Networks. Frontiers in Physiology, 2018, 9, 1206.	1.3	82
64	Human Atrial Arrhythmogenesis and Sinus Bradycardia in KCNQ1-Linked Short QT Syndrome: Insights From Computational Modelling. Frontiers in Physiology, 2018, 9, 1402.	1.3	39
65	A Combined Fully Convolutional Networks and Deformable Model for Automatic Left Ventricle Segmentation Based on 3D Echocardiography. BioMed Research International, 2018, 2018, 1-16.	0.9	25
66	Morphological Substrates for Atrial Arrhythmogenesis in a Heart With Atrioventricular Septal Defect. Frontiers in Physiology, 2018, 9, 1071.	1.3	3
67	A computational model of excitation and contraction in uterine myocytes from the pregnant rat. Scientific Reports, 2018, 8, 9159.	1.6	7
68	In silico Assessment of Pharmacotherapy for Human Atrial Patho-Electrophysiology Associated With hERG-Linked Short QT Syndrome. Frontiers in Physiology, 2018, 9, 1888.	1.3	13
69	Investigation of hERG1b Influence on hERG Channel Pharmacology at Physiological Temperature. Journal of Pharmacology and Pharmacotherapeutics, 2018, 9, 92-103.	0.2	10
70	A Multiscale Investigation of Global Electrical Heterogeneity: Effects of Body Habitus, Respiration, and Tissue Conductivity. , 2018, 45, .		0
71	Optogenetic Control of Heart Rhythm by Selective Stimulation of Cardiomyocytes Derived from Pnmt+ Cells in Murine Heart. Scientific Reports, 2017, 7, 40687.	1.6	42
72	An efficient and fast GPU-based algorithm for visualizing large volume of 4D data from virtual heart simulations. Biomedical Signal Processing and Control, 2017, 35, 8-18.	3.5	8

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73	Stress-Activated Kinase Mitogen-Activated Kinase Kinase-7 Governs Epigenetics of Cardiac Repolarization for Arrhythmia Prevention. <i>Circulation</i> , 2017, 135, 683-699.	1.6	17
74	Effects of amiodarone on short QT syndrome variant 3 in human ventricles: a simulation study. <i>BioMedical Engineering OnLine</i> , 2017, 16, 69.	1.3	12
75	Mechanism underlying impaired cardiac pacemaking rhythm during ischemia: A simulation study. <i>Chaos</i> , 2017, 27, 093934.	1.0	10
76	Three-dimensional image reconstruction of distribution of Pnmt+ cell-derived cells in murine heart. <i>Scientific Data</i> , 2017, 4, 170134.	2.4	7
77	Modelling the effects of quinidine, disopyramide, and E-4031 on short QT syndrome variant 3 in the human ventricles. <i>Physiological Measurement</i> , 2017, 38, 1859-1873.	1.2	14
78	In-silico investigations of the functional impact of KCNA5 mutations on atrial mechanical dynamics. <i>Journal of Molecular and Cellular Cardiology</i> , 2017, 111, 86-95.	0.9	18
79	In silico investigation of a KCNQ1 mutation associated with short QT syndrome. <i>Scientific Reports</i> , 2017, 7, 8469.	1.6	44
80	High resolution 3-Dimensional imaging of the human cardiac conduction system from microanatomy to mathematical modeling. <i>Scientific Reports</i> , 2017, 7, 7188.	1.6	104
81	A composite visualization method for electrophysiology-morphous merging of human heart. <i>BioMedical Engineering OnLine</i> , 2017, 16, 70.	1.3	3
82	A Novel Reconstruction Method of 3D Heart Geometry Atlas Based on Visible Human. , 2017, , .		0
83	Mechanisms Underlying the Emergence of Post-acidosis Arrhythmia at the Tissue Level: A Theoretical Study. <i>Frontiers in Physiology</i> , 2017, 8, 195.	1.3	21
84	Computational Analysis of the Mode of Action of Disopyramide and Quinidine on hERG-Linked Short QT Syndrome in Human Ventricles. <i>Frontiers in Physiology</i> , 2017, 8, 759.	1.3	51
85	Computational Cardiac Modeling Reveals Mechanisms of Ventricular Arrhythmogenesis in Long QT Syndrome Type 8: CACNA1C R858H Mutation Linked to Ventricular Fibrillation. <i>Frontiers in Physiology</i> , 2017, 8, 771.	1.3	27
86	Synergistic Anti-arrhythmic Effects in Human Atria with Combined Use of Sodium Blockers and Acacetin. <i>Frontiers in Physiology</i> , 2017, 8, 946.	1.3	58
87	Novel non-invasive algorithm to identify the origins of re-entry and ectopic foci in the atria from 64-lead ECGs: A computational study. <i>PLoS Computational Biology</i> , 2017, 13, e1005270.	1.5	8
88	Atrial arrhythmogenicity of KCNJ2 mutations in short QT syndrome: Insights from virtual human atria. <i>PLoS Computational Biology</i> , 2017, 13, e1005593.	1.5	51
89	A computational model of spatio-temporal cardiac intracellular calcium handling with realistic structure and spatial flux distribution from sarcoplasmic reticulum and t-tubule reconstructions. <i>PLoS Computational Biology</i> , 2017, 13, e1005714.	1.5	49
90	In silico assessment of genetic variation in KCNA5 reveals multiple mechanisms of human atrial arrhythmogenesis. <i>PLoS Computational Biology</i> , 2017, 13, e1005587.	1.5	32

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91	Electro-mechanical dynamics of spiral waves in a discrete 2D model of human atrial tissue. PLoS ONE, 2017, 12, e0176607.	1.1	10
92	In silico assessment of the effects of quinidine, disopyramide and E-4031 on short QT syndrome variant 1 in the human ventricles. PLoS ONE, 2017, 12, e0179515.	1.1	21
93	Modelling the effects of chloroquine on <i>KCNJ2</i> -linked short QT syndrome. Oncotarget, 2017, 8, 106511-106526.	0.8	14
94	Pacemaker Created in Human Ventricle by Depressing Inward-Rectifier K ⁺ Current: A Simulation Study. BioMed Research International, 2016, 2016, 1-9.	0.9	3
95	Depth Attenuation Degree Based Visualization for Cardiac Ischemic Electrophysiological Feature Exploration. BioMed Research International, 2016, 2016, 1-8.	0.9	2
96	Altered Left Ventricular Ion Channel Transcriptome in a High-Fat-Fed Rat Model of Obesity: Insight into Obesity-Induced Arrhythmogenesis. Journal of Obesity, 2016, 2016, 1-12.	1.1	14
97	Inverse Correlation between Heart Rate Variability and Heart Rate Demonstrated by Linear and Nonlinear Analysis. PLoS ONE, 2016, 11, e0157557.	1.1	59
98	Synergistic effect of bioactive lipid and condition medium on cardiac differentiation of human mesenchymal stem cells from different tissues. Cell Biochemistry and Function, 2016, 34, 163-172.	1.4	3
99	Multi-scale cardiac modelling reveal tachyarrhythmias induced by abrupt rate accelerations in long QT syndrome. , 2016, , .		0
100	Effects of propafenone on KCNH2-linked short QT syndrome: A modelling study. , 2016, , .		1
101	Pro-arrhythmogenic effects of CACNA1C G1911R mutation in human ventricular tachycardia: insights from cardiac multi-scale models. Scientific Reports, 2016, 6, 31262.	1.6	20
102	Atrioventricular Node Dysfunction and Ion Channel Transcriptome in Pulmonary Hypertension. Circulation: Arrhythmia and Electrophysiology, 2016, 9, .	2.1	22
103	Cardiac left ventricular volumes prediction method based on atlas location and deep learning. , 2016, , .		7
104	Novel ion channel targets in atrial fibrillation. Expert Opinion on Therapeutic Targets, 2016, 20, 947-958.	1.5	31
105	Characterization and influence of cardiac background sodium current in the atrioventricular node. Journal of Molecular and Cellular Cardiology, 2016, 97, 114-124.	0.9	10
106	Physiological mechanisms of pulmonary hypertension. American Heart Journal, 2016, 180, 1-11.	1.2	24
107	Insights from echocardiography, magnetic resonance imaging, and microcomputed tomography relative to the mid-myocardial left ventricular echogenic zone. Echocardiography, 2016, 33, 1546-1556.	0.3	19
108	Comparison of Electric- and Magnetic-Cardiograms Produced by Myocardial Ischemia in Models of the Human Ventricle and Torso. PLoS ONE, 2016, 11, e0160999.	1.1	25

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109	Investigation of the functional effects of KCNJ2-linked short QT syndrome on electrical conduction at purkinje-ventricle junction at low- and high- frequencies. , 2015, , .		2
110	The virtual heart as a platform for screening drug cardiotoxicity. British Journal of Pharmacology, 2015, 172, 5531-5547.	2.7	43
111	Effects of amiodarone on ventricular excitation associated with the KCNJ2-linked short QT syndrome: Insights from a modelling study. , 2015, , .		5
112	Investigation of the pro-arrhythmic effects of domperidone by a simulation study. , 2015, , .		0
113	In silico investigation of short QT syndrome-linked potassium channel mutations on electro-mechanical function of human atrial cells. , 2015, , .		24
114	In silico investigation of the functional effects of KCNQ1-G269S mutation in human ventricles. , 2015, , .		0
115	A 2D Electromechanical Model of Human Atrial Tissue Using the Discrete Element Method. BioMed Research International, 2015, 2015, 1-12.	0.9	9
116	Effects of Persistent Atrial Fibrillation-Induced Electrical Remodeling on Atrial Electro-Mechanics â€œ Insights from a 3D Model of the Human Atria. PLoS ONE, 2015, 10, e0142397.	1.1	26
117	Abnormal calcium homeostasis in heart failure with preserved ejection fraction is related to both reduced contractile function and incomplete relaxation: an electromechanically detailed biophysical modeling study. Frontiers in Physiology, 2015, 6, 78.	1.3	45
118	Parallel Optimization of 3D Cardiac Electrophysiological Model Using GPU. Computational and Mathematical Methods in Medicine, 2015, 2015, 1-10.	0.7	20
119	A Computer Simulation Study of Anatomy Induced Drift of Spiral Waves in the Human Atrium. BioMed Research International, 2015, 2015, 1-15.	0.9	30
120	Effects of early afterdepolarizations on ventricular tachycardia in human heart. , 2015, , .		1
121	Investigation of the mechanisms underlying cardiac alternans - insights from a computational study. , 2015, , .		1
122	Quantification of the effects of electrical remodeling due to hypertrophic cardiomyopathy on human ventricular electromechanical activity and energetics. , 2015, , .		0
123	Reducing false arrhythmia alarms in the ICU using novel signal quality indices assessment method. , 2015, , .		11
124	Simulation of effects of TBX18 on the pacemaker activity of human ventricular cells. , 2015, , .		1
125	Calcium leak induced sinus bradycardia. , 2015, , .		0
126	To the Editorâ€œAltered in vivo systolic function in the short QT syndrome anticipated in silico. Heart Rhythm, 2015, 12, e115.	0.3	3

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127	Letter by Monfredi et al Regarding Article, "Physical Activity and Heart Rate Variability in Older Adults: The Cardiovascular Health Study". <i>Circulation</i> , 2015, 131, e348.	1.6	2
128	EFFECTS OF ACUTE GLOBAL ISCHEMIA ON RE-ENTRANT ARRHYTHMOGENESIS: A SIMULATION STUDY. <i>Journal of Biological Systems</i> , 2015, 23, 213-230.	0.5	6
129	A New Algorithm to Diagnose Atrial Ectopic Origin from Multi Lead ECG Systems - Insights from 3D Virtual Human Atria and Torso. <i>PLoS Computational Biology</i> , 2015, 11, e1004026.	1.5	21
130	A model model: a commentary on DiFrancesco and Noble (1985) "A model of cardiac electrical activity incorporating ionic pumps and concentration changes". <i>Philosophical Transactions of the Royal Society B: Biological Sciences</i> , 2015, 370, 20140316.	1.8	4
131	Left ventricular ejection fraction is determined by both global myocardial strain and wall thickness. <i>IJC Heart and Vasculature</i> , 2015, 7, 113-118.	0.6	44
132	Optimal Iodine Staining of Cardiac Tissue for X-Ray Computed Tomography. <i>PLoS ONE</i> , 2014, 9, e105552.	1.1	11
133	Importance of Gradients in Membrane Properties and Electrical Coupling in Sinoatrial Node Pacing. <i>PLoS ONE</i> , 2014, 9, e94565.	1.1	39
134	Three-Dimensional Computer Model of the Right Atrium Including the Sinoatrial and Atrioventricular Nodes Predicts Classical Nodal Behaviours. <i>PLoS ONE</i> , 2014, 9, e112547.	1.1	20
135	Multi-boundary cardiac data visualization based on multidimensional transfer function with ray distance. <i>Bio-Medical Materials and Engineering</i> , 2014, 24, 3025-3032.	0.4	6
136	Recent progress in multi-scale models of the human atria. <i>Drug Discovery Today: Disease Models</i> , 2014, 14, 23-32.	1.2	9
137	Biophysical Characterization of the Underappreciated and Important Relationship Between Heart Rate Variability and Heart Rate. <i>Hypertension</i> , 2014, 64, 1334-1343.	1.3	263
138	A novel genetic modifier for clarithromycin-related cardiac arrhythmia risk?. <i>Therapeutic Advances in Infectious Disease</i> , 2014, 2, 71-72.	1.1	1
139	Evolution and pharmacological modulation of the arrhythmogenic wave dynamics in canine pulmonary vein model. <i>Europace</i> , 2014, 16, 416-423.	0.7	37
140	Proarrhythmic effects of cisapride: Insights from a simulation study. , 2014, , .		0
141	Effects of human atrial ionic remodelling by β -blocker therapy on mechanisms of atrial fibrillation: a computer simulation. <i>Europace</i> , 2014, 16, 1524-1533.	0.7	21
142	hERG Inhibitors with Similar Potency But Different Binding Kinetics Do Not Pose the Same Proarrhythmic Risk: Implications for Drug Safety Assessment. <i>Journal of Cardiovascular Electrophysiology</i> , 2014, 25, 197-207.	0.8	65
143	A multi-step method with signal quality assessment and fine-tuning procedure to locate maternal and fetal QRS complexes from abdominal ECG recordings. <i>Physiological Measurement</i> , 2014, 35, 1665-1683.	1.2	45
144	Mkk4 Is a Negative Regulator of the Transforming Growth Factor Beta 1 Signaling Associated With Atrial Remodeling and Arrhythmogenesis With Age. <i>Journal of the American Heart Association</i> , 2014, 3, e000340.	1.6	45

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145	A Pipeline for Neuron Reconstruction Based on Spatial Sliding Volume Filter Seeding. Computational and Mathematical Methods in Medicine, 2014, 2014, 1-8.	0.7	5
146	Effects of Maximal Sodium and Potassium Conductance on the Stability of Hodgkin-Huxley Model. Computational and Mathematical Methods in Medicine, 2014, 2014, 1-9.	0.7	14
147	Pak1 Is Required to Maintain Ventricular Ca ²⁺ Homeostasis and Electrophysiological Stability Through SERCA2a Regulation in Mice. Circulation: Arrhythmia and Electrophysiology, 2014, 7, 938-948.	2.1	32
148	Theoretical investigation of the mechanism of heart failure using a canine ventricular cell model: Especially the role of up-regulated CaMKII and SR Ca ²⁺ leak. Journal of Molecular and Cellular Cardiology, 2013, 56, 34-43.	0.9	22
149	Antenatal architecture and activity of the human heart. Interface Focus, 2013, 3, 20120065.	1.5	39
150	Image-Based Model of Atrial Anatomy and Electrical Activation: A Computational Platform for Investigating Atrial Arrhythmia. IEEE Transactions on Medical Imaging, 2013, 32, 18-27.	5.4	38
151	Application of Micro-Computed Tomography With Iodine Staining to Cardiac Imaging, Segmentation, and Computational Model Development. IEEE Transactions on Medical Imaging, 2013, 32, 8-17.	5.4	106
152	Viewpoint: Is the resting bradycardia in athletes the result of remodeling of the sinoatrial node rather than high vagal tone?. Journal of Applied Physiology, 2013, 114, 1351-1355.	1.2	64
153	In silico investigation of the short QT syndrome, using human ventricle models incorporating electromechanical coupling. Frontiers in Physiology, 2013, 4, 166.	1.3	48
154	Sick Sinus Syndrome in HCN1-Deficient Mice. Circulation, 2013, 128, 2585-2594.	1.6	80
155	A novel computational sheep atria model for the study of atrial fibrillation. Interface Focus, 2013, 3, 20120067.	1.5	29
156	Heterogeneous and anisotropic integrative model of pulmonary veins: computational study of arrhythmogenic substrate for atrial fibrillation. Interface Focus, 2013, 3, 20120069.	1.5	34
157	Pro-arrhythmogenic effects of atrial fibrillation-induced electrical remodelling: insights from the three-dimensional virtual human atria. Journal of Physiology, 2013, 591, 4249-4272.	1.3	152
158	Simulating the role of anisotropy in human atrial cardioversion. , 2013, 2013, 6838-41.		1
159	Modification by KCNE1 variants of the hERG potassium channel response to premature stimulation and to pharmacological inhibition. Physiological Reports, 2013, 1, e00175.	0.7	21
160	Reply to Matelot, Schnell, Kervio, Thillaye du Boullay, and Carre. Journal of Applied Physiology, 2013, 114, 1757-1757.	1.2	0
161	Effect of cardiac ventricular mechanical contraction on the characteristics of the ECC: A simulation study. Journal of Biomedical Science and Engineering, 2013, 06, 47-60.	0.2	26
162	Modeling the Chronotropic Effect of Isoprenaline on Rabbit Sinoatrial Node. Frontiers in Physiology, 2012, 3, 241.	1.3	19

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