Zhen Song

List of Publications by Year
in descending order

25 papers	624 citations	687363 13 h-index	610901 24 g-index
29 all docs	29 docs citations	29 times ranked	675 citing authors

#	Article	IF	Citations
1	Calcium-Voltage Coupling in the Genesis of Early and Delayed Afterdepolarizations in Cardiac Myocytes. Biophysical Journal, 2015, 108, 1908-1921.	0.5	94
2	Molecular Basis of Hypokalemia-Induced Ventricular Fibrillation. Circulation, 2015, 132, 1528-1537.	1.6	87
3	General Principles for the Validation of Proarrhythmia Risk Prediction Models: An Extension of the CiPA In Silico Strategy. Clinical Pharmacology and Therapeutics, 2020, 107, 102-111.	4.7	67
4	T-tubule disruption promotes calcium alternans in failing ventricular myocytes: Mechanistic insights from computational modeling. Journal of Molecular and Cellular Cardiology, 2015, 79, 32-41.	1.9	50
5	Mitochondrial Ca ²⁺ Influx Contributes to Arrhythmic Risk in Nonischemic Cardiomyopathy. Journal of the American Heart Association, 2018, 7, .	3.7	38
6	Transverse tubular network structures in the genesis of intracellular calcium alternans and triggered activity in cardiac cells. Journal of Molecular and Cellular Cardiology, 2018, 114, 288-299.	1.9	31
7	Stochastic initiation and termination of calcium-mediated triggered activity in cardiac myocytes. Proceedings of the National Academy of Sciences of the United States of America, 2017, 114, E270-E279.	7.1	26
8	New experimental evidence for mechanism of arrhythmogenic membrane potential alternans based on balance of electrogenic INCX/ICa currents. Heart Rhythm, 2012, 9, 1698-1705.	0.7	25
9	Long-Lasting Sparks: Multi-Metastability and Release Competition in the Calcium Release Unit Network. PLoS Computational Biology, 2016, 12, e1004671.	3.2	25
10	Spatially Discordant Alternans and Arrhythmias in Tachypacing-Induced Cardiac Myopathy in Transgenic LQT1 Rabbits: The Importance of IKs and Ca2+ Cycling. PLoS ONE, 2015, 10, e0122754.	2.5	23
11	Determinants of early afterdepolarization properties in ventricular myocyte models. PLoS Computational Biology, 2018, 14, e1006382.	3.2	23
12	Acute reversal of phospholamban inhibition facilitates the rhythmic whole-cell propagating calcium waves in isolated ventricular myocytes. Journal of Molecular and Cellular Cardiology, 2015, 80, 126-135.	1.9	16
13	A Dynamical Threshold for Cardiac Delayed Afterdepolarization-Mediated Triggered Activity. Biophysical Journal, 2016, 111, 2523-2533.	0.5	16
14	Mechanisms of Premature Ventricular Complexes Caused by QT Prolongation. Biophysical Journal, 2021, 120, 352-369.	0.5	14
15	Spatially Discordant Repolarization Alternans in the Absence of Conduction Velocity Restitution. Biophysical Journal, 2020, 118, 2574-2587.	0.5	13
16	Mechanisms of Arrhythmogenicity of Hypertrophic Cardiomyopathy-Associated Troponin T (TNNT2) Variant I79N. Frontiers in Cell and Developmental Biology, 2021, 9, 787581.	3.7	13
17	Multiscale Determinants of Delayed Afterdepolarization Amplitude in Cardiac Tissue. Biophysical Journal, 2017, 112, 1949-1961.	0.5	12
18	Activation of TRPC (Transient Receptor Potential Canonical) Channel Currents in Iron Overloaded Cardiac Myocytes. Circulation: Arrhythmia and Electrophysiology, 2021, 14, e009291.	4.8	11

#	Article	IF	Citations
19	A Spatiotemporal Ventricular Myocyte Model Incorporating Mitochondrial Calcium Cycling. Biophysical Journal, 2019, 117, 2349-2360.	0.5	10
20	Small-conductance Ca2+-activated K+ channels promote J-wave syndrome and phase 2 reentry. Heart Rhythm, 2020, 17, 1582-1590.	0.7	8
21	Delayed global feedback in the genesis and stability of spatiotemporalÂexcitationÂpatterns in paced biological excitable media. PLoS Computational Biology, 2020, 16, e1007931.	3.2	7
22	Mitochondrial depolarization promotes calcium alternans: Mechanistic insights from a ventricular myocyte model. PLoS Computational Biology, 2021, 17, e1008624.	3.2	4
23	Mitochondrial Contributions in the Genesis of Delayed Afterdepolarizations in Ventricular Myocytes. Frontiers in Physiology, 2021, 12, 744023.	2.8	4
24	Stability of spatially discordant repolarization alternans in cardiac tissue. Chaos, 2020, 30, 123141.	2.5	3
25	Complex Early and Delayed Afterdepolarization Dynamics caused by Voltage-Calcium Coupling in Cardiac Myocytes. Biophysical Journal, 2015, 108, 261a-262a.	0.5	1