Zhilin Qu

List of Publications by Year
in descending order

161 papers	10,511 citations	23500 58 h-index	37111 96 g-index
172 all docs	172 docs citations	172 times ranked	5986 citing authors

#	Article	IF	Citations
1	From Pulsus to Pulseless. Circulation Research, 2006, 98, 1244-1253.	2.0	386
2	A Rabbit Ventricular Action Potential Model Replicating Cardiac Dynamics at Rapid Heart Rates. Biophysical Journal, 2008, 94, 392-410.	0.2	370
3	Mechanisms of Discordant Alternans and Induction of Reentry in Simulated Cardiac Tissue. Circulation, 2000, 102, 1664-1670.	1.6	355
4	Early afterdepolarizations and cardiac arrhythmias. Heart Rhythm, 2010, 7, 1891-1899.	0.3	315
5	So Little Source, So Much Sink: Requirements for Afterdepolarizations to Propagate in Tissue. Biophysical Journal, 2010, 99, 1408-1415.	0.2	291
6	The Dynamics of Cardiac Fibrillation. Circulation, 2005, 112, 1232-1240.	1.6	285
7	Cardiac fibrosis and arrhythmogenesis: The road to repair is paved with perils. Journal of Molecular and Cellular Cardiology, 2014, 70, 83-91.	0.9	247
8	Synchronization of chaotic early afterdepolarizations in the genesis of cardiac arrhythmias. Proceedings of the National Academy of Sciences of the United States of America, 2009, 106, 2983-2988.	3.3	233
9	Cardiac electrical restitution properties and stability of reentrant spiral waves: a simulation study. American Journal of Physiology - Heart and Circulatory Physiology, 1999, 276, H269-H283.	1.5	225
10	An advanced algorithm for solving partial differential equation in cardiac conduction. IEEE Transactions on Biomedical Engineering, 1999, 46, 1166-1168.	2.5	224
11	Spatiotemporal Heterogeneity in the Induction of Ventricular Fibrillation by Rapid Pacing. Circulation Research, 1999, 84, 1318-1331.	2.0	212
12	Ventricular Fibrillation. Circulation Research, 2000, 87, 1103-1107.	2.0	208
13	Electrophysiology of Hypokalemia and Hyperkalemia. Circulation: Arrhythmia and Electrophysiology, 2017, 10, .	2.1	205
14	Nonlinear and stochastic dynamics in the heart. Physics Reports, 2014, 543, 61-162.	10.3	166
15	Effects of fibroblast-myocyte coupling on cardiac conduction and vulnerability to reentry: A computational study. Heart Rhythm, 2009, 6, 1641-1649.	0.3	163
16	Alternans and Arrhythmias. Circulation Research, 2011, 108, 98-112.	2.0	156
17	Regulation of the mammalian cell cycle: a model of the G₁-to-S transition. American Journal of Physiology - Cell Physiology, 2003, 284, C349-C364.	2.1	153
18	Origins of Spiral Wave Meander and Breakup in a Two-Dimensional Cardiac Tissue Model. Annals of Biomedical Engineering, 2000, 28, 755-771.	1.3	150

#	Article	IF	Citations
19	Spatially Discordant Alternans in Cardiac Tissue. Circulation Research, 2006, 99, 520-527.	2.0	146
20	Scroll Wave Dynamics in a Three-Dimensional Cardiac Tissue Model: Roles of Restitution, Thickness, and Fiber Rotation. Biophysical Journal, 2000, 78, 2761-2775.	0.2	145
21	Early afterdepolarizations in cardiac myocytes: beyond reduced repolarization reserve. Cardiovascular Research, 2013, 99, 6-15.	1.8	143
22	Bifurcation and Chaos in a Model of Cardiac Early Afterdepolarizations. Physical Review Letters, 2009, 102, 258103.	2.9	125
23	Role of Pectinate Muscle Bundles in the Generation and Maintenance of Intra-atrial Reentry. Circulation Research, 1998, 83, 448-462.	2.0	123
24	Increased susceptibility of aged hearts to ventricular fibrillation during oxidative stress. American Journal of Physiology - Heart and Circulatory Physiology, 2009, 297, H1594-H1605.	1.5	120
25	Dynamics of the Cell Cycle: Checkpoints, Sizers, and Timers. Biophysical Journal, 2003, 85, 3600-3611.	0.2	112
26	Spark-Induced Sparks As a Mechanism of Intracellular Calcium Alternans in Cardiac Myocytes. Circulation Research, 2010, 106, 1582-1591.	2.0	112
27	Multi-scale modeling in biology: How to bridge the gaps between scales?. Progress in Biophysics and Molecular Biology, 2011, 107, 21-31.	1.4	111
28	Suppression of Re-Entrant and Multifocal Ventricular Fibrillation by the Late Sodium Current Blocker Ranolazine. Journal of the American College of Cardiology, 2011, 57, 366-375.	1.2	106
29	Differential conditions for early afterâ€depolarizations and triggered activity in cardiomyocytes derived from transgenic LQT1 and LQT2 rabbits. Journal of Physiology, 2012, 590, 1171-1180.	1.3	104
30	Dynamic Origin of Spatially Discordant Alternans in Cardiac Tissue. Biophysical Journal, 2007, 92, 448-460.	0.2	98
31	Mechanisms of Ventricular Arrhythmias: From Molecular Fluctuations to Electrical Turbulence. Annual Review of Physiology, 2015, 77, 29-55.	5.6	98
32	â€œGood Enough Solutionsâ€•and the Genetics of Complex Diseases. Circulation Research, 2012, 111, 493-504.	2.0	94
33	Calcium-Voltage Coupling in the Genesis of Early and Delayed Afterdepolarizations in Cardiac Myocytes. Biophysical Journal, 2015, 108, 1908-1921.	0.2	94
34	Arrhythmogenic consequences of myofibroblastâ€“myocyte coupling. Cardiovascular Research, 2012, 93, 242-251.	1.8	92
35	Molecular Basis of Hypokalemia-Induced Ventricular Fibrillation. Circulation, 2015, 132, 1528-1537.	1.6	87
36	A simulation study of the effects of cardiac anatomy in ventricular fibrillation. Journal of Clinical Investigation, 2004, 113, 686-693.	3.9	87

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37	T-wave alternans and arrhythmogenesis in cardiac diseases. Frontiers in Physiology, 2010, 1, 154.	1.3	86
38	Genesis of Phase 3 Early Afterdepolarizations and Triggered Activity in Acquired Long-QT Syndrome. Circulation: Arrhythmia and Electrophysiology, 2011, 4, 103-111.	2.1	86
39	Cardiac alternans induced by fibroblast-myocyte coupling: mechanistic insights from computational models. American Journal of Physiology - Heart and Circulatory Physiology, 2009, 297, H775-H784.	1.5	85
40	Modifying L-Type Calcium Current Kinetics: Consequences for Cardiac Excitation and Arrhythmia Dynamics. Biophysical Journal, 2008, 94, 411-423.	0.2	84
41	Irregularly Appearing Early Afterdepolarizations in Cardiac Myocytes: Random Fluctuations or Dynamical Chaos?. Biophysical Journal, 2010, 99, 765-773.	0.2	83
42	Chaos in the genesis and maintenance of cardiac arrhythmias. Progress in Biophysics and Molecular Biology, 2011, 105, 247-257.	1.4	82
43	Nonlinear dynamics of cardiac excitation-contraction coupling: An iterated map study. Physical Review E, 2007, 75, 011927.	0.8	81
44	Protective Role of Transient Pore Openings in Calcium Handling by Cardiac Mitochondria. Journal of Biological Chemistry, 2011, 286, 34851-34857.	1.6	81
45	Criticality in Intracellular Calcium Signaling in Cardiac Myocytes. Biophysical Journal, 2012, 102, 2433-2442.	0.2	81
46	Electrophysiological heterogeneity and stability of reentry in simulated cardiac tissue. American Journal of Physiology - Heart and Circulatory Physiology, 2001, 280, H535-H545.	1.5	79
47	Intracellular Ca dynamics in ventricular fibrillation. American Journal of Physiology - Heart and Circulatory Physiology, 2004, 286, H1836-H1844.	1.5	79
48	Intracellular Ca Alternans: Coordinated Regulation by Sarcoplasmic Reticulum Release, Uptake, and Leak. Biophysical Journal, 2008, 95, 3100-3110.	0.2	78
49	Potassium currents in the heart: functional roles in repolarization, arrhythmia and therapeutics. Journal of Physiology, 2017, 595, 2229-2252.	1.3	76
50	Electrical Restitution and Cardiac Fibrillation. Journal of Cardiovascular Electrophysiology, 2002, 13, 292-295.	0.8	68
51	Thematic review series: Systems Biology Approaches to Metabolic and Cardiovascular Disorders. Network perspectives of cardiovascular metabolism. Journal of Lipid Research, 2006, 47, 2355-2366.	2.0	68
52	Calcium alternans in cardiac myocytes: Order from disorder. Journal of Molecular and Cellular Cardiology, 2013, 58, 100-109.	0.9	67
53	General Principles for the Validation of Proarrhythmia Risk Prediction Models: An Extension of the CiPA <i>In Silico</i> Strategy. Clinical Pharmacology and Therapeutics, 2020, 107, 102-111.	2.3	67
54	Effects of Na+ channel and cell coupling abnormalities on vulnerability to reentry: a simulation study. American Journal of Physiology - Heart and Circulatory Physiology, 2004, 286, H1310-H1321.	1.5	66

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55	Perspective: A dynamics-based classification of ventricular arrhythmias. Journal of Molecular and Cellular Cardiology, 2015, 82, 136-152.	0.9	66
56	Spatiotemporal Chaos in a Simulated Ring of Cardiac Cells. Physical Review Letters, 1997, 78, 1387-1390.	2.9	64
57	Dynamics of reentry around a circular obstacle in cardiac tissue. Physical Review E, 1998, 58, 6355-6358.	0.8	63
58	Vulnerable Window for Conduction Block in a One-Dimensional Cable of Cardiac Cells, 1: Single Extrasystoles. Biophysical Journal, 2006, 91, 793-804.	0.2	60
59	Critical mass hypothesis revisited: role of dynamical wave stability in spontaneous termination of cardiac fibrillation. American Journal of Physiology - Heart and Circulatory Physiology, 2006, 290, H255-H263.	1.5	60
60	Shaping a new Ca²⁺ conductance to suppress early afterdepolarizations in cardiac myocytes. Journal of Physiology, 2011, 589, 6081-6092.	1.3	59
61	Role of the transient outward potassium current in the genesis of early afterdepolarizations in cardiac cells. Cardiovascular Research, 2012, 95, 308-316.	1.8	59
62	Delayed afterdepolarizations generate both triggers and a vulnerable substrate promoting reentry in cardiac tissue. Heart Rhythm, 2015, 12, 2115-2124.	0.3	59
63	Electrical refractory period restitution and spiral wave reentry in simulated cardiac tissue. American Journal of Physiology - Heart and Circulatory Physiology, 2002, 283, H448-H460.	1.5	58
64	Computational Modeling and Numerical Methods for Spatiotemporal Calcium Cycling in Ventricular Myocytes. Frontiers in Physiology, 2012, 3, 114.	1.3	58
65	Mother Rotors and the Mechanisms of D600-Induced Type 2 Ventricular Fibrillation. Circulation, 2004, 110, 2110-2118.	1.6	57
66	Bi-stable wave propagation and early afterdepolarizationâ€“mediated cardiac arrhythmias. Heart Rhythm, 2012, 9, 115-122.	0.3	53
67	Glycolytic Oscillations in Isolated Rabbit Ventricular Myocytes. Journal of Biological Chemistry, 2008, 283, 36321-36327.	1.6	52
68	Short-term cardiac memory and mother rotor fibrillation. American Journal of Physiology - Heart and Circulatory Physiology, 2007, 292, H180-H189.	1.5	50
69	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.	0.9	50
70	Simulation Methods and Validation Criteria for Modeling Cardiac Ventricular Electrophysiology. PLoS ONE, 2014, 9, e114494.	1.1	48
71	Targeting the late component of the cardiac L-type Ca2+ current to suppress early afterdepolarizations. Journal of General Physiology, 2015, 145, 395-404.	0.9	47
72	Calcium alternans in a couplon network model of ventricular myocytes: role of sarcoplasmic reticulum load. American Journal of Physiology - Heart and Circulatory Physiology, 2012, 303, H341-H352.	1.5	46

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73	Synchronization of Early Afterdepolarizations and Arrhythmogenesis inÂHeterogeneous Cardiac Tissue Models. Biophysical Journal, 2012, 103, 365-373.	0.2	46
74	Selective inhibition of late sodium current suppresses ventricular tachycardia and fibrillation in intact rat hearts. Heart Rhythm, 2014, 11, 492-501.	0.3	45
75	Multisite Phosphorylation and Network Dynamics of Cyclin-Dependent Kinase Signaling in the Eukaryotic Cell Cycle. Biophysical Journal, 2004, 86, 3432-3443.	0.2	43
76	Complex excitation dynamics underlie polymorphic ventricular tachycardia in a transgenic rabbit model of long QT syndrome type 1. Heart Rhythm, 2015, 12, 220-228.	0.3	43
77	A unified theory of calcium alternans in ventricular myocytes. Scientific Reports, 2016, 6, 35625.	1.6	43
78	From local to global spatiotemporal chaos in a cardiac tissue model. Physical Review E, 2000, 61, 727-732.	0.8	42
79	Directed fusion of cardiac spheroids into larger heterocellular microtissues enables investigation of cardiac action potential propagation via cardiac fibroblasts. PLoS ONE, 2018, 13, e0196714.	1.1	41
80	Effects of Na+ and K+ channel blockade on vulnerability to and termination of fibrillation in simulated normal cardiac tissue. American Journal of Physiology - Heart and Circulatory Physiology, 2005, 289, H1692-H1701.	1.5	40
81	Mechanisms linking Tâ€wave alternans to spontaneous initiation of ventricular arrhythmias in rabbit models of long QT syndrome. Journal of Physiology, 2018, 596, 1341-1355.	1.3	40
82	Coexistence of multiple spiral waves with independent frequencies in a heterogeneous excitable medium. Physical Review E, 2001, 63, 031905.	0.8	39
83	Mitochondrial Oscillations and Waves in Cardiac Myocytes: Insights from Computational Models. Biophysical Journal, 2010, 98, 1428-1438.	0.2	39
84	Linking cell division to cell growth in a spatiotemporal model of the cell cycle. Journal of Theoretical Biology, 2006, 241, 120-133.	0.8	38
85	Mitochondrial Ca ²⁺ Influx Contributes to Arrhythmic Risk in Nonischemic Cardiomyopathy. Journal of the American Heart Association, 2018, 7, .	1.6	38
86	Spontaneous initiation of premature ventricular complexes and arrhythmias in type 2 long QT syndrome. American Journal of Physiology - Heart and Circulatory Physiology, 2016, 311, H1470-H1484.	1.5	36
87	R-From-T as a Common Mechanism of Arrhythmia Initiation in Long QT Syndromes. Circulation: Arrhythmia and Electrophysiology, 2019, 12, e007571.	2.1	36
88	Effects of simulated ischemia on spiral wave stability. American Journal of Physiology - Heart and Circulatory Physiology, 2001, 280, H1667-H1673.	1.5	35
89	Increased vulnerability to inducible atrial fibrillation caused by partial cellular uncoupling with heptanol. American Journal of Physiology - Heart and Circulatory Physiology, 2002, 283, H1116-H1122.	1.5	35
90	Dynamics and Cardiac Arrhythmias. Journal of Cardiovascular Electrophysiology, 2006, 17, 1042-1049.	0.8	35

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91	Dynamics of Early Afterdepolarization-Mediated Triggered Activity in Cardiac Monolayers. Biophysical Journal, 2012, 102, 2706-2714.	0.2	35
92	Period-Doubling Bifurcation in an Array of Coupled Stochastically Excitable Elements Subjected to Global Periodic Forcing. Physical Review Letters, 2009, 103, 044102.	2.9	33
93	Linking Flickering to Waves and Whole-Cell Oscillations in a Mitochondrial Network Model. Biophysical Journal, 2011, 101, 2102-2111.	0.2	33
94	Diffusion-Induced Vortex Filament Instability in 3-Dimensional Excitable Media. Physical Review Letters, 1999, 83, 2668-2671.	2.9	32
95	Coordination of cell growth and cell division: a mathematical modeling study. Journal of Cell Science, 2004, 117, 4199-4207.	1.2	32
96	The Sinus Node. JACC: Clinical Electrophysiology, 2020, 6, 1841-1843.	1.3	32
97	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.	0.9	31
98	Vulnerable Window for Conduction Block in a One-Dimensional Cable of Cardiac Cells, 2: Multiple Extrasystoles. Biophysical Journal, 2006, 91, 805-815.	0.2	30
99	Mechanisms and Determinants of Ultralong Action Potential Duration and Slow Rate-Dependence in Cardiac Myocytes. PLoS ONE, 2012, 7, e43587.	1.1	30
100	Dispersion of Refractoriness and Induction of Reentry due to Chaos Synchronization in a Model of Cardiac Tissue. Physical Review Letters, 2007, 99, 118101.	2.9	28
101	Signal transduction network motifs and biological memory. Journal of Theoretical Biology, 2007, 246, 755-761.	0.8	28
102	The emergence of subcellular pacemaker sites for calcium waves and oscillations. Journal of Physiology, 2013, 591, 5305-5320.	1.3	27
103	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.	3.3	26
104	Hysteresis and Cell Cycle Transitions: How Crucial Is It?. Biophysical Journal, 2005, 88, 1626-1634.	0.2	25
105	Repolarization Reserve Evolves Dynamically During the Cardiac Action Potential. Circulation: Arrhythmia and Electrophysiology, 2015, 8, 694-702.	2.1	25
106	Long-Lasting Sparks: Multi-Metastability and Release Competition in the Calcium Release Unit Network. PLoS Computational Biology, 2016, 12, e1004671.	1.5	25
107	Oxidative stress, fibrosis, and early afterdepolarization-mediated cardiac arrhythmias. Frontiers in Physiology, 2013, 4, 19.	1.3	24
108	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.	1.1	23

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109	Determinants of early afterdepolarization properties in ventricular myocyte models. PLoS Computational Biology, 2018, 14, e1006382.	1.5	23
110	Roles of Protein Ubiquitination and Degradation Kinetics in Biological Oscillations. PLoS ONE, 2012, 7, e34616.	1.1	22
111	Ablating atrial fibrillation: A translational science perspective for clinicians. Heart Rhythm, 2016, 13, 1868-1877.	0.3	22
112	Dynamical effects of diffusive cell coupling on cardiac excitation and propagation: a simulation study. American Journal of Physiology - Heart and Circulatory Physiology, 2004, 287, H2803-H2812.	1.5	21
113	Chronic nicotine in hearts with healed ventricular myocardial infarction promotes atrial flutter that resembles typical human atrial flutter. American Journal of Physiology - Heart and Circulatory Physiology, 2005, 288, H2878-H2886.	1.5	19
114	Electrophysiology of Heart Failure Using a Rabbit Model: From the Failing Myocyte to Ventricular Fibrillation. PLoS Computational Biology, 2016, 12, e1004968.	1.5	19
115	Vulnerability to re-entry in simulated two-dimensional cardiac tissue: Effects of electrical restitution and stimulation sequence. Chaos, 2007, 17, 043115.	1.0	18
116	Concomitant SK current activation and sodium current inhibition cause J wave syndrome. JCI Insight, 2018, 3, .	2.3	18
117	The effects of cascade length, kinetics and feedback loops on biological signal transduction dynamics in a simplified cascade model. Physical Biology, 2009, 6, 016007.	0.8	17
118	Memory-Induced Chaos in Cardiac Excitation. Physical Review Letters, 2017, 118, 138101.	2.9	17
119	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.	0.9	16
120	A Dynamical Threshold for Cardiac Delayed Afterdepolarization-Mediated Triggered Activity. Biophysical Journal, 2016, 111, 2523-2533.	0.2	16
121	Transient Outward K ⁺ Current (I _{to}) Underlies the Right Ventricular Initiation of Polymorphic Ventricular Tachycardia in a Transgenic Rabbit Model of Long-QT Syndrome Type 1. Circulation: Arrhythmia and Electrophysiology, 2018, 11, e005414.	2.1	15
122	Drifting dynamics of dense and sparse spiral waves in heterogeneous excitable media. Physical Review E, 2009, 79, 036212.	0.8	14
123	Pro- and antiarrhythmic effects of ATP-sensitive potassium current activation on reentry during early afterdepolarization-mediated arrhythmias. Heart Rhythm, 2013, 10, 575-582.	0.3	14
124	Mechanisms of Premature Ventricular Complexes Caused by QT Prolongation. Biophysical Journal, 2021, 120, 352-369.	0.2	14
125	A kinematic study of spiral wave drift due to an electric field. Physics Letters, Section A: General, Atomic and Solid State Physics, 2003, 308, 179-186.	0.9	13
126	Resonance drifts of spiral waves on media of periodic excitability. Physical Review E, 2012, 85, 046216.	0.8	13

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127	Memory-induced nonlinear dynamics of excitation in cardiac diseases. Physical Review E, 2018, 97, 042414.	0.8	13
128	Spatially Discordant Repolarization Alternans in the Absence of Conduction Velocity Restitution. Biophysical Journal, 2020, 118, 2574-2587.	0.2	13
129	Mechanisms of Arrhythmogenicity of Hypertrophic Cardiomyopathy-Associated Troponin T (TNNT2) Variant I79N. Frontiers in Cell and Developmental Biology, 2021, 9, 787581.	1.8	13
130	Multiscale Determinants of Delayed Afterdepolarization Amplitude in Cardiac Tissue. Biophysical Journal, 2017, 112, 1949-1961.	0.2	12
131	R-on-T and the initiation of reentry revisited: Integrating old and new concepts. Heart Rhythm, 2022, 19, 1369-1383.	0.3	12
132	Late I _{Na} Blocker GS967 Supresses Polymorphic Ventricular Tachycardia in a Transgenic Rabbit Model of Long QT Type 2. Circulation: Arrhythmia and Electrophysiology, 2020, 13, e006875.	2.1	11
133	Activation of TRPC (Transient Receptor Potential Canonical) Channel Currents in Iron Overloaded Cardiac Myocytes. Circulation: Arrhythmia and Electrophysiology, 2021, 14, e009291.	2.1	11
134	The pinwheel experiment revisited: effects of cellular electrophysiological properties on vulnerability to cardiac reentry. American Journal of Physiology - Heart and Circulatory Physiology, 2007, 293, H1781-H1790.	1.5	10
135	A Spatiotemporal Ventricular Myocyte Model Incorporating Mitochondrial Calcium Cycling. Biophysical Journal, 2019, 117, 2349-2360.	0.2	10
136	The chicken or the egg? Voltage and calcium dynamics in the heart. American Journal of Physiology - Heart and Circulatory Physiology, 2007, 293, H2054-H2055.	1.5	9
137	Coupled iterated map models of action potential dynamics in a one-dimensional cable of cardiac cells. New Journal of Physics, 2008, 10, 055001.	1.2	9
138	Small-conductance Ca2+-activated K+ channels promote J-wave syndrome and phase 2 reentry. Heart Rhythm, 2020, 17, 1582-1590.	0.3	8
139	Bifurcations Caused by Feedback between Voltage and Intracellular Ion Concentrations in Ventricular Myocytes. Physical Review Letters, 2019, 123, 218101.	2.9	7
140	Stabilizer Cell Gene Therapy. Circulation: Arrhythmia and Electrophysiology, 2020, 13, e008420.	2.1	7
141	Simultaneous activation of the small conductance calcium-activated potassium current by acetylcholine and inhibition of sodium current by ajmaline cause J-wave syndrome in Langendorff-perfused rabbit ventricles. Heart Rhythm, 2021, 18, 98-108.	0.3	7
142	Delayed global feedback in the genesis and stability of spatiotemporalÂexcitationÂpatterns in paced biological excitable media. PLoS Computational Biology, 2020, 16, e1007931.	1.5	7
143	Short-Long Heart Rate Variation Increases Dispersion of Action Potential Duration in Long QT Type 2 Transgenic Rabbit Model. Scientific Reports, 2019, 9, 14849.	1.6	6
144	Life and death saddles in the heart. Physical Review E, 2021, 103, 062406.	0.8	6

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145	Why Is Only Type 1 Electrocardiogram Diagnostic of Brugada Syndrome? Mechanistic Insights From Computer Modeling. Circulation: Arrhythmia and Electrophysiology, 2022, 15, CIRCEP121010365.	2.1	6
146	The transient outward potassium current plays a key role in spiral wave breakup in ventricular tissue. American Journal of Physiology - Heart and Circulatory Physiology, 2021, 320, H826-H837.	1.5	4
147	Bursting and complex oscillatory patterns in a gene regulatory network model. Chaos, Solitons and Fractals, 2021, 152, 111348.	2.5	4
148	Mitochondrial depolarization promotes calcium alternans: Mechanistic insights from a ventricular myocyte model. PLoS Computational Biology, 2021, 17, e1008624.	1.5	4
149	Mitochondrial Contributions in the Genesis of Delayed Afterdepolarizations in Ventricular Myocytes. Frontiers in Physiology, 2021, 12, 744023.	1.3	4
150	What is ventricular fibrillation?. Heart Rhythm, 2022, 19, 306-307.	0.3	4
151	Supernormal Excitability Causes Alternans, Block, Wavebreak and Reentry in Cardiac Tissue. Biophysical Journal, 2011, 100, 435a.	0.2	3
152	Control of voltage-driven instabilities in cardiac myocytes with memory. Chaos, 2018, 28, 113122.	1.0	3
153	Stability of spatially discordant repolarization alternans in cardiac tissue. Chaos, 2020, 30, 123141.	1.0	3
154	Controlling cardiac alternans. Heart Rhythm, 2013, 10, 573-574.	0.3	2
155	Multiscale Consequences of Spontaneous Calcium Release on Cardiac Delayed Afterdepolarizations. Biophysical Journal, 2015, 108, 264a.	0.2	2
156	Mechanisms of phaseâ€3 early afterdepolarizations and triggered activities in ventricular myocyte models. Physiological Reports, 2021, 9, e14883.	0.7	2
157	Network Dynamics in Cardiac Electrophysiology. Springer Series in Biophysics, 2014, , 243-260.	0.4	2
158	Complex Early and Delayed Afterdepolarization Dynamics caused by Voltage-Calcium Coupling in Cardiac Myocytes. Biophysical Journal, 2015, 108, 261a-262a.	0.2	1
159	Collective Dynamics of Excitable System in Heterogeneous Media. , 0, , .		0
160	The Heart by Numbers. Biophysical Journal, 2019, 117, E1-E3.	0.2	0
161	10.1063/5.0029209.3. , 2020, , .		0