

Zhilin Qu

List of Publications by Year in Descending Order

Source: <https://exaly.com/author-pdf/104198/zhilin-qu-publications-by-year.pdf>

Version: 2024-04-26

This document has been generated based on the publications and citations recorded by exaly.com. For the latest version of this publication list, visit the link given above.

The third column is the impact factor (IF) of the journal, and the fourth column is the number of citations of the article.

156
papers

8,389
citations

54
h-index

87
g-index

172
ext. papers

9,701
ext. citations

5.4
avg, IF

6.08
L-index

#	Paper	IF	Citations
156	Why Is Only Type 1 Electrocardiogram Diagnostic of Brugada Syndrome? Mechanistic Insights From Computer Modeling.. <i>Circulation: Arrhythmia and Electrophysiology</i> , 2021 , CIRCEP121010365	6.4	1
155	Mitochondrial Contributions in the Genesis of Delayed Afterdepolarizations in Ventricular Myocytes. <i>Frontiers in Physiology</i> , 2021 , 12, 744023	4.6	1
154	Mechanisms of phase-3 early afterdepolarizations and triggered activities in ventricular myocyte models. <i>Physiological Reports</i> , 2021 , 9, e14883	2.6	0
153	Life and death saddles in the heart. <i>Physical Review E</i> , 2021 , 103, 062406	2.4	1
152	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. <i>Heart Rhythm</i> , 2021 , 18, 98-108	6.7	2
151	Mechanisms of Premature Ventricular Complexes Caused by QT Prolongation. <i>Biophysical Journal</i> , 2021 , 120, 352-369	2.9	5
150	Activation of TRPC (Transient Receptor Potential Canonical) Channel Currents in Iron Overloaded Cardiac Myocytes. <i>Circulation: Arrhythmia and Electrophysiology</i> , 2021 , 14, e009291	6.4	5
149	The transient outward potassium current plays a key role in spiral wave breakup in ventricular tissue. <i>American Journal of Physiology - Heart and Circulatory Physiology</i> , 2021 , 320, H826-H837	5.2	2
148	Bursting and complex oscillatory patterns in a gene regulatory network model. <i>Chaos, Solitons and Fractals</i> , 2021 , 152, 111348	9.3	1
147	Mitochondrial depolarization promotes calcium alternans: Mechanistic insights from a ventricular myocyte model. <i>PLoS Computational Biology</i> , 2021 , 17, e1008624	5	1
146	Mechanisms of Arrhythmogenicity of Hypertrophic Cardiomyopathy-Associated Troponin T () Variant I79N.. <i>Frontiers in Cell and Developmental Biology</i> , 2021 , 9, 787581	5.7	0
145	Small-conductance Ca-activated K channels promote J-wave syndrome and phase 2 reentry. <i>Heart Rhythm</i> , 2020 , 17, 1582-1590	6.7	5
144	Late I Blocker GS967 Suppresses Polymorphic Ventricular Tachycardia in a Transgenic Rabbit Model of Long QT Type 2. <i>Circulation: Arrhythmia and Electrophysiology</i> , 2020 , 13, e006875	6.4	5
143	Spatially Discordant Repolarization Alternans in the Absence of Conduction Velocity Restitution. <i>Biophysical Journal</i> , 2020 , 118, 2574-2587	2.9	7
142	Delayed global feedback in the genesis and stability of spatiotemporal excitation patterns in paced biological excitable media. <i>PLoS Computational Biology</i> , 2020 , 16, e1007931	5	5
141	Stability of spatially discordant repolarization alternans in cardiac tissue. <i>Chaos</i> , 2020 , 30, 123141	3.3	1
140	General Principles for the Validation of Proarrhythmia Risk Prediction Models: An Extension of the CiPA In Silico Strategy. <i>Clinical Pharmacology and Therapeutics</i> , 2020 , 107, 102-111	6.1	34

139	Stabilizer Cell Gene Therapy: A Less-Is-More Strategy to Prevent Cardiac Arrhythmias. <i>Circulation: Arrhythmia and Electrophysiology</i> , 2020 , 13, e008420	6.4	2
138	Relationship Between Cardiac Alternans, Calcium Cycling, and Ventricular Arrhythmias 2019 , 364-374		2
137	Short-Long Heart Rate Variation Increases Dispersion of Action Potential Duration in Long QT Type 2 Transgenic Rabbit Model. <i>Scientific Reports</i> , 2019 , 9, 14849	4.9	2
136	A Spatiotemporal Ventricular Myocyte Model Incorporating Mitochondrial Calcium Cycling. <i>Biophysical Journal</i> , 2019 , 117, 2349-2360	2.9	6
135	Bifurcations Caused by Feedback between Voltage and Intracellular Ion Concentrations in Ventricular Myocytes. <i>Physical Review Letters</i> , 2019 , 123, 218101	7.4	3
134	R-From-T as a Common Mechanism of Arrhythmia Initiation in Long QT Syndromes. <i>Circulation: Arrhythmia and Electrophysiology</i> , 2019 , 12, e007571	6.4	15
133	Mitochondrial Ca Influx Contributes to Arrhythmic Risk in Nonischemic Cardiomyopathy. <i>Journal of the American Heart Association</i> , 2018 , 7,	6	28
132	Mechanisms linking T-wave alternans to spontaneous initiation of ventricular arrhythmias in rabbit models of long QT syndrome. <i>Journal of Physiology</i> , 2018 , 596, 1341-1355	3.9	25
131	Memory-induced nonlinear dynamics of excitation in cardiac diseases. <i>Physical Review E</i> , 2018 , 97, 042414	4.4	10
130	Transverse tubular network structures in the genesis of intracellular calcium alternans and triggered activity in cardiac cells. <i>Journal of Molecular and Cellular Cardiology</i> , 2018 , 114, 288-299	5.8	21
129	Determinants of early afterdepolarization properties in ventricular myocyte models. <i>PLoS Computational Biology</i> , 2018 , 14, e1006382	5	14
128	Concomitant SK current activation and sodium current inhibition cause J wave syndrome. <i>JCI Insight</i> , 2018 , 3,	9.9	11
127	Control of voltage-driven instabilities in cardiac myocytes with memory. <i>Chaos</i> , 2018 , 28, 113122	3.3	2
126	Transient Outward K Current (I) Underlies the Right Ventricular Initiation of Polymorphic Ventricular Tachycardia in a Transgenic Rabbit Model of Long-QT Syndrome Type 1. <i>Circulation: Arrhythmia and Electrophysiology</i> , 2018 , 11, e005414	6.4	11
125	Directed fusion of cardiac spheroids into larger heterocellular microtissues enables investigation of cardiac action potential propagation via cardiac fibroblasts. <i>PLoS ONE</i> , 2018 , 13, e0196714	3.7	25
124	Multiscale Determinants of Delayed Afterdepolarization Amplitude in Cardiac Tissue. <i>Biophysical Journal</i> , 2017 , 112, 1949-1961	2.9	10
123	Memory-Induced Chaos in Cardiac Excitation. <i>Physical Review Letters</i> , 2017 , 118, 138101	7.4	15
122	Electrophysiology of Hypokalemia and Hyperkalemia. <i>Circulation: Arrhythmia and Electrophysiology</i> , 2017 , 10,	6.4	118

121	Stochastic initiation and termination of calcium-mediated triggered activity in cardiac myocytes. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2017 , 114, E270-E279	11.5	18
120	Potassium currents in the heart: functional roles in repolarization, arrhythmia and therapeutics. <i>Journal of Physiology</i> , 2017 , 595, 2229-2252	3.9	51
119	Spontaneous initiation of premature ventricular complexes and arrhythmias in type 2 long QT syndrome. <i>American Journal of Physiology - Heart and Circulatory Physiology</i> , 2016 , 311, H1470-H1484	5.2	22
118	A unified theory of calcium alternans in ventricular myocytes. <i>Scientific Reports</i> , 2016 , 6, 35625	4.9	34
117	Ablating atrial fibrillation: A translational science perspective for clinicians. <i>Heart Rhythm</i> , 2016 , 13, 1868-77	6.7	16
116	Long-Lasting Sparks: Multi-Metastability and Release Competition in the Calcium Release Unit Network. <i>PLoS Computational Biology</i> , 2016 , 12, e1004671	5	20
115	Electrophysiology of Heart Failure Using a Rabbit Model: From the Failing Myocyte to Ventricular Fibrillation. <i>PLoS Computational Biology</i> , 2016 , 12, e1004968	5	13
114	A Dynamical Threshold for Cardiac Delayed Afterdepolarization-Mediated Triggered Activity. <i>Biophysical Journal</i> , 2016 , 111, 2523-2533	2.9	11
113	Repolarization reserve evolves dynamically during the cardiac action potential: effects of transient outward currents on early afterdepolarizations. <i>Circulation: Arrhythmia and Electrophysiology</i> , 2015 , 8, 694-702	6.4	21
112	Multiscale Consequences of Spontaneous Calcium Release on Cardiac Delayed Afterdepolarizations. <i>Biophysical Journal</i> , 2015 , 108, 264a	2.9	2
111	Delayed afterdepolarizations generate both triggers and a vulnerable substrate promoting reentry in cardiac tissue. <i>Heart Rhythm</i> , 2015 , 12, 2115-24	6.7	36
110	Calcium-voltage coupling in the genesis of early and delayed afterdepolarizations in cardiac myocytes. <i>Biophysical Journal</i> , 2015 , 108, 1908-21	2.9	69
109	Targeting the late component of the cardiac L-type Ca ²⁺ current to suppress early afterdepolarizations. <i>Journal of General Physiology</i> , 2015 , 145, 395-404	3.4	31
108	Perspective: a dynamics-based classification of ventricular arrhythmias. <i>Journal of Molecular and Cellular Cardiology</i> , 2015 , 82, 136-52	5.8	51
107	Molecular Basis of Hypokalemia-Induced Ventricular Fibrillation. <i>Circulation</i> , 2015 , 132, 1528-1537	16.7	69
106	T-tubule disruption promotes calcium alternans in failing ventricular myocytes: mechanistic insights from computational modeling. <i>Journal of Molecular and Cellular Cardiology</i> , 2015 , 79, 32-41	5.8	41
105	Spatially Discordant Alternans and Arrhythmias in Tachypacing-Induced Cardiac Myopathy in Transgenic LQT1 Rabbits: The Importance of IKs and Ca ²⁺ Cycling. <i>PLoS ONE</i> , 2015 , 10, e0122754	3.7	20
104	Complex excitation dynamics underlie polymorphic ventricular tachycardia in a transgenic rabbit model of long QT syndrome type 1. <i>Heart Rhythm</i> , 2015 , 12, 220-8	6.7	32

103	Mechanisms of ventricular arrhythmias: from molecular fluctuations to electrical turbulence. <i>Annual Review of Physiology</i> , 2015 , 77, 29-55	23.1	68
102	Acute reversal of phospholamban inhibition facilitates the rhythmic whole-cell propagating calcium waves in isolated ventricular myocytes. <i>Journal of Molecular and Cellular Cardiology</i> , 2015 , 80, 126-35	5.8	14
101	Cardiac fibrosis and arrhythmogenesis: the road to repair is paved with perils. <i>Journal of Molecular and Cellular Cardiology</i> , 2014 , 70, 83-91	5.8	177
100	Nonlinear and Stochastic Dynamics in the Heart. <i>Physics Reports</i> , 2014 , 543, 61-162	27.7	121
99	Selective inhibition of late sodium current suppresses ventricular tachycardia and fibrillation in intact rat hearts. <i>Heart Rhythm</i> , 2014 , 11, 492-501	6.7	38
98	Simulation Methods and Validation Criteria for Modeling Cardiac Ventricular Electrophysiology. <i>PLoS ONE</i> , 2014 , 9, e114494	3.7	39
97	Network Dynamics in Cardiac Electrophysiology. <i>Springer Series in Biophysics</i> , 2014 , 243-260		2
96	The emergence of subcellular pacemaker sites for calcium waves and oscillations. <i>Journal of Physiology</i> , 2013 , 591, 5305-20	3.9	21
95	Calcium alternans in cardiac myocytes: order from disorder. <i>Journal of Molecular and Cellular Cardiology</i> , 2013 , 58, 100-9	5.8	51
94	Pro- and antiarrhythmic effects of ATP-sensitive potassium current activation on reentry during early afterdepolarization-mediated arrhythmias. <i>Heart Rhythm</i> , 2013 , 10, 575-82	6.7	12
93	Early afterdepolarizations in cardiac myocytes: beyond reduced repolarization reserve. <i>Cardiovascular Research</i> , 2013 , 99, 6-15	9.9	106
92	Oxidative stress, fibrosis, and early afterdepolarization-mediated cardiac arrhythmias. <i>Frontiers in Physiology</i> , 2013 , 4, 19	4.6	17
91	Bi-stable wave propagation and early afterdepolarization-mediated cardiac arrhythmias. <i>Heart Rhythm</i> , 2012 , 9, 115-22	6.7	44
90	Differential conditions for early after-depolarizations and triggered activity in cardiomyocytes derived from transgenic LQT1 and LQT2 rabbits. <i>Journal of Physiology</i> , 2012 , 590, 1171-80	3.9	91
89	Criticality in intracellular calcium signaling in cardiac myocytes. <i>Biophysical Journal</i> , 2012 , 102, 2433-42	2.9	55
88	Dynamics of early afterdepolarization-mediated triggered activity in cardiac monolayers. <i>Biophysical Journal</i> , 2012 , 102, 2706-14	2.9	31
87	Synchronization of early afterdepolarizations and arrhythmogenesis in heterogeneous cardiac tissue models. <i>Biophysical Journal</i> , 2012 , 103, 365-73	2.9	37
86	Roles of protein ubiquitination and degradation kinetics in biological oscillations. <i>PLoS ONE</i> , 2012 , 7, e34616	3.7	20

85	Resonance drifts of spiral waves on media of periodic excitability. <i>Physical Review E</i> , 2012 , 85, 046216	2.4	10
84	Computational modeling and numerical methods for spatiotemporal calcium cycling in ventricular myocytes. <i>Frontiers in Physiology</i> , 2012 , 3, 114	4.6	47
83	Calcium alternans in a couplon network model of ventricular myocytes: role of sarcoplasmic reticulum load. <i>American Journal of Physiology - Heart and Circulatory Physiology</i> , 2012 , 303, H341-52	5.2	38
82	"Good enough solutions" and the genetics of complex diseases. <i>Circulation Research</i> , 2012 , 111, 493-504	15.7	68
81	Arrhythmogenic consequences of myofibroblast-myocyte coupling. <i>Cardiovascular Research</i> , 2012 , 93, 242-51	9.9	74
80	Role of the transient outward potassium current in the genesis of early afterdepolarizations in cardiac cells. <i>Cardiovascular Research</i> , 2012 , 95, 308-16	9.9	51
79	Mechanisms and determinants of ultralong action potential duration and slow rate-dependence in cardiac myocytes. <i>PLoS ONE</i> , 2012 , 7, e43587	3.7	23
78	Linking flickering to waves and whole-cell oscillations in a mitochondrial network model. <i>Biophysical Journal</i> , 2011 , 101, 2102-11	2.9	25
77	Suppression of re-entrant and multifocal ventricular fibrillation by the late sodium current blocker ranolazine. <i>Journal of the American College of Cardiology</i> , 2011 , 57, 366-75	15.1	91
76	Supernormal Excitability Causes Alternans, Block, Wavebreak and Reentry in Cardiac Tissue. <i>Biophysical Journal</i> , 2011 , 100, 435a	2.9	3
75	Shaping a new Ca^{2+} conductance to suppress early afterdepolarizations in cardiac myocytes. <i>Journal of Physiology</i> , 2011 , 589, 6081-92	3.9	51
74	Chaos in the genesis and maintenance of cardiac arrhythmias. <i>Progress in Biophysics and Molecular Biology</i> , 2011 , 105, 247-57	4.7	73
73	Multi-scale modeling in biology: how to bridge the gaps between scales?. <i>Progress in Biophysics and Molecular Biology</i> , 2011 , 107, 21-31	4.7	81
72	Protective role of transient pore openings in calcium handling by cardiac mitochondria. <i>Journal of Biological Chemistry</i> , 2011 , 286, 34851-7	5.4	58
71	Genesis of phase 3 early afterdepolarizations and triggered activity in acquired long-QT syndrome. <i>Circulation: Arrhythmia and Electrophysiology</i> , 2011 , 4, 103-11	6.4	75
70	Alternans and arrhythmias: from cell to heart. <i>Circulation Research</i> , 2011 , 108, 98-112	15.7	137
69	T-wave alternans and arrhythmogenesis in cardiac diseases. <i>Frontiers in Physiology</i> , 2010 , 1, 154	4.6	73
68	Spark-induced sparks as a mechanism of intracellular calcium alternans in cardiac myocytes. <i>Circulation Research</i> , 2010 , 106, 1582-91	15.7	90

67	Mitochondrial oscillations and waves in cardiac myocytes: insights from computational models. <i>Biophysical Journal</i> , 2010 , 98, 1428-38	2.9	36
66	Irregularly appearing early afterdepolarizations in cardiac myocytes: random fluctuations or dynamical chaos?. <i>Biophysical Journal</i> , 2010 , 99, 765-73	2.9	64
65	So little source, so much sink: requirements for afterdepolarizations to propagate in tissue. <i>Biophysical Journal</i> , 2010 , 99, 1408-15	2.9	224
64	Early afterdepolarizations and cardiac arrhythmias. <i>Heart Rhythm</i> , 2010 , 7, 1891-9	6.7	233
63	Drifting dynamics of dense and sparse spiral waves in heterogeneous excitable media. <i>Physical Review E</i> , 2009 , 79, 036212	2.4	12
62	Period-doubling bifurcation in an array of coupled stochastically excitable elements subjected to global periodic forcing. <i>Physical Review Letters</i> , 2009 , 103, 044102	7.4	29
61	Bifurcation and chaos in a model of cardiac early afterdepolarizations. <i>Physical Review Letters</i> , 2009 , 102, 258103	7.4	102
60	Synchronization of chaotic early afterdepolarizations in the genesis of cardiac arrhythmias. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2009 , 106, 2983-8	11.5	184
59	Cardiac alternans induced by fibroblast-myocyte coupling: mechanistic insights from computational models. <i>American Journal of Physiology - Heart and Circulatory Physiology</i> , 2009 , 297, H775-84	5.2	77
58	Increased susceptibility of aged hearts to ventricular fibrillation during oxidative stress. <i>American Journal of Physiology - Heart and Circulatory Physiology</i> , 2009 , 297, H1594-605	5.2	97
57	The effects of cascade length, kinetics and feedback loops on biological signal transduction dynamics in a simplified cascade model. <i>Physical Biology</i> , 2009 , 6, 016007	3	16
56	Effects of fibroblast-myocyte coupling on cardiac conduction and vulnerability to reentry: A computational study. <i>Heart Rhythm</i> , 2009 , 6, 1641-9	6.7	118
55	A rabbit ventricular action potential model replicating cardiac dynamics at rapid heart rates. <i>Biophysical Journal</i> , 2008 , 94, 392-410	2.9	313
54	Modifying L-type calcium current kinetics: consequences for cardiac excitation and arrhythmia dynamics. <i>Biophysical Journal</i> , 2008 , 94, 411-23	2.9	72
53	Intracellular Ca alternans: coordinated regulation by sarcoplasmic reticulum release, uptake, and leak. <i>Biophysical Journal</i> , 2008 , 95, 3100-10	2.9	71
52	Glycolytic oscillations in isolated rabbit ventricular myocytes. <i>Journal of Biological Chemistry</i> , 2008 , 283, 36321-7	5.4	42
51	Coupled Iterated Map Models of Action Potential Dynamics in a One-dimensional Cable of Cardiac Cells. <i>New Journal of Physics</i> , 2008 , 10, 55001-55024	2.9	8
50	Dynamic origin of spatially discordant alternans in cardiac tissue. <i>Biophysical Journal</i> , 2007 , 92, 448-60	2.9	85

49	Short-term cardiac memory and mother rotor fibrillation. <i>American Journal of Physiology - Heart and Circulatory Physiology</i> , 2007 , 292, H180-9	5.2	35
48	Signal transduction network motifs and biological memory. <i>Journal of Theoretical Biology</i> , 2007 , 246, 755-61	2.3	20
47	The chicken or the egg? Voltage and calcium dynamics in the heart. <i>American Journal of Physiology - Heart and Circulatory Physiology</i> , 2007 , 293, H2054-5	5.2	8
46	The pinwheel experiment revisited: effects of cellular electrophysiological properties on vulnerability to cardiac reentry. <i>American Journal of Physiology - Heart and Circulatory Physiology</i> , 2007 , 293, H1781-90	5.2	7
45	Vulnerability to re-entry in simulated two-dimensional cardiac tissue: effects of electrical restitution and stimulation sequence. <i>Chaos</i> , 2007 , 17, 043115	3.3	14
44	Dispersion of refractoriness and induction of reentry due to chaos synchronization in a model of cardiac tissue. <i>Physical Review Letters</i> , 2007 , 99, 118101	7.4	22
43	Nonlinear dynamics of cardiac excitation-contraction coupling: an iterated map study. <i>Physical Review E</i> , 2007 , 75, 011927	2.4	70
42	From pulsus to pulseless: the saga of cardiac alternans. <i>Circulation Research</i> , 2006 , 98, 1244-53	15.7	349
41	Critical mass hypothesis revisited: role of dynamical wave stability in spontaneous termination of cardiac fibrillation. <i>American Journal of Physiology - Heart and Circulatory Physiology</i> , 2006 , 290, H255-63	5.2	49
40	Systems biology approaches to metabolic and cardiovascular disorders: network perspectives of cardiovascular metabolism. <i>Journal of Lipid Research</i> , 2006 , 47, 2355-66	6.3	62
39	Spatially discordant alternans in cardiac tissue: role of calcium cycling. <i>Circulation Research</i> , 2006 , 99, 520-7	15.7	127
38	Vulnerable window for conduction block in a one-dimensional cable of cardiac cells, 1: single extrasystoles. <i>Biophysical Journal</i> , 2006 , 91, 793-804	2.9	44
37	Vulnerable window for conduction block in a one-dimensional cable of cardiac cells, 2: multiple extrasystoles. <i>Biophysical Journal</i> , 2006 , 91, 805-15	2.9	25
36	Dynamics and cardiac arrhythmias. <i>Journal of Cardiovascular Electrophysiology</i> , 2006 , 17, 1042-9	2.7	31
35	Linking cell division to cell growth in a spatiotemporal model of the cell cycle. <i>Journal of Theoretical Biology</i> , 2006 , 241, 120-33	2.3	31
34	Hysteresis and cell cycle transitions: how crucial is it?. <i>Biophysical Journal</i> , 2005 , 88, 1626-34	2.9	20
33	Chronic nicotine in hearts with healed ventricular myocardial infarction promotes atrial flutter that resembles typical human atrial flutter. <i>American Journal of Physiology - Heart and Circulatory Physiology</i> , 2005 , 288, H2878-86	5.2	17
32	Effects of Na(+) and K(+) channel blockade on vulnerability to and termination of fibrillation in simulated normal cardiac tissue. <i>American Journal of Physiology - Heart and Circulatory Physiology</i> , 2005 , 289, H1692-701	5.2	34

31	The dynamics of cardiac fibrillation. <i>Circulation</i> , 2005 , 112, 1232-40	16.7	253
30	Effects of Na(+) channel and cell coupling abnormalities on vulnerability to reentry: a simulation study. <i>American Journal of Physiology - Heart and Circulatory Physiology</i> , 2004 , 286, H1310-21	5.2	61
29	Mother rotors and the mechanisms of D600-induced type 2 ventricular fibrillation. <i>Circulation</i> , 2004 , 110, 2110-8	16.7	54
28	Coordination of cell growth and cell division: a mathematical modeling study. <i>Journal of Cell Science</i> , 2004 , 117, 4199-207	5.3	26
27	Intracellular Ca dynamics in ventricular fibrillation. <i>American Journal of Physiology - Heart and Circulatory Physiology</i> , 2004 , 286, H1836-44	5.2	75
26	Dynamical effects of diffusive cell coupling on cardiac excitation and propagation: a simulation study. <i>American Journal of Physiology - Heart and Circulatory Physiology</i> , 2004 , 287, H2803-12	5.2	21
25	Multisite phosphorylation and network dynamics of cyclin-dependent kinase signaling in the eukaryotic cell cycle. <i>Biophysical Journal</i> , 2004 , 86, 3432-43	2.9	40
24	A simulation study of the effects of cardiac anatomy in ventricular fibrillation. <i>Journal of Clinical Investigation</i> , 2004 , 113, 686-93	15.9	56
23	Regulation of the mammalian cell cycle: a model of the G1-to-S transition. <i>American Journal of Physiology - Cell Physiology</i> , 2003 , 284, C349-64	5.4	135
22	A kinematic study of spiral wave drift due to an electric field. <i>Physics Letters, Section A: General, Atomic and Solid State Physics</i> , 2003 , 308, 179-186	2.3	12
21	Dynamics of the cell cycle: checkpoints, sizers, and timers. <i>Biophysical Journal</i> , 2003 , 85, 3600-11	2.9	97
20	Increased vulnerability to inducible atrial fibrillation caused by partial cellular uncoupling with heptanol. <i>American Journal of Physiology - Heart and Circulatory Physiology</i> , 2002 , 283, H1116-22	5.2	32
19	Electrical restitution and cardiac fibrillation. <i>Journal of Cardiovascular Electrophysiology</i> , 2002 , 13, 292-5	2.7	61
18	Electrical refractory period restitution and spiral wave reentry in simulated cardiac tissue. <i>American Journal of Physiology - Heart and Circulatory Physiology</i> , 2002 , 283, H448-60	5.2	44
17	Coexistence of multiple spiral waves with independent frequencies in a heterogeneous excitable medium. <i>Physical Review E</i> , 2001 , 63, 031905	2.4	38
16	Effects of simulated ischemia on spiral wave stability. <i>American Journal of Physiology - Heart and Circulatory Physiology</i> , 2001 , 280, H1667-73	5.2	30
15	Electrophysiological heterogeneity and stability of reentry in simulated cardiac tissue. <i>American Journal of Physiology - Heart and Circulatory Physiology</i> , 2001 , 280, H535-45	5.2	61
14	Origins of spiral wave meander and breakup in a two-dimensional cardiac tissue model. <i>Annals of Biomedical Engineering</i> , 2000 , 28, 755-71	4.7	131

13	Ventricular fibrillation: how do we stop the waves from breaking?. <i>Circulation Research</i> , 2000 , 87, 1103-7	15.7	187
12	From local to global spatiotemporal chaos in a cardiac tissue model. <i>Physical Review E</i> , 2000 , 61, 727-32	2.4	38
11	Mechanisms of discordant alternans and induction of reentry in simulated cardiac tissue. <i>Circulation</i> , 2000 , 102, 1664-70	16.7	316
10	Scroll wave dynamics in a three-dimensional cardiac tissue model: roles of restitution, thickness, and fiber rotation. <i>Biophysical Journal</i> , 2000 , 78, 2761-75	2.9	128
9	Cardiac electrical restitution properties and stability of reentrant spiral waves: a simulation study. <i>American Journal of Physiology - Heart and Circulatory Physiology</i> , 1999 , 276, H269-83	5.2	159
8	Diffusion-Induced Vortex Filament Instability in 3-Dimensional Excitable Media. <i>Physical Review Letters</i> , 1999 , 83, 2668-2671	7.4	30
7	Spatiotemporal heterogeneity in the induction of ventricular fibrillation by rapid pacing: importance of cardiac restitution properties. <i>Circulation Research</i> , 1999 , 84, 1318-31	15.7	196
6	An advanced algorithm for solving partial differential equation in cardiac conduction. <i>IEEE Transactions on Biomedical Engineering</i> , 1999 , 46, 1166-8	5	168
5	Dynamics of reentry around a circular obstacle in cardiac tissue. <i>Physical Review E</i> , 1998 , 58, 6355-6358	2.4	55
4	Role of pectinate muscle bundles in the generation and maintenance of intra-atrial reentry: potential implications for the mechanism of conversion between atrial fibrillation and atrial flutter. <i>Circulation Research</i> , 1998 , 83, 448-62	15.7	100
3	Spatiotemporal Chaos in a Simulated Ring of Cardiac Cells. <i>Physical Review Letters</i> , 1997 , 78, 1387-1390	7.4	58
2	Determinants of early afterdepolarization properties in ventricular myocyte models		1
1	Multiscale Nonlinear Dynamics in Cardiac Electrophysiology: From Sparks to Sudden Death	257-275	1