Multiple mechanisms of spiral wave breakup in a mode

Chaos 12, 852-892 DOI: 10.1063/1.1504242

Citation Report

#	Article	IF	CITATIONS
1	Introduction: Mapping and control of complex cardiac arrhythmias. Chaos, 2002, 12, 732-739.	2.5	62
2	Ion Channel Basis for Alternans and Memory in Cardiac Myocytes. Annals of Biomedical Engineering, 2003, 31, 1213-1230.	2.5	35
3	Taming Winfree Turbulence of Scroll Waves in Excitable Media. Science, 2003, 299, 1722-1725.	12.6	227
4	A novel approach to identifying antiarrhythmic drug targets. Drug Discovery Today, 2003, 8, 162-167.	6.4	35
5	Endocardial detection of repolarization alternans. IEEE Transactions on Biomedical Engineering, 2003, 50, 855-862.	4.2	16
10	Postshock Arrhythmogenesis in a Slice of the Canine Heart. Journal of Cardiovascular Electrophysiology, 2003, 14, S249-S256.	1.7	7
11	A tomographic study of desynchronization and complex dynamics of scroll waves in an excitable chemical reaction with a gradient. Physical Chemistry Chemical Physics, 2003, 5, 2344-2353.	2.8	49
12	Efficient simulation of three-dimensional anisotropic cardiac tissue using an adaptive mesh refinement method. Chaos, 2003, 13, 853-865.	2.5	82
13	Spiral wave stability in cardiac tissue with biphasic restitution. Physical Review E, 2003, 68, 021917.	2.1	11
14	DYNAMICS AND INTERACTION OF FILAMENTS DURING REENTRY AND FIBRILLATION IN MAMMALIAN VIRTUAL VENTRICULAR TISSUE. International Journal of Bifurcation and Chaos in Applied Sciences and Engineering, 2003, 13, 3733-3745.	1.7	1
15	Dynamic mechanism for conduction block in heart tissue. New Journal of Physics, 2003, 5, 101-101.	2.9	35
16	Effect of regional differences in cardiac cellular electrophysiology on the stability of ventricular arrhythmias: a computational study. Physics in Medicine and Biology, 2003, 48, 95-111.	3.0	20
17	Computers and arrhythmias. , 2003, , 1683-1686.		0
18	Suppression of alternans and conduction blocks despite steep APD restitution: electrotonic, memory, and conduction velocity restitution effects. American Journal of Physiology - Heart and Circulatory Physiology, 2004, 286, H2332-H2341.	3.2	195
19	New approaches for identifying antiarrhythmic drug targets. Expert Opinion on Therapeutic Targets, 2004, 8, 1-5.	3.4	3
20	Determining the effects of memory and action potential duration alternans on cardiac restitution using a constant-memory restitution protocol. Physiological Measurement, 2004, 25, 1013-1024.	2.1	12
21	Condition for alternans and its control in a two-dimensional mapping model of paced cardiac dynamics. Physical Review E, 2004, 69, 031904.	2.1	45
22	Rate-dependent propagation of cardiac action potentials in a one-dimensional fiber. Physical Review E, 2004, 70, 061906.	2.1	14

TATION REDO

ARTICLE IF CITATIONS # Basic Mechanisms of Cardiac Impulse Propagation and Associated Arrhythmias. Physiological Reviews, 23 28.8 914 2004, 84, 431-488. Suppression of scroll wave turbulence by noise. Physical Review E, 2004, 70, 067201. 24 2.1 Preventing alternans-induced spiral wave breakup in cardiac tissue: An ion-channel-based approach. 25 2.1 34 Physical Review E, 2004, 70, 061903. Non-Tikhonov Asymptotic Properties of Cardiac Excitability. Physical Review Letters, 2004, 93, 168103. Expanding scroll rings and negative tension turbulence in a model of excitable media. Physical Review 27 2.1 41 E, 2004, 70, 056201. Spiral wave drift in an electric field and scroll wave instabilities. Physical Review E, 2004, 70, 026204. 2.1 Multiarm spirals in a two-dimensional cardiac substrate. Proceedings of the National Academy of 29 7.1 72 Sciences of the United States of America, 2004, 101, 15530-15534. Dynamical effects of diffusive cell coupling on cardiac excitation and propagation: a simulation 3.2 21 study. American Journal of Physiology - Heart and Circulatory Physiology, 2004, 287, H2803-H2812. Dynamics of virtual electrode-induced scroll-wave reentry in a 3D bidomain model. American Journal 31 3.2 32 of Physiology - Heart and Circulatory Physiology, 2004, 287, H1570-H1581. Effect of Î²-adrenergic blockade on dynamic electrical restitution in vivo. American Journal of 3.2 Physiology - Heart and Circulatory Physiology, 2004, 287, H390-H394. Propagation of normal beats and re-entry in a computational model of ventricular cardiac tissue with regional differences in action potential shape and duration. Progress in Biophysics and Molecular 33 2.9 47 Biology, 2004, 85, 473-499. Combined Phase Singularity and Wavefront Analysis for Optical Maps of Ventricular Fibrillation. IEEE 4.2 Transactions on Biomedical Engineering, 2004, 51, 56-65. Filament Behavior in a Computational Model of Ventricular Fibrillation in the Canine Heart. IEEE 35 4.2 46 Transactions on Biomedical Engineering, 2004, 51, 28-34. Molecular mechanisms and global dynamics of fibrillation: an integrative approach to the underlying basis of vortex-like reentry. Journal of Theoretical Biology, 2004, 230, 475-487. 1.7 Periodic stimulus and the single cardiac cellâ€"getting more out of 1D maps. Journal of Theoretical 37 1.7 6 Biology, 2004, 229, 69-83. The heterogeneous course of drug transit through the body. Trends in Pharmacological Sciences, 2004, 25, 140-146. Mechanistic inquiry into decrease in probability of defibrillation success with increase in complexity 39 of preshock reentrant activity. American Journal of Physiology - Heart and Circulatory Physiology, 3.228 2004, 286, H909-H917. Two-dimensional Propagation in Cardiac Muscle., 2004, , 267-272.

#	Article	IF	CITATIONS
41	21 Towards understanding the physical basis of re-entrant cardiac arrhythmias. Studies in Multidisciplinarity, 2005, , 389-410.	0.0	0
42	Scroll wave instability controlled by external fluctuations. Physica A: Statistical Mechanics and Its Applications, 2005, 351, 159-166.	2.6	1
43	The sensitivity of the heart to static magnetic fields. Progress in Biophysics and Molecular Biology, 2005, 87, 289-320.	2.9	13
44	Reproducing Cardiac Restitution Properties Using the Fenton–Karma Membrane Model. Annals of Biomedical Engineering, 2005, 33, 907-911.	2.5	25
45	Role of Repolarization Restitution in the Development of Coarse and Fine Atrial Fibrillation in the Isolated Canine Right Atria. Journal of Cardiovascular Electrophysiology, 2005, 16, 639-645.	1.7	12
48	Arrhythmogenic Mechanisms. , 0, , 33-46.		0
49	Elimination of Spiral Waves and Competition between Travelling Wave Impulses and Spiral Waves. Chinese Physics Letters, 2005, 22, 291-294.	3.3	12
50	Control of Spiral Waves and Spatiotemporal Chaos by Exciting Travel Wave Trains. Communications in Theoretical Physics, 2005, 44, 858-862.	2.5	6
51	A membrane model of electrically remodelled atrial myocardium derived from in vivo measurements*. Europace, 2005, 7, S135-S145.	1.7	16
52	Multistability of reentrant rhythms in an ionic model of a two-dimensional annulus of cardiac tissue. Physical Review E, 2005, 72, 051927.	2.1	17
53	Suppress Winfree Turbulence by Local Forcing Excitable Systems. Physical Review Letters, 2005, 94, 188301.	7.8	132
54	Dynamics of conduction blocks in a model of paced cardiac tissue. Physical Review E, 2005, 71, 051911.	2.1	22
55	Multistable spatiotemporal patterns of cardiac activity. Proceedings of the National Academy of Sciences of the United States of America, 2005, 102, 10409-10410.	7.1	25
57	Automating phase singularity localization in mathematical models of cardiac tissue dynamics. Mathematical Medicine and Biology, 2005, 22, 335-346.	1.2	3
58	Methods for Identifying and Tracking Phase Singularities in Computational Models of Re-entrant Fibrillation. Lecture Notes in Computer Science, 2005, , 246-255.	1.3	4
59	Of circles and spirals: Bridging the gap between the leading circle and spiral wave concepts of cardiac reentry. Europace, 2005, 7, S10-S20.	1.7	116
60	Control of spiral waves and spatiotemporal chaos by periodic perturbation near the boundary. Europhysics Letters, 2005, 72, 908-914.	2.0	60
61	Global Organization of Dynamics in Oscillatory Heterogeneous Excitable Media. Physical Review	7.8	93

#	Article	IF	CITATIONS
62	Regional differences in APD restitution can initiate wavebreak and re-entry in cardiac tissue: A computational study. BioMedical Engineering OnLine, 2005, 4, 54.	2.7	40
63	Modeling wave propagation in realistic heart geometries using the phase-field method. Chaos, 2005, 15, 013502.	2.5	125
64	Ionic Determinants of Functional Reentry in a 2-D Model of Human Atrial Cells During Simulated Chronic Atrial Fibrillation. Biophysical Journal, 2005, 88, 3806-3821.	0.5	232
65	Ventricular fibrillation and defibrillation—What are the major unresolved issues?. Heart Rhythm, 2005, 2, 555-558.	0.7	11
66	Computational electrocardiology: mathematical and numerical modeling. , 2006, , 187-241.		26
67	Spiral wave dynamics in excitable media with spherical geometries. Chaos, 2006, 16, 037115.	2.5	11
69	Implantable cardioverter-defibrillator detection of repolarization alternans: Uncovering a marker of electrical instability. Heart Rhythm, 2006, 3, 798-799.	0.7	4
70	Action Potential Duration Restitution Portraits of Mammalian Ventricular Myocytes: Role of Calcium Current. Biophysical Journal, 2006, 91, 2735-2745.	0.5	47
71	Spectral Methods for Partial Differential Equations in Irregular Domains: The Spectral Smoothed Boundary Method. SIAM Journal of Scientific Computing, 2006, 28, 886-900.	2.8	101
72	Negative-Tension Instability of Scroll Waves and Winfree Turbulence in the Oregonator Model. Journal of Physical Chemistry A, 2006, 110, 12063-12071.	2.5	26
73	Action potential morphology heterogeneity in the atrium and its effect on atrial reentry: a two-dimensional and quasi-three-dimensional study. Philosophical Transactions Series A, Mathematical, Physical, and Engineering Sciences, 2006, 364, 1349-1366.	3.4	14
74	Mechanistic enquiry into the effect of increased pacing rate on the upper limit of vulnerability. Philosophical Transactions Series A, Mathematical, Physical, and Engineering Sciences, 2006, 364, 1333-1348.	3.4	2
75	Whole heart action potential duration restitution properties in cardiac patients: a combined clinical and modelling study. Experimental Physiology, 2006, 91, 339-354.	2.0	121
76	Phase singularities and filaments: Simplifying complexity in computational models of ventricular fibrillation. Progress in Biophysics and Molecular Biology, 2006, 90, 378-398.	2.9	113
77	Spectral smoothed boundary methods: The role of external boundary conditions. Numerical Methods for Partial Differential Equations, 2006, 22, 435-448.	3.6	38
78	The Influence of Activation Time on Contraction Force of Myocardial Tissue: a Simulation Study. , 2006, 2006, 2900-3.		3
79	Inherent Dispersion in Restitution Properties Over Space. , 2006, 2006, 3935-8.		0
80	Spiral Wave Attachment to Millimeter-Sized Obstacles. Circulation, 2006, 114, 2113-2121.	1.6	105

#	Article	IF	CITATIONS
81	Proarrhythmic Potential of Mesenchymal Stem Cell Transplantation Revealed in an In Vitro Coculture Model. Circulation, 2006, 113, 1832-1841.	1.6	204
82	Correction. Circulation Research, 2006, 98, e28.	4.5	0
83	A normal form for excitable media. Chaos, 2006, 16, 013122.	2.5	8
84	Inwardly rotating spiral wave breakup in oscillatory reaction-diffusion media. Physical Review E, 2006, 74, 026107.	2.1	14
85	Periodic forcing of scroll rings and control of Winfree turbulence in excitable media. Chaos, 2006, 16, 023124.	2.5	23
86	Multi-Variate Visualization of Cardiac Virtual Tissue. , 2006, , .		1
87	Dynamics of bound states of same-chirality spiral waves. Physical Review E, 2006, 74, 016207.	2.1	9
88	Magnetic resonance imaging of chemical waves in porous media. Chaos, 2006, 16, 037103.	2.5	15
90	Parallel Computing Performance of a 3D Cardiac Tissue Model. , 2006, , .		0
91	NUMERICAL SIMULATIONS OF SYNCHRONIZED PACING. Journal of Biological Systems, 2006, 14, 101-112.	1.4	7
92	SUPPRESSION OF CELLULAR ALTERNANS IN GUINEA PIG VENTRICULAR MYOCYTES WITH LQT2: INSIGHTS FROM THE LUO–RUDY MODEL. International Journal of Bifurcation and Chaos in Applied Sciences and Engineering, 2007, 17, 381-425.	1.7	4
93	Three distinct phases of VF during global ischemia in the isolated blood-perfused pig heart. American Journal of Physiology - Heart and Circulatory Physiology, 2007, 293, H1617-H1628.	3.2	42
94	Cardiac beat-to-beat alternations driven by unusual spiral waves. Proceedings of the National Academy of Sciences of the United States of America, 2007, 104, 11639-11642.	7.1	20
95	Negative filament tension in the Luo-Rudy model of cardiac tissue. Chaos, 2007, 17, 015102.	2.5	32
96	Arrhythmogenesis in the heart: Multiscale modeling of the effects of defibrillation shocks and the role of electrophysiological heterogeneity. Chaos, 2007, 17, 015103.	2.5	71
97	Amplitude equation approach to spatiotemporal dynamics of cardiac alternans. Physical Review E, 2007, 76, 051911.	2.1	56
98	Theory of action potential wave block at-a-distance in the heart. Physical Review E, 2007, 75, 021910.	2.1	28
99	Controlling spatiotemporal chaos using multiple delays. Physical Review E, 2007, 75, 065202.	2.1	21

#	Article	IF	CITATIONS
100	Control of electrical alternans in simulations of paced myocardium using extended time-delay autosynchronization. Physical Review E, 2007, 76, 041917.	2.1	13
101	Modulation of Spiral Wave Reentry by K+ Channel Blockade. Circulation Journal, 2007, 71, A26-A31.	1.6	10
102	Application of image processing on analyzing the structure of spatial-temporal pattern. , 2007, , .		3
103	Spatiotemporal order out of noise. Reviews of Modern Physics, 2007, 79, 829-882.	45.6	433
104	Turbulence control with local pacing and its implication in cardiac defibrillation. Chaos, 2007, 17, 015107.	2.5	43
105	Pulmonary vein reentry—Properties and size matter: Insights from a computational analysis. Heart Rhythm, 2007, 4, 1553-1562.	0.7	83
106	Controlling Spatiotemporal Chaos and Spiral Turbulence in Excitable Media. , 0, , 703-718.		1
107	Alternans and the influence of ionic channel modifications: Cardiac three–dimensional simulations and one-dimensional numerical bifurcation analysis. Chaos, 2007, 17, 015104.	2.5	16
108	A tale of two dogs: analyzing two models of canine ventricular electrophysiology. American Journal of Physiology - Heart and Circulatory Physiology, 2007, 292, H43-H55.	3.2	95
109	Mechanisms of destabilization and early termination of spiral wave reentry in the ventricle by a class III antiarrhythmic agent, nifekalant. American Journal of Physiology - Heart and Circulatory Physiology, 2007, 292, H539-H548.	3.2	55
110	Kink-soliton explosions in generalized Klein–Gordon equations. Chaos, Solitons and Fractals, 2007, 33, 143-155.	5.1	11
111	The Role of Cardiac Tissue Alignment in Modulating Electrical Function. Journal of Cardiovascular Electrophysiology, 2007, 18, 1323-1329.	1.7	71
112	Cardiac electrical dynamics: maximizing dynamical heterogeneity. Journal of Electrocardiology, 2007, 40, S51-S55.	0.9	16
113	<emphasis emphasistype="boldital">In Vivo</emphasis> Inductive Phase Shift Measurements to Detect Intraperitoneal Fluid. IEEE Transactions on Biomedical Engineering, 2007, 54, 953-956.	4.2	13
114	Forward Euler Stability of the Bidomain Model of Cardiac Tissue. IEEE Transactions on Biomedical Engineering, 2007, 54, 951-953.	4.2	25
115	Eliminating spiral waves and spatiotemporal chaos using feedback signal. European Physical Journal B, 2007, 58, 331-336.	1.5	28
116	A Model for Multi-site Pacing of Fibrillation Using Nonlinear Dynamics Feedback. Journal of Biological Physics, 2007, 33, 145-153.	1.5	6
117	Pacemakers in a Reaction-Diffusion Mechanics System. Journal of Statistical Physics, 2007, 128, 375-392.	1.2	27

#	Article	IF	CITATIONS
118	An Ionically Based Mapping Model with Memory for Cardiac Restitution. Bulletin of Mathematical Biology, 2007, 69, 459-482.	1.9	21
119	Minimal model for human ventricular action potentials in tissue. Journal of Theoretical Biology, 2008, 253, 544-560.	1.7	332
120	Termination of equine atrial fibrillation by quinidine: An optical mapping study. Journal of Veterinary Cardiology, 2008, 10, 87-103.	0.9	23
121	A guide to modelling cardiac electrical activity in anatomically detailed ventricles. Progress in Biophysics and Molecular Biology, 2008, 96, 19-43.	2.9	196
122	Effect of bundle branch block on cardiac output: A whole heart simulation study. Progress in Biophysics and Molecular Biology, 2008, 97, 520-542.	2.9	52
123	Sharp Interface and Voltage Conservation in the Phase Field Method: Application to Cardiac Electrophysiology. SIAM Journal of Scientific Computing, 2008, 30, 837-854.	2.8	11
124	Excito-oscillatory dynamics as a mechanism of ventricular fibrillation. Heart Rhythm, 2008, 5, 575-584.	0.7	7
125	Breakup of Spiral Waves in Coupled Hindmarsh–Rose Neurons. Chinese Physics Letters, 2008, 25, 4325-4328.	3.3	28
126	Elimination of spiral waves and spatiotemporal chaos by the pulse with a specific spatiotemporal configuration. Chinese Physics B, 2008, 17, 1925-1934.	1.4	11
127	Role of Conduction Velocity Restitution and Short-Term Memory in the Development of Action Potential Duration Alternans in Isolated Rabbit Hearts. Circulation, 2008, 118, 17-25.	1.6	118
128	Suppression of Spiral Waves by Voltage Clamp Techniques in a Conductance-Based Cardiac Tissue Model. Chinese Physics Letters, 2008, 25, 2706-2709.	3.3	17
129	The instability of the spiral wave induced by the deformation of elastic excitable media. Journal of Physics A: Mathematical and Theoretical, 2008, 41, 385105.	2.1	12
130	Spiral wave drift and complex-oscillatory spiral waves caused by heterogeneities in two-dimensionalin vitrocardiac tissues. New Journal of Physics, 2008, 10, 015005.	2.9	15
131	Visualization of spiral and scroll waves in simulated and experimental cardiac tissue. New Journal of Physics, 2008, 10, 125016.	2.9	185
132	Filament-Induced Surface Spiral Turbulence in Three-Dimensional Excitable Media. Physical Review Letters, 2008, 101, 208302.	7.8	27
133	Bifurcation analysis of a normal form for excitable media: Are stable dynamical alternans on a ring possible?. Chaos, 2008, 18, 013129.	2.5	6
134	Twisted vortex filaments in the three-dimensional complex Ginzburg–Landau equation. Chaos, 2008, 18, 026103.	2.5	6
135	Vortex filament dynamics in computational models of ventricular fibrillation in the heart. Chaos, 2008, 18, 043127.	2.5	39

	CITATION	Report	
Article		IF	CITATIONS
Characterization of multiple spiral wave dynamics as a stochastic predator-prey system Review E, 2008, 78, 021913.	1. Physical	2.1	10
Annihilation and reflection of spiral waves at a boundary for the Beeler-Reuter model. F Review E, 2008, 77, 031918.	Physical	2.1	8
Control and synchronization of spatiotemporal chaos. Physical Review E, 2008, 77, 01	6201.	2.1	17
Intrinsic inhomogeneities and the coexistence of spirals with different periods of rotat Review E, 2008, 78, 051914.	ion. Physical	2.1	2
Negative Filament Tension at High Excitability in a Model of Cardiac Tissue. Physical Re 2008, 100, 218101.	view Letters,	7.8	46
Boundary-induced reentry in homogeneous excitable tissue. Physical Review E, 2008, 7	78, 031925.	2.1	3
Physiome and Sasang Constitutional Medicine. Journal of Physiological Sciences, 2008	, 58, 433-440.	2.1	51
Line-defect patterns of unstable spiral waves in cardiac tissue. Physical Review E, 2009	, 79, 030906.	2.1	12
Pinned Scroll Rings in an Excitable System. Physical Review Letters, 2009, 102, 24410	1.	7.8	40
Origin choice and petal loss in the flower garden of spiral wave tip trajectories. Chaos, 033118.	2009, 19,	2.5	19

146	Origin choice and petal loss in the flower garden of spiral wave tip trajectories. Chaos, 2009, 19, 033118.	2.5	19
147	STOCHASTIC DRIVING AND COUPLING CONTROL METHOD TO SUPPRESS SPIRAL WAVES AND SPATIOTEMPORAL CHAOS AND ANALYSIS OF CORRELATION. International Journal of Bifurcation and Chaos in Applied Sciences and Engineering, 2009, 19, 1081-1086.	1.7	1
148	Dynamics of Spiral Wave Tip in Excitable Media with Gradient Parameter. Communications in Theoretical Physics, 2009, 52, 173-179.	2.5	11
149	MULTISCALE MODELING OF ELECTRICAL ACTIVITIES OF THE HEART. , 2009, , .		0
150	A computational study of mother rotor VF in the human ventricles. American Journal of Physiology - Heart and Circulatory Physiology, 2009, 296, H370-H379.	3.2	64
151	Optimization of Feedback Pacing for Defibrillation. IEEE Transactions on Biomedical Engineering, 2009, 56, 532-534.	4.2	9
152	Permutation-Based Significance Tests for Multiharmonic Steady-State Evoked Potentials. IEEE Transactions on Biomedical Engineering, 2009, 56, 534-537.	4.2	13
153	Computational modeling of cardiac electrophysiology: A novel finite element approach. International Journal for Numerical Methods in Engineering, 2009, 79, 156-178.	2.8	81
154	A geometric theory for scroll wave filaments in anisotropic excitable media. Physica D: Nonlinear	2.8	19

Phenomena, 2009, 238, 941-950.

#

136

138

140

142

145

#	Article	IF	CITATIONS
155	Suppression of the Spiral Wave and Turbulence inÂtheÂExcitability-Modulated Media. International Journal of Theoretical Physics, 2009, 48, 150-157.	1.2	14
156	Early afterdepolarisations and ventricular arrhythmias in cardiac tissue: a computational study. Medical and Biological Engineering and Computing, 2009, 47, 291-300.	2.8	4
157	Influence of cardiac tissue anisotropy on re-entrant activation in computational models of ventricular fibrillation. Physica D: Nonlinear Phenomena, 2009, 238, 951-961.	2.8	11
158	Spherical topology in cardiac simulations. HFSP Journal, 2009, 3, 124-129.	2.5	Ο
159	Model-based control of cardiac alternans on a ring. Physical Review E, 2009, 80, 021932.	2.1	24
160	Resonance and Feedback Strategies for Low-Voltage Defibrillation. , 2009, , 493-510.		1
161	Mechanisms of VF maintenance: Wandering wavelets, mother rotors, or foci. Heart Rhythm, 2009, 6, 405-415.	0.7	56
162	Multiple spiral patterns in a cardiac tissue. , 2009, , .		0
163	Pinning of vortex rings and vortex networks in excitable systems. Europhysics Letters, 2010, 91, 50002.	2.0	19
164	On the solutions of time-fractional reaction–diffusion equations. Communications in Nonlinear Science and Numerical Simulation, 2010, 15, 3847-3854.	3.3	74
165	Atrial and ventricular fibrillation: computational simulation of spiral waves in cardiac tissue. Archive of Applied Mechanics, 2010, 80, 569-580.	2.2	41
166	Electromechanics of the heart: a unified approach to the strongly coupled excitation–contraction problem. Computational Mechanics, 2010, 45, 227-243.	4.0	178
167	Patterning and excitability control in cardiomyocyte tissue culture. Physica D: Nonlinear Phenomena, 2010, 239, 1560-1566.	2.8	10
168	Control of pattern formation by time-delay feedback with global and local contributions. Physica D: Nonlinear Phenomena, 2010, 239, 1681-1691.	2.8	13
169	Eliminate spiral wave in excitable media by using a new feasible scheme. Communications in Nonlinear Science and Numerical Simulation, 2010, 15, 1768-1776.	3.3	18
170	Spiral wave breakup in excitable media with an inhomogeneity of conduction anisotropy. Computers in Biology and Medicine, 2010, 40, 775-780.	7.0	8
171	Spontaneous suppression of spiral turbulence based on feedback strategy. Physical Review E, 2010, 81, 056214.	2.1	19
172	Reflection and attachment of spirals at obstacles for the Fitzhugh-Nagumo and Beeler-Reuter models. Physical Review E, 2010, 81, 041924.	2.1	16

#	Article	IF	CITATIONS
173	Utilizing the eikonal relationship in strategies for reentrant wave termination in excitable media. Physical Review E, 2010, 81, 056202.	2.1	10
174	Hysteresis and bistability in periodically paced cardiac tissue. Physical Review E, 2010, 81, 051903.	2.1	15
175	Defect mediated turbulence in a locally quasiperiodic chemical medium. Journal of Chemical Physics, 2010, 133, 044909.	3.0	4
176	Collision-Based Spiral Acceleration in Cardiac Media: Roles of Wavefront Curvature and Excitable Gap. Biophysical Journal, 2010, 98, 1119-1128.	0.5	4
177	Wave emission on interacting heterogeneities in cardiac tissue. Physical Review E, 2010, 82, 021926.	2.1	15
178	Period-2 spiral waves supported by nonmonotonic wave dispersion. Physical Review E, 2010, 82, 046213.	2.1	13
179	Anomalous drift of spiral waves in heterogeneous excitable media. Physical Review E, 2010, 82, 051908.	2.1	22
180	Fibroblasts alter spiral wave stability. Chaos, 2010, 20, 045103.	2.5	14
181	Control of Spiral Waves and Spatiotemporal Chaos by Stochastic and Asymmetrical Mutual Coupling. , 2011, , .		0
182	Low-energy control of electrical turbulence in the heart. Nature, 2011, 475, 235-239.	27.8	287
182 183	Low-energy control of electrical turbulence in the heart. Nature, 2011, 475, 235-239. Regenerating the Heart. , 2011, , .	27.8	287 2
182 183 184	Low-energy control of electrical turbulence in the heart. Nature, 2011, 475, 235-239. Regenerating the Heart., 2011, ,. Stabilization Control of Chaotic System Based on LaSalle Invariant Principle. Lecture Notes in Electrical Engineering, 2011, , 697-704.	27.8	287 2 0
182 183 184 185	Low-energy control of electrical turbulence in the heart. Nature, 2011, 475, 235-239. Regenerating the Heart., 2011,,. Stabilization Control of Chaotic System Based on LaSalle Invariant Principle. Lecture Notes in Electrical Engineering, 2011,, 697-704. Reentrant excitation in an analog-digital hybrid circuit model of cardiac tissue. Chaos, 2011, 21, 023121.	27.8 0.4 2.5	287 2 0 9
182 183 184 185 185	Low-energy control of electrical turbulence in the heart. Nature, 2011, 475, 235-239. Regenerating the Heart., 2011,,. Stabilization Control of Chaotic System Based on LaSalle Invariant Principle. Lecture Notes in Electrical Engineering, 2011,, 697-704. Reentrant excitation in an analog-digital hybrid circuit model of cardiac tissue. Chaos, 2011, 21, 023121. Stochastic dynamics of phase singularities under ventricular fibrillation in 2D Beeler-Reuter model. AlP Advances, 2011, 1, .	27.8 0.4 2.5 1.3	287 2 0 9 9
182 183 184 185 185 186	Low-energy control of electrical turbulence in the heart. Nature, 2011, 475, 235-239. Regenerating the Heart., 2011,, Stabilization Control of Chaotic System Based on LaSalle Invariant Principle. Lecture Notes in Electrical Engineering, 2011,, 697-704. Reentrant excitation in an analog-digital hybrid circuit model of cardiac tissue. Chaos, 2011, 21, 023121. Stochastic dynamics of phase singularities under ventricular fibrillation in 2D Beeler-Reuter model. AIP Advances, 2011, 1, . New Methods for the Analysis of Heartbeat Behavior in Risk Stratification. Frontiers in Physiology, 2011, 2, 88.	27.8 0.4 2.5 1.3 2.8	287 2 0 9 9 10
 182 183 184 185 186 187 188 	Low-energy control of electrical turbulence in the heart. Nature, 2011, 475, 235-239. Regenerating the Heart., 2011, ,. Stabilization Control of Chaotic System Based on LaSalle Invariant Principle. Lecture Notes in Electrical Engineering, 2011,, 697-704. Reentrant excitation in an analog-digital hybrid circuit model of cardiac tissue. Chaos, 2011, 21, 023121. Stochastic dynamics of phase singularities under ventricular fibrillation in 2D Beeler-Reuter model. AIP Advances, 2011, 1, . New Methods for the Analysis of Heartbeat Behavior in Risk Stratification. Frontiers in Physiology, 2011, 2, 88. Scroll-Wave Dynamics in Human Cardiac Tissue: Lessons from a Mathematical Model with Inhomogeneities and Fiber Architecture. PLoS ONE, 2011, 6, e18052.	27.8 0.4 2.5 1.3 2.8 2.5	287 2 0 9 9 10 28
 182 183 184 185 186 187 188 189 	Low-energy control of electrical turbulence in the heart. Nature, 2011, 475, 235-239. Regenerating the Heart., 2011, , . Stabilization Control of Chaotic System Based on LaSalle Invariant Principle. Lecture Notes in Electrical Engineering, 2011, , 697-704. Reentrant excitation in an analog-digital hybrid circuit model of cardiac tissue. Chaos, 2011, 21, 023121. Stochastic dynamics of phase singularities under ventricular fibrillation in 2D Beeler-Reuter model. AIP Advances, 2011, 1, . New Methods for the Analysis of Heartbeat Behavior in Risk Stratification. Frontiers in Physiology, 2011, 2, 88. Scroll-Wave Dynamics in Human Cardiac Tissue: Lessons from a Mathematical Model with Inhomogeneities and Fiber Architecture. PLoS ONE, 2011, 6, e18052. Models of cardiac tissue electrophysiology: Progress, challenges and open questions. Progress in Biophysics and Molecular Biology, 2011, 104, 22-48.	27.8 0.4 2.5 1.3 2.8 2.5 2.9	287 2 0 9 9 10 28 483

#	Article	IF	CITATIONS
191	Experiment-model interaction for analysis of epicardial activation during human ventricular fibrillation with global myocardial ischaemia. Progress in Biophysics and Molecular Biology, 2011, 107, 101-111.	2.9	19
192	3D virtual human atria: A computational platform for studying clinical atrial fibrillation. Progress in Biophysics and Molecular Biology, 2011, 107, 156-168.	2.9	143
193	Conduction Velocity Restitution of the Human Atrium—An Efficient Measurement Protocol for Clinical Electrophysiological Studies. IEEE Transactions on Biomedical Engineering, 2011, 58, 2648-2655.	4.2	55
194	A hybrid stimulation strategy for suppression of spiral waves in cardiac tissue. Chaos, Solitons and Fractals, 2011, 44, 633-639.	5.1	7
195	Effects of boundaries and geometry on the spatial distribution of action potential duration in cardiac tissue. Journal of Theoretical Biology, 2011, 285, 164-176.	1.7	59
196	Three-dimensional recurring patterns in excitable media. Physics Letters, Section A: General, Atomic and Solid State Physics, 2011, 375, 2333-2337.	2.1	5
197	Filament turbulence in oscillatory media. Europhysics Letters, 2011, 94, 68003.	2.0	10
198	Effects of reduced discrete coupling on filament tension in excitable media. Chaos, 2011, 21, 013118.	2.5	13
199	Model-based control of cardiac alternans in Purkinje fibers. Physical Review E, 2011, 84, 041927.	2.1	32
200	Impact of tissue geometry on simulated cholinergic atrial fibrillation: A modeling study. Chaos, 2011, 21, 013108.	2.5	16
201	Supernormal conduction in cardiac tissue promotes concordant alternans and action potential bunching. Physical Review E, 2011, 83, 040902.	2.1	18
202	Scaling properties of conduction velocity in heterogeneous excitable media. Physical Review E, 2011, 84, 046208.	2.1	11
203	Verification of cardiac tissue electrophysiology simulators using an <i>N</i> -version benchmark. Philosophical Transactions Series A, Mathematical, Physical, and Engineering Sciences, 2011, 369, 4331-4351.	3.4	253
204	Teaching cardiac electrophysiology modeling to undergraduate students: laboratory exercises and GPU programming for the study of arrhythmias and spiral wave dynamics. American Journal of Physiology - Advances in Physiology Education, 2011, 35, 427-437.	1.6	20
205	Mechanisms of ventricular arrhythmias: a dynamical systems-based perspective. American Journal of Physiology - Heart and Circulatory Physiology, 2012, 302, H2451-H2463.	3.2	62
206	Chaotic dynamics in cardiac aggregates induced by potassium channel block. Chaos, 2012, 22, 033140.	2.5	13
207	Pacemaker interactions induce reentrant wave dynamics in engineered cardiac culture. Chaos, 2012, 22, 033132.	2.5	15
208	Kinetic Monte Carlo simulations of travelling pulses and spiral waves in the lattice Lotka-Volterra model. Chaos, 2012, 22, 023141.	2.5	1

#	Article	IF	CITATIONS
209	Scroll wave filaments self-wrap around unexcitable heterogeneities. Physical Review E, 2012, 86, 036205.	2.1	17
210	Induced spiral motion in cardiac tissue due to alternans. Physical Review E, 2012, 86, 061908.	2.1	5
211	Termination of pinned vortices by high-frequency wave trains in heartlike excitable media with anisotropic fiber orientation. Physical Review E, 2012, 86, 031912.	2.1	13
212	Dynamics of spiral waves driven by a dichotomous periodic signal. Nonlinear Dynamics, 2012, 70, 1719-1730.	5.2	13
213	How the Hodgkin–Huxley equations inspired the Cardiac Physiome Project. Journal of Physiology, 2012, 590, 2613-2628.	2.9	100
215	Mathematical and numerical methods for reaction-diffusion models in electrocardiology. Modeling, Simulation and Applications, 2012, , 107-141.	1.3	5
216	Rigidity Matching between Cells and the Extracellular Matrix Leads to the Stabilization of Cardiac Conduction. Biophysical Journal, 2012, 102, 379-387.	0.5	24
217	Modeling of Physiological Flows. Modeling, Simulation and Applications, 2012, , .	1.3	18
218	Cardiac dynamics: a simplified model for action potential propagation. Theoretical Biology and Medical Modelling, 2012, 9, 50.	2.1	13
219	Computational Mapping Identifies Localized Mechanisms for Ablation of Atrial Fibrillation. PLoS ONE, 2012, 7, e46034.	2.5	100
220	Contribution of the Purkinje network to wave propagation in the canine ventricle: insights from a combined electrophysiological-anatomical model. Nonlinear Dynamics, 2012, 68, 365-379.	5.2	15
221	Nonlinear dynamics of periodically paced cardiac tissue. Nonlinear Dynamics, 2012, 68, 347-363.	5.2	12
222	An analytic algorithm for time fractional nonlinear reaction–diffusion equation based on a new iterative method. Communications in Nonlinear Science and Numerical Simulation, 2012, 17, 3906-3921.	3.3	24
223	Negative Tension of Scroll Wave Filaments and Turbulence in Three-Dimensional Excitable Media and Application in Cardiac Dynamics. Bulletin of Mathematical Biology, 2013, 75, 1351-1376.	1.9	24
224	Spiral Wave Chimeras in Complex Oscillatory and Chaotic Systems. Physical Review Letters, 2013, 111, 134101.	7.8	103
225	Curvature Analysis of Cardiac Excitation Wavefronts. IEEE/ACM Transactions on Computational Biology and Bioinformatics, 2013, 10, 323-336.	3.0	12
226	BURSTING IN CELLULAR AUTOMATA AND CARDIAC ARRHYTHMIAS. , 2013, , 135-145.		1
227	Physics of Cardiac Arrhythmogenesis. Annual Review of Condensed Matter Physics, 2013, 4, 313-337.	14.5	82

	CIIAI	ION KEPORT	
#	Article	IF	CITATIONS
228	Interaction of a Pair of Parallel Scroll Waves. Journal of Physical Chemistry A, 2013, 117, 12711-12718.	2.5	10
229	Effects of Pacing Site and Stimulation History on Alternans Dynamics and the Development of Complex Spatiotemporal Patterns in Cardiac Tissue. Frontiers in Physiology, 2013, 4, 71.	2.8	109
230	Desynchronization of the Chaotic-Bursting Neuronal Ensemble Based on LaSalle Invariant Principle. Applied Mechanics and Materials, 0, 427-429, 1109-1112.	0.2	0
231	Principles of Cardiac Electric Propagation and Their Implications for Re-entrant Arrhythmias. Circulation: Arrhythmia and Electrophysiology, 2013, 6, 655-661.	4.8	54
232	Heterogeneous and anisotropic integrative model of pulmonary veins: computational study of arrhythmogenic substrate for atrial fibrillation. Interface Focus, 2013, 3, 20120069.	3.0	34
233	Critical role of pinning defects in scroll-wave breakup in active media. Europhysics Letters, 2013, 103, 50003.	2.0	6
234	Meandering Spiral Waves Induced by Time-Periodic Coupling Strength. Communications in Theoretical Physics, 2013, 60, 545-550.	2.5	2
235	Force exerted on the spiral tip by the heterogeneity in an excitable medium. Europhysics Letters, 2013, 104, 58005.	2.0	18
236	Robustness, Death of Spiral Wave in the Network of Neurons under Partial Ion Channel Block. Communications in Theoretical Physics, 2013, 59, 233-242.	2.5	9
237	Twists of Opposite Handedness on a Scroll Wave. Physical Review Letters, 2013, 110, 234102.	7.8	12
238	Reentry Near the Percolation Threshold in a Heterogeneous Discrete Model for Cardiac Tissue. Physical Review Letters, 2013, 110, 158101.	7.8	68
239	Models of ventricular arrhythmia mechanisms. , 2013, 2013, 1526-9.		1
240	Analytical approximations for spiral waves. Chaos, 2013, 23, 043135.	2.5	6
241	Effective dynamics of twisted and curved scroll waves using virtual filaments. Physical Review E, 2013, 88, 062907.	2.1	9
242	Electric-field-controlled unpinning of scroll waves. Physical Review E, 2013, 88, 052918.	2.1	22
243	Effects of pacing magnitudes and forms on bistability width in a modeled ventricular tissue. Physical Review E, 2013, 88, 012711.	2.1	0
244	Dependence of scroll-wave dynamics on the orientation of a gradient of excitability. Physical Review E, 2013, 88, 062923.	2.1	3
245	A patient-specific model of virtual ablation for atrial fibrillation. , 2013, 2013, 1522-5.		4

#	Article	IF	CITATIONS
246	Role of temperature on nonlinear cardiac dynamics. Physical Review E, 2013, 87, 042717.	2.1	45
247	Theoretical considerations for mapping activation in human cardiac fibrillation. Chaos, 2013, 23, 023113.	2.5	79
248	SELECTION OF SPIRAL WAVE IN THE COUPLED NETWORK UNDER GAUSSIAN COLORED NOISE. International Journal of Modern Physics B, 2013, 27, 1350115.	2.0	10
249	The Formation Mechanism of Defects, Spiral Wave in the Network of Neurons. PLoS ONE, 2013, 8, e55403.	2.5	32
250	Rotor Termination Is Critically Dependent on Kinetic Properties of IKur Inhibitors in an In Silico Model of Chronic Atrial Fibrillation. PLoS ONE, 2013, 8, e83179.	2.5	17
251	Optimisation of a Generic Ionic Model of Cardiac Myocyte Electrical Activity. Computational and Mathematical Methods in Medicine, 2013, 2013, 1-20.	1.3	13
252	Theory of Rotors and Arrhythmias. , 2014, , 341-350.		7
253	Rotors in Human Atrial Fibrillation. , 2014, , 433-442.		0
254	Capture of fixation by rotational flow; a deterministic hypothesis regarding scaling and stochasticity in fixational eye movements. Frontiers in Systems Neuroscience, 2014, 8, 29.	2.5	0
255	Influence of excitability on unpinning and termination of spiral waves. Physical Review E, 2014, 90, 052919.	2.1	15
256	Prospective evaluation of two novel ECG-based restitution biomarkers for prediction of sudden cardiac death risk in ischaemic cardiomyopathy. Heart, 2014, 100, 1878-1885.	2.9	25
257	Advances in modeling ventricular arrhythmias: from mechanisms to the clinic. Wiley Interdisciplinary Reviews: Systems Biology and Medicine, 2014, 6, 209-224.	6.6	46
258	The effect of cellular aging on the dynamics of spiral waves. Chinese Physics B, 2014, 23, 120503.	1.4	2
259	Spiral-wave dynamics in ionically realistic mathematical models for human ventricular tissue: the effects of periodic deformation. Frontiers in Physiology, 2014, 5, 207.	2.8	9
260	Alternans and Spiral Breakup in an Excitable Reaction-Diffusion System: A Simulation Study. International Scholarly Research Notices, 2014, 2014, 1-14.	0.9	6
262	Stability of Impulsively Forced Excitable Fibers to Perturbations of the Forcing Period. SIAM Journal on Applied Mathematics, 2014, 74, 191-207.	1.8	0
263	Mathematical Cardiac Electrophysiology. Modeling, Simulation and Applications, 2014, , .	1.3	120
264	An Energy-Optimal Methodology for Synchronization of Excitable Media. SIAM Journal on Applied Dynamical Systems, 2014, 13, 944-957.	1.6	10

ARTICLE IF CITATIONS # Mechanistic insights into hypothermic ventricular fibrillation: the role of temperature and tissue 265 1.7 36 size. Europace, 2014, 16, 424-434. Drifting Through the Beehive. Biophysical Journal, 2014, 106, 1555-1556. 267 Nonlinear and stochastic dynamics in the heart. Physics Reports, 2014, 543, 61-162. 25.6 166 Luo Rudy Phase I excitation modeling towards HDL coder implementation for real-time simulation., 268 2014,,. Cardiac Potassium Channel Subtypes: New Roles in Repolarization and Arrhythmia. Physiological 269 28.8 181 Reviews, 2014, 94, 609-653. Spiral defect chaos in an advection-reaction-diffusion system. Physical Review E, 2014, 89, 062920. 2.1 Fractional diffusion models of cardiac electrical propagation: role of structural heterogeneity in 271 3.4 173 dispersion of repolarization. Journal of the Royal Society Interface, 2014, 11, 20140352. Controlling spiral waves and spatiotemporal chaos by dislocation coupling., 2015, , . Propagation of spiral waves pinned to circular and rectangular obstacles. Physical Review E, 2015, 91, 273 2.1 16 052912. Determining individual phase response curves from aggregate population data. Physical Review E, 2015, 274 2.1 92,022902 Entoptic perceptions of spiral waves and rare inward spirals. Chaos, 2015, 25, 063109. 275 2.5 1 Unusual spiral wave dynamics in the Kessler-Levine model of an excitable medium. Chaos, 2015, 25, 053115. Analytical description of the slope of the APD-restitution curve to assess the interacting 277 4 contribution of conduction and repolarization dynamics. , 2015, 2015, 5672-5. High-order finite element methods for cardiac monodomain simulations. Frontiers in Physiology, 2015, 278 2.8 6,217. A New Approach and Solution Technique to Solve Time Fractional Nonlinear Reaction-Diffusion 279 9 1.1 Equations. Mathematical Problems in Engineering, 2015, 2015, 1-13. Cardiomyocytes. Methods in Molecular Biology, 2015, 1299, v. 280 Formation of multi-armed spiral waves in neuronal network induced by adjusting ion channel 281 2.012 conductance. International Journal of Modern Physics B, 2015, 29, 1550043. Optical Mapping of Ventricular Fibrillation Dynamics. Advances in Experimental Medicine and Biology, 24 2015, 859, 313-342.

#	Article	IF	CITATIONS
283	Phase synchrony reveals organization in human atrial fibrillation. American Journal of Physiology - Heart and Circulatory Physiology, 2015, 309, H2118-H2126.	3.2	12
284	Complex Structure and Dynamics of the Heart. Springer Theses, 2015, , .	0.1	6
285	Pattern selection in neuronal network driven by electric autapses with diversity in time delays. International Journal of Modern Physics B, 2015, 29, 1450239.	2.0	117
286	Macroâ€micro imaging of cardiac–neural circuits in coâ€cultures from normal and diseased hearts. Journal of Physiology, 2015, 593, 3047-3053.	2.9	4
287	High-density mapping of atrial fibrillation in a chronic substrate: Evidence for distinct modes of repetitive wavefront propagation. International Journal of Cardiology, 2015, 199, 407-414.	1.7	14
288	Influence of the medium's dimensionality on defect-mediated turbulence. Physical Review E, 2015, 91, 032926.	2.1	8
289	Dynamical disease: Challenges for nonlinear dynamics and medicine. Chaos, 2015, 25, 097603.	2.5	59
290	Instability of periodic traveling wave solutions in a modified FitzHugh–Nagumo model for excitable media. Applied Mathematics and Computation, 2015, 256, 968-984.	2.2	13
291	Extending Phase Reduction to Excitable Media: Theory and Applications. SIAM Review, 2015, 57, 201-222.	9.5	29
292	Unstable spiral waves and local Euclidean symmetry in a model of cardiac tissue. Chaos, 2015, 25, 063116.	2.5	14
293	P wave analysis with wavelets identifies hypertensive patients at risk of recurrence of atrial fibrillation: A case–control study and 1year follow-up. Journal of Electrocardiology, 2015, 48, 845-852.	0.9	5
294	Cardiac Arrhythmias: Mechanistic Knowledge and Innovation from Computer Models. Modeling, Simulation and Applications, 2015, , 1-27.	1.3	0
295	Mechanisms for the Termination of Atrial Fibrillation by Localized Ablation. Circulation: Arrhythmia and Electrophysiology, 2015, 8, 1325-1333.	4.8	57
296	Membrane Potential Imaging in the Nervous System and Heart. Advances in Experimental Medicine and Biology, 2015, , .	1.6	15
297	The role of short term memory and conduction velocity restitution in alternans formation. Journal of Theoretical Biology, 2015, 367, 21-28.	1.7	12
298	Reentry produced by small-scale heterogeneities in a discrete model of cardiac tissue. Journal of Physics: Conference Series, 2016, 727, 012002.	0.4	4
299	Pattern Selection in Network of Coupled Multi-Scroll Attractors. PLoS ONE, 2016, 11, e0154282.	2.5	15
300	Interactions between Activation and Repolarization Restitution Properties in the Intact Human Heart: In-Vivo Whole-Heart Data and Mathematical Description. PLoS ONE, 2016, 11, e0161765.	2.5	36

#	ARTICLE	IF	CITATIONS
301	A New Efficient Method for Detecting Phase Singularity in Cardiac Fibrillation. PLoS ONE, 2016, 11, e0167567.	2.5	21
302	Using Skewness and the First-Digit Phenomenon to Identify Dynamical Transitions in Cardiac Models. Frontiers in Physiology, 2016, 6, 390.	2.8	3
303	When the clock strikes: Modeling the relation between circadian rhythms and cardiac arrhythmias. Journal of Physics: Conference Series, 2016, 759, 012021.	0.4	2
304	Uncertainty and variability in computational and mathematical models of cardiac physiology. Journal of Physiology, 2016, 594, 6833-6847.	2.9	127
305	Atrial Conduction Velocity Correlates with Frequency Content of Bipolar Signal. PACE - Pacing and Clinical Electrophysiology, 2016, 39, 814-821.	1.2	10
306	Numerical solutions of reaction-diffusion equations: Application to neural and cardiac models. American Journal of Physics, 2016, 84, 626-638.	0.7	6
307	Reconstructing three-dimensional reentrant cardiac electrical wave dynamics using data assimilation. Chaos, 2016, 26, 013107.	2.5	23
308	CyberCardia project: Modeling, verification and validation of implantable cardiac devices. , 2016, , .		2
309	Instability of spiral and scroll waves in the presence of a gradient in the fibroblast density: the effects of fibroblast–myocyte coupling. New Journal of Physics, 2016, 18, 123014.	2.9	10
310	An implicit pseudospectral scheme to solve propagating fronts in reactionâ€diffusion equations. Numerical Methods for Partial Differential Equations, 2016, 32, 86-105.	3.6	3
311	Linked and knotted chimera filaments in oscillatory systems. Physical Review E, 2016, 94, 010204.	2.1	21
312	Nonlinear physics of electrical wave propagation in the heart: a review. Reports on Progress in Physics, 2016, 79, 096601.	20.1	58
313	Dynamics and Molecular Mechanisms of Ventricular Fibrillation in Structurally Normal Hearts. Cardiac Electrophysiology Clinics, 2016, 8, 601-612.	1.7	9
314	Increased Late Sodium Current Contributes to the Electrophysiological Effects of Chronic, but Not Acute, Dofetilide Administration. Circulation: Arrhythmia and Electrophysiology, 2016, 9, e003655.	4.8	15
315	Hysteresis and drift of spiral waves near heterogeneities: From chemical experiments to cardiac simulations. Physical Review E, 2016, 93, 022203.	2.1	11
316	Using delay differential equations to induce alternans in a model of cardiac electrophysiology. Journal of Theoretical Biology, 2016, 404, 262-272.	1.7	8
318	Modeling Current Density Maps Using Aliev–Panfilov Electrophysiological Heart Model. Cardiovascular Engineering and Technology, 2016, 7, 238-253.	1.6	1
319	Local heterogeneities in cardiac systems suppress turbulence by generating multi-armed rotors. New Journal of Physics, 2016, 18, 053018.	2.9	6

ARTICLE IF CITATIONS # Model of electrical activity in cardiac tissue under electromagnetic induction. Scientific Reports, 320 3.3 129 2016, 6, 28. Myokit: A simple interface to cardiac cellular electrophysiology. Progress in Biophysics and 321 Molecular Biology, 2016, 120, 100-114. Influence of isolation degree of spatial patterns on persistence of populations. Nonlinear Dynamics, 322 5.2 118 2016, 83, 811-819. Computational modeling of non-linear diffusion in cardiac electrophysiology: A novel porous-medium approach. Computer Methods in Applied Mechanics and Engineering, 2016, 300, 70-83. Hidden structures of information transport underlying spiral wave dynamics. Chaos, 2017, 27, 013106. 324 2.5 10 Fast propagation regions cause self-sustained reentry in excitable media. Proceedings of the National 7.1 Academy of Sciences of the United States of America, 2017, 114, 1281-1286. Spiral-wave dynamics in a mathematical model of human ventricular tissue with myocytes and Purkinje 326 2.1 22 fibers. Physical Review E, 2017, 95, 022405. Nonlinear measures characterize atrial fibrillatory dynamics generated using fractional diffusion. 0.3 IFMBE Proceedings, 2017, , 541-544. Laser-Etched Designs for Molding Hydrogel-Based Engineered Tissues. Tissue Engineering - Part C: 328 2.1 26 Methods, 2017, 23, 311-321. On the generation of spiral and scroll waves by periodic stimulation of excitable media in the 5.1 presence of obstacles of minimum size. Chaos, Solitons and Fractals, 2017, 99, 162-170. Nonlinear diffusion and thermo-electric coupling in a two-variable model of cardiac action potential. 330 21 2.5 Chaos, 2017, 27, 093919. Dynamical mechanism of atrial fibrillation: A topological approach. Chaos, 2017, 27, 093936. 2.5 Spatiotemporal Progression of EarlyÂHuman Ventricular Fibrillation. JACC: Clinical Electrophysiology, 332 3.2 7 2017, 3, 1437-1446. Feedback-controlled dynamics of spiral waves in the complex Ginzburg–Landau equation. Nonlinear 5.2 Dynamics, 2017, 90, 2745-2753. Sensitivity of reentrant driver localization to electrophysiological parameter variability in image-based computational models of persistent atrial fibrillation sustained by a fibrotic substrate. 334 2.564 Chaos, 2017, 27, 093932. A basic lattice model of an excitable medium: Kinetic Monte Carlo simulations. Mathematical Models and Computer Simulations, 2017, 9, 636-648. Alternans promotion in cardiac electrophysiology models by delay differential equations. Chaos, 2017, 336 2.512 27,093915. Systematic reduction of a detailed atrial myocyte model. Chaos, 2017, 27, 093914.

#	Article	IF	Citations
338	Suppression of turbulence by heterogeneities in a cardiac model with fiber rotation. Chaos, 2017, 27, 093921.	2.5	4
339	Incorporating inductances in tissue-scale models of cardiac electrophysiology. Chaos, 2017, 27, 093926.	2.5	12
340	Effects of mechanical feedback on the stability of cardiac scroll waves: A bidomain electro-mechanical simulation study. Chaos, 2017, 27, 093905.	2.5	23
341	Effects of model error on cardiac electrical wave state reconstruction using data assimilation. Chaos, 2017, 27, 093911.	2.5	12
342	Memory effects, transient growth, and wave breakup in a model of paced atrium. Chaos, 2017, 27, 093917.	2.5	2
343	Rotors exhibit greater surface ECG variation during ventricular fibrillation than focal sources due to wavebreak, secondary rotors, and meander. Journal of Cardiovascular Electrophysiology, 2017, 28, 1158-1166.	1.7	10
344	Features of Chaotic Transients in Excitable Media Governed by Spiral and Scroll Waves. Physical Review Letters, 2017, 119, 054101.	7.8	33
345	Parametric wave induces straight drift of spiral waves in excitable medium. Europhysics Letters, 2017, 119, 58002.	2.0	7
346	Robustness of free and pinned spiral waves against breakup by electrical forcing in excitable chemical media. Physical Review E, 2017, 95, 042214.	2.1	8
347	Mechanism for Amplitude Alternans in Electrocardiograms and the Initiation of Spatiotemporal Chaos. Physical Review Letters, 2017, 118, 168101.	7.8	42
348	Dynamics of scroll waves in a cylinder jacket geometry. Physical Review E, 2017, 96, 012203.	2.1	2
349	Multilevel parallelism scheme in a genetic algorithm applied to cardiac models with mass–spring systems. Journal of Supercomputing, 2017, 73, 609-623.	3.6	2
350	Spatiotemporal control to eliminate cardiac alternans using isostable reduction. Physica D: Nonlinear Phenomena, 2017, 342, 32-44.	2.8	8
351	FPGA in-the-loop simulations of cardiac excitation model under voltage clamp conditions. AIP Conference Proceedings, 2017, , .	0.4	0
352	Complexity of Atrial Fibrillation Electrograms Through Nonlinear Signal Analysis: In Silico Approach. , 2017, , .		2
353	Spatial Patterns of Excitation at Tissue and Whole Organ Level Due to Early Afterdepolarizations. Frontiers in Physiology, 2017, 8, 404.	2.8	13
354	Computational Cardiac Modeling Reveals Mechanisms of Ventricular Arrhythmogenesis in Long QT Syndrome Type 8: CACNA1C R858H Mutation Linked to Ventricular Fibrillation. Frontiers in Physiology, 2017, 8, 771.	2.8	27
355	Simultaneous Quantification of Spatially Discordant Alternans in Voltage and Intracellular Calcium in Langendorff-Perfused Rabbit Hearts and Inconsistencies with Models of Cardiac Action Potentials and Ca Transients. Frontiers in Physiology, 2017, 8, 819.	2.8	38

#	Article	IF	CITATIONS
356	Stochastic process of pragmatic information for 2D spiral wave turbulence in globally and locally coupled Alief-Panfilov oscillators. AIP Conference Proceedings, 2017, , .	0.4	0
357	BeatBox—HPC simulation environment for biophysically and anatomically realistic cardiac electrophysiology. PLoS ONE, 2017, 12, e0172292.	2.5	23
358	Effects of early afterdepolarizations on excitation patterns in an accurate model of the human ventricles. PLoS ONE, 2017, 12, e0188867.	2.5	17
359	Atrial arrhythmogenicity of KCNJ2 mutations in short QT syndrome: Insights from virtual human atria. PLoS Computational Biology, 2017, 13, e1005593.	3.2	51
360	Terminal Transient Phase of Chaotic Transients. Physical Review Letters, 2018, 120, 094101.	7.8	19
361	Generation and customization of biosynthetic excitable tissues for electrophysiological studies and cell-based therapies. Nature Protocols, 2018, 13, 927-945.	12.0	11
362	Numerical solutions of equations of cardiac wave propagation based on Chebyshev multidomain pseudospectral methods. Mathematics and Computers in Simulation, 2018, 151, 29-53.	4.4	1
363	Locating Order-Disorder Phase Transition in a Cardiac System. Scientific Reports, 2018, 8, 1967.	3.3	10
364	Identification and Characterization of Sites Where Persistent Atrial Fibrillation Is Terminated by Localized Ablation. Circulation: Arrhythmia and Electrophysiology, 2018, 11, e005258.	4.8	43
365	Defects formation and spiral waves in a network of neurons in presence of electromagnetic induction. Cognitive Neurodynamics, 2018, 12, 235-254.	4.0	42
366	Spiral breakup in a RD system of cardiac excitation due to front–back interaction. Wave Motion, 2018, 79, 73-83.	2.0	6
367	Wave Propagation in Inhomogeneous Excitable Media. Annual Review of Condensed Matter Physics, 2018, 9, 435-461.	14.5	10
368	Approximate time-dependent solution of a master equation with full linear birth-death rates. Journal of Physics Communications, 2018, 2, 025033.	1.2	1
369	Competing Mechanisms of Stress-Assisted Diffusivity and Stretch-Activated Currents in Cardiac Electromechanics. Frontiers in Physiology, 2018, 9, 1714.	2.8	29
370	Spiral wave initiation in excitable media. Philosophical Transactions Series A, Mathematical, Physical, and Engineering Sciences, 2018, 376, 20170379.	3.4	17
371	Understanding the mechanism of heart dysfunction through modeling and simulation. AIP Conference Proceedings, 2018, , .	0.4	0
372	Jacobian-determinant method of identifying phase singularity during reentry. Physical Review E, 2018, 98, .	2.1	21
373	Slow Recovery of Excitability Increases Ventricular Fibrillation Risk as Identified by Emulation. Frontiers in Physiology, 2018, 9, 1114.	2.8	15

ARTICLE IF CITATIONS # Initiation of Rotors by Fast Propagation Regions in Excitable Media: A Theoretical Study. Frontiers in 374 2.1 4 Physics, 2018, 6, . Causal Scale of Rotors in a Cardiac System. Frontiers in Physics, 2018, 6, . 2.1 Spatiotemporal Permutation Entropy as a Measure for Complexity of Cardiac Arrhythmia. Frontiers in 376 2.1 13 Physics, 2018, 6, . Spatiotemporal dynamics near the Turing–Hopf bifurcation in a toxic-phytoplankton–zooplankton model with cross-diffusion. Nonlinear Dynamics, 2019, 98, 27-37. Double-wave reentry in excitable media. Chaos, 2019, 29, 073103. 378 2.5 4 Chaotic tip trajectories of a single spiral wave in the presence of heterogeneities. Physical Review E, 379 2.1 2019, 99, 062409. Entropy Mapping Approach for Functional Reentry Detection in Atrial Fibrillation: An In-Silico Study. 380 2.2 8 Entropy, 2019, 21, 194. Spiral and target wave chimeras in a 2D lattice of map-based neuron models. Chaos, 2019, 29, 101104. 2.5 14 Multifractal Desynchronization of the Cardiac Excitable Cell Network During Atrial Fibrillation. II. 382 2.8 1 Modeling. Frontiers in Physiology, 2019, 10, 480. Reconnection of multiple scroll rings in a three-dimensional reaction-diffusion system. Physical 2.1 Review E, 2019, 100, 022222. Global Identification of FitzHugh-Nagumo Equation via Deterministic Learning and Interpolation. IEEE 384 2 4.2 Access, 2019, 7, 107334-107345. A Frequency-Speed Subsystem of the Barkley Model for Spiral Tip Identification via Deterministic Learning., 2019,,. Spiral wave patterns in a two-dimensional lattice of nonlocally coupled maps modeling neural 386 5.1 19 activity. Chaos, Solitons and Fractals, 2019, 120, 75-82. Scale-invariant structures of spiral waves. Computers in Biology and Medicine, 2019, 104, 291-298. Twisted scroll wave dynamics: partially pinned waves in excitable chemical media. Physical Chemistry 388 2.8 3 Chemical Physics, 2019, 21, 2419-2425. Wave propagation in a network of interacting nephrons. Physica A: Statistical Mechanics and Its Applications, 2019, 530, 121566. 390 Robust approach for rotor mapping in cardiac tissue. Chaos, 2019, 29, 053101. 2.520 Time-Delay Feedback Control of an Oscillatory Medium. SEMA SIMAI Springer Series, 2019, , 1-17.

		CITATION REPORT		
#	Article		IF	CITATIONS
392	Chaotic Solutions in a Forced Two-Dimensional Hindmarsh-Rose Neuron. , 2019, , 187-	[.] 209.		1
393	Real-time interactive simulations of large-scale systems on personal computers and cel Toward patient-specific heart modeling and other applications. Science Advances, 201	l phones: 9, 5, eaav6019.	10.3	45
394	Spiral Tip Identification via Deterministic Learning. International Journal of Bifurcation a Applied Sciences and Engineering, 2019, 29, 1950040.	and Chaos in	1.7	1
395	Reaction-Diffusion Patterns and Waves: From Chemical Reactions to Cardiac Arrhythm Frontiers Collection, 2019, , 239-251.	ias. The	0.2	5
396	Large-scale interactive numerical experiments of chaos, solitons and fractals in real tim web browser. Chaos, Solitons and Fractals, 2019, 121, 6-29.	ie via GPU in a	5.1	16
397	Simulation of spiral wave superseding in the Luo–Rudy anisotropic model of cardiac circular-shaped fibres. Journal of Computational Science, 2019, 32, 1-11.	tissue with	2.9	9
398	Delay differential equation-based models of cardiac tissue: Efficient implementation ar spiral-wave dynamics. Chaos, 2019, 29, 123128.	ıd effects on	2.5	1
399	Pattern formation in reaction-diffusion systems in the presence of non-Markovian diffu Review E, 2019, 100, 052217.	ision. Physical	2.1	3
400	Simulating waves, chaos and synchronization with a microcontroller. Chaos, 2019, 29,	123104.	2.5	4
401	Extinction dynamics of spiral defect chaos. Physical Review E, 2019, 99, 012407.		2.1	11
402	Electromagnetic induction on a map-based action potential model. Nonlinear Dynamic 433-444.	s, 2019, 95,	5.2	10
403	Probabilistic reachability for multi-parameter bifurcation analysis of cardiac alternans. T Computer Science, 2019, 765, 158-169.	Theoretical	0.9	5
404	Experimental validation of a variational data assimilation procedure for estimating space cardiac conductivities. Computer Methods in Applied Mechanics and Engineering, 202	ce-dependent 0, 358, 112615.	6.6	33
405	Spiral and target wave chimeras in a 2D network of nonlocally coupled vanÂderÂPol os Solitons and Fractals, 2020, 131, 109492.	scillators. Chaos,	5.1	4
406	Control of spiral drift by using feedback signals from a circular measuring domain in os media. Applied Mathematics and Computation, 2020, 368, 124802.	cillatory	2.2	1
407	Formation of spiral wave in Hodgkin-Huxley neuron networks with Gamma-distributed Communications in Nonlinear Science and Numerical Simulation, 2020, 83, 105112.	synaptic input.	3.3	15
408	Complete dynamical analysis of myocardial cell exposed to magnetic flux. Chinese Jour 2020, 64, 363-373.	nal of Physics,	3.9	6
409	In-silico study of the cardiac arrhythmogenic potential of biomaterial injection therapy. Reports, 2020, 10, 12990.	Scientific	3.3	9

#	Article	IF	CITATIONS
410	Effects of randomization of characteristic times on spiral wave generation in a simple cellular	1.3	1
	automaton model of excitable media. AlP Advances, 2020, 10, 085116.		_
411	Reinforcement Learning for Elimination of Reentrant Spiral Waves in Excitable Media. , 2020, , .		Ο
412	On the Role of Ionic Modeling on the Signature of Cardiac Arrhythmias for Healthy and Diseased Hearts. Mathematics, 2020, 8, 2242.	2.2	10
413	Wave propagation in a network of extended Morris–Lecar neurons with electromagnetic induction and its local kinetics. Nonlinear Dynamics, 2020, 100, 3625-3644.	5.2	29
414	Sensitivity of a data-assimilation system for reconstructing three-dimensional cardiac electrical dynamics. Philosophical Transactions Series A, Mathematical, Physical, and Engineering Sciences, 2020, 378, 20190388.	3.4	9
415	Unstable cardiac multi-spiral waves in a FitzHugh–Nagumo soliton model under magnetic flow effect. Nonlinear Dynamics, 2020, 100, 3799-3814.	5.2	21
416	In-silico Analysis of the Role of Boundary Conditions in the Induced Drift of 2D Spiral Waves. , 2020, , .		0
417	Synchronization features of target wave structures with an incoherent center. Chaos, Solitons and Fractals, 2020, 139, 110002.	5.1	4
418	Spiral Tip Recognition via Deterministic Learning. International Journal of Bifurcation and Chaos in Applied Sciences and Engineering, 2020, 30, 2050093.	1.7	1
419	Time resolution for wavefront and phase singularity tracking using activation maps in cardiac propagation models. Chaos, 2020, 30, 033132.	2.5	3
420	Anisotropic shortening in the wavelength of electrical waves promotes onset of electrical turbulence in cardiac tissue: An in silico study. PLoS ONE, 2020, 15, e0230214.	2.5	3
421	Modelling and Simulation for Preclinical Cardiac Safety Assessment of Drugs with Human iPSC-Derived Cardiomyocytes. Deutsche Mathematiker Vereinigung Jahresbericht, 2020, 122, 209-257.	1.1	7
422	Two sides of the same coin: new insights into mechanisms of ventricular fibrillation. Cardiovascular Research, 2021, 117, 983-984.	3.8	2
423	Local synchronization indices for rotors detection in atrial fibrillation: A simulation study. Communications in Nonlinear Science and Numerical Simulation, 2021, 94, 105548.	3.3	1
424	Circadian Rhythms of Early Afterdepolarizations and Ventricular Arrhythmias in a Cardiomyocyte Model. Biophysical Journal, 2021, 120, 319-333.	0.5	6
425	Defibrillate You Later, Alligator: Q10 Scaling and Refractoriness Keeps Alligators from Fibrillation. Integrative Organismal Biology, 2021, 3, obaa047.	1.8	5
426	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.	3.2	4
427	Dynamics of Structured Networks of Winfree Oscillators. Frontiers in Systems Neuroscience, 2021, 15, 631377.	2.5	6

#	Article	IF	CITATIONS
428	Data integration for the numerical simulation of cardiac electrophysiology. PACE - Pacing and Clinical Electrophysiology, 2021, 44, 726-736.	1.2	8
429	Electroimmunology and cardiac arrhythmia. Nature Reviews Cardiology, 2021, 18, 547-564.	13.7	39
431	CVAR-Seg: An Automated Signal Segmentation Pipeline for Conduction Velocity and Amplitude Restitution. Frontiers in Physiology, 2021, 12, 673047.	2.8	3
432	Enabling forward uncertainty quantification and sensitivity analysis in cardiac electrophysiology by reduced order modeling and machine learning. International Journal for Numerical Methods in Biomedical Engineering, 2021, 37, e3450.	2.1	17
433	Bayesian Calibration of Electrophysiology Models Using Restitution Curve Emulators. Frontiers in Physiology, 2021, 12, 693015.	2.8	6
434	Heart rhythm analysis using a nonlinear dynamics perspective. Applied Mathematical Modelling, 2021, 96, 152-176.	4.2	12
435	Effect of magnetic induction on the synchronizability of coupled neuron network. Chaos, 2021, 31, 083115.	2.5	25
436	Long-Time Prediction of Arrhythmic Cardiac Action Potentials Using Recurrent Neural Networks and Reservoir Computing. Frontiers in Physiology, 2021, 12, 734178.	2.8	11
437	The openCARP simulation environment for cardiac electrophysiology. Computer Methods and Programs in Biomedicine, 2021, 208, 106223.	4.7	84
438	Dynamical behaviors in the FitzHugh–Nagumo system with a memory trace. International Journal of Modern Physics B, 0, , 2150259.	2.0	0
439	Electrical activity of the heart. , 2021, , 93-142.		1
440	Robust data assimilation with noise: Applications to cardiac dynamics. Chaos, 2021, 31, 013118.	2.5	9
442	Cardiac Oscillations and Arrhythmia Analysis. , 2006, , 409-422.		8
443	Computational Cardiac Electrophysiology: Implementing Mathematical Models of Cardiomyocytes to Simulate Action Potentials of the Heart. Methods in Molecular Biology, 2015, 1299, 65-74.	0.9	1
444	Sudden Cardiac Death and Turbulence. Understanding Complex Systems, 2016, , 235-248.	0.6	1
445	Intercellular Communication and Impulse Propagation. , 2004, , 213-221.		1
446	Modeling Cardiac Defibrillation. , 2004, , 282-290.		10
447	Theory of Reentry. , 2004, , 317-326.		9

ARTICLE IF CITATIONS Nonlinear Dynamics of Excitation and Propagation in Cardiac Muscle., 2004, , 327-335. 15 448 449 Rotors and Spiral Waves in Two Dimensions., 2004, , 336-344. Efficient parameterization of cardiac action potential models using a genetic algorithm. Chaos, 2017, 450 2.520 27,093922. Spiral-Wave Dynamics in a Mathematical Model of Human Ventricular Tissue with Myocytes and Fibroblasts. PLoS ONE, 2013, 8, e72950. A Quantitative Comparison of the Behavior of Human Ventricular Cardiac Electrophysiology Models 452 2.5 44 in Tissue. PLoS ONE, 2014, 9, e84401. Reentry and Ectopic Pacemakers Emerge in a Three-Dimensional Model for a Slab of Cardiac Tissue with Diffuse Microfibrosis near the Percolation Threshold. PLoS ONE, 2016, 11, e0166972. 2.5 Electro-mechanical dynamics of spiral waves in a discrete 2D model of human atrial tissue. PLoS ONE, 454 2.5 10 2017, 12, e0176607. Effects of the aging and systole of heart on the dynamics of spiral wave. Wuli Xuebao/Acta Physica Sinica, 2013, 62, 010505. Pulsed low-energy stimulation initiates electric turbulence in cardiac tissue. PLoS Computational 456 3.2 6 Biology, 2021, 17, e1009476. Detecting spiral wave tips using deep learning. Scientific Reports, 2021, 11, 19767. 3.3 Cell-to-cell mathematical modeling of arrhythmia phenomena in the heart. Mathematics and 458 4.4 1 Computers in Simulation, 2022, 193, 153-172. Removal of a Spiral Reentry by a Weak Electric Shock. Seibutsu Butsuri, 2005, 45, 259-263. 0.1 Substrates of Cardiac Reentrant Arrhythmias: The Possible Role of Tissue Regeneration and 460 0 Replacement., 2011,, 283-300. The numerical study on the effect of the earlyafterdepolarization on spiral wavesin discrete excitable media. Wuli Xuebaó/Acta Physica Sinica, 2011, 60, 030501. Numerical study of the death and breakup of spiral wave in the networks of thermosensitive neurons. 462 0.53 Wuli Xuebao/Acta Physica Sinica, 2012, 61, 038701. Effects of sodium and potassium ion channel fluctuation on the spatiotemporal patterns of neuronal network. Wuli Xuebao/Acta Physica Sinica, 2012, 61, 020503. Modulation of nonlinear coupling on the synchronization induced by linear coupling. Wuli 464 0.5 3 Xuebao/Acta Physica Sinica, 2013, 62, 028701. Suppression of the spiral wave in cardiac tissue by using forcing currents with diversity. Wuli Xuebao/Acta Physica Sinica, 2013, 62, 084501.

#	ARTICLE	IF	CITATIONS
467	Simulation Studies of Cardiac Bioelectrical Activity. Modeling, Simulation and Applications, 2014, , 249-360.	1.3	0
468	Anisotropic Cardiac Sources. Modeling, Simulation and Applications, 2014, , 149-173.	1.3	0
469	Controlling Chaos in the Heart: Some Mathematics Behind Terminating Cardiac Arrhythmias. Springer Proceedings in Mathematics and Statistics, 2014, , 1-17.	0.2	0
471	Basic Cardiac Anatomy and Electrocardiology. Modeling, Simulation and Applications, 2014, , 1-19.	1.3	0
472	Study on the effect of delayed recovery of extracellular potassium ion concentration on spiral wave. Wuli Xuebao/Acta Physica Sinica, 2014, 63, 238201.	0.5	0
473	Parallel Solvers for the Bidomain System. Modeling, Simulation and Applications, 2014, , 207-248.	1.3	1
474	Numerical Methods for the Bidomain and Reduced Models. Modeling, Simulation and Applications, 2014, , 191-206.	1.3	0
475	The Inverse Problem of Electrocardiology. Modeling, Simulation and Applications, 2014, , 175-190.	1.3	0
476	Mathematical Models of Cellular Bioelectrical Activity. Modeling, Simulation and Applications, 2014, , 21-75.	1.3	0
480	Dynamics of spiral waves in an asymmetrically coupled two-layer excitable medium. Wuli Xuebao/Acta Physica Sinica, 2015, 64, 198201.	0.5	2
481	Afterdepolarlizations induced by wave pattern in human ventricular tissue. Wuli Xuebao/Acta Physica Sinica, 2017, 66, 068201.	0.5	1
482	Spiral wave breakup manner in the excitable system with early afterdepolarizations. Wuli Xuebao/Acta Physica Sinica, 2018, 67, 090501.	0.5	0
483	Novel Patterns of Left Ventricular Mechanical Activity During Experimental Cardiac Arrest in Pigs. Physiological Research, 2018, 67, 391-399.	0.9	2
486	Suppression of Turbulent Dynamics in Models of Cardiac Tissue by Weak Local Excitations. Understanding Complex Systems, 2009, , 89-105.	0.6	2
489	Biochaos in cardiac rhythms. European Physical Journal: Special Topics, 2022, 231, 833-845.	2.6	4
490	Intermittent trapping of spiral waves in a cardiac model. Physical Review E, 2022, 105, 014404.	2.1	7
491	Doppler shift during overdrive pacing of spiral waves. Prediction of the annihilation site. Chaos, Solitons and Fractals, 2022, 155, 111782.	5.1	3
492	Real-Time Interactive Simulations of Complex Ionic Cardiac Cell Models in 2D and 3D Heart Structures with GPUs on Personal Computers. , 2021, , .		3

#	Article	IF	CITATIONS
493	Stochastic Termination of Spiral Wave Dynamics in Cardiac Tissue. Frontiers in Network Physiology, 2022, 2, .	1.8	6
494	Research on the effects of dynamic change of action potential on the evolution behavior of spiral wave. Wuli Xuebao/Acta Physica Sinica, 2022, .	0.5	0
495	Reentry in cardiac ventricular epicardial tissue due to SCN5A L812Q gene mutation: a computational study. Biomedical Physics and Engineering Express, 2022, , .	1.2	0
496	Effect of Noise variance in spiral wave suppression for a multi-layered neuron model with flux coupling modelled using a memristor. European Physical Journal: Special Topics, 0, , 1.	2.6	2
497	Fractional generalization of entropy improves the characterization of rotors in simulated atrial fibrillation. Applied Mathematics and Computation, 2022, 425, 127077.	2.2	4
501	Thermal Ablation Effects on Rotors that Characterize Functional Reâ€entry Cardiac Arrhythmia. International Journal for Numerical Methods in Biomedical Engineering, 2022, , e3614.	2.1	0
502	Spiral waves of divergence in the Barkley model of nilpotent matrices. Chaos, Solitons and Fractals, 2022, 159, 112158.	5.1	4
503	Interaction of multiple spiral rotors in a reaction-diffusion system. Physical Review E, 2022, 105, .	2.1	2
504	Future Directions for Mapping Atrial Fibrillation. Arrhythmia and Electrophysiology Review, 0, 11, .	2.4	1
505	Oscillatory wave patterns and spiral breakup in the Brusselator model using numerical bifurcation analysis. Journal of Computational Science, 2022, 62, 101720.	2.9	1
506	A machine-learning approach for long-term prediction of experimental cardiac action potential time series using an autoencoder and echo state networks. Chaos, 2022, 32, .	2.5	8
507	Optimal entrainment for removal of pinned spiral waves. Physical Review E, 2022, 105, .	2.1	1
508	Spiral wave breakup: Optical mapping in explanted human heart shows the transition from ventricular tachycardia to ventricular fibrillation and self-termination. Heart Rhythm, 2022, , .	0.7	3
509	Spiral patterns and numerical bifurcation analysis in a three-component Brusselator model for chemical reactions. Mathematics and Computers in Simulation, 2022, , .	4.4	1
510	The physics of heart rhythm disorders. Physics Reports, 2022, 978, 1-45.	25.6	14
511	Spiral-generation mechanism in the two-dimensional FitzHugh-Nagumo system. Ricerche Di Matematica, 0, , .	1.0	0
513	Dynamics of Chemical Excitation Waves Subjected to Subthreshold Electric Field in a Mathematical Model of the Belousov-Zhabotinsky Reaction. Springer Proceedings in Complexity, 2022, , 1241-1249.	0.3	0
514	Grass-roots optimization of coupled oscillator networks. Physical Review E, 2022, 106, .	2.1	1

#	Article	IF	CITATIONS
515	Nonlocal delay driven spatiotemporal patterns in a single-species reaction–diffusion model. Communications in Nonlinear Science and Numerical Simulation, 2023, 117, 106899.	3.3	3
516	Spiral- and scroll-wave dynamics in mathematical models for canine and human ventricular tissue with varying Potassium and Calcium currents. Physics Open, 2022, , 100120.	1.5	0
517	Bayesian inference for fitting cardiac models to experiments: estimating parameter distributions using Hamiltonian Monte Carlo and approximate Bayesian computation. Medical and Biological Engineering and Computing, 2023, 61, 75-95.	2.8	2
518	Three-dimensional chiral morphodynamics of chemomechanical active shells. Proceedings of the National Academy of Sciences of the United States of America, 2022, 119, .	7.1	8
519	The role of pulse timing in cardiac defibrillation. Frontiers in Network Physiology, 0, 2, .	1.8	2
520	A comprehensive framework for evaluation of high pacing frequency and arrhythmic optical mapping signals. Frontiers in Physiology, 0, 14, .	2.8	2
521	Mechanical Manifestation of Complete and Incomplete Spiral Wave Break Up. , 2022, , .		0
522	Dynamics and control of spiral waves under feedback derived from a moving measuring point. Chaos, Solitons and Fractals, 2023, 168, 113220.	5.1	3
523	A unified analysis for reaction–diffusion models with application to the spiral waves dynamics of the Barkley model. Arabian Journal of Mathematics, 0, , .	0.9	0
525	A Chebyshev multidomain adaptive mesh method for reaction-diffusion equations. Applied Numerical Mathematics, 2023, 190, 283-302.	2.1	0
526	Spiral-wave dynamics in excitable media: Insights from dynamic mode decomposition. Communications in Nonlinear Science and Numerical Simulation, 2023, 126, 107428.	3.3	1
527	Optimising low-energy defibrillation in 2D cardiac tissue with a genetic algorithm. Frontiers in Network Physiology, 0, 3, .	1.8	0
528	Polarized electric field-induced drift of spiral waves in discontinuous cardiac media. Chaos, Solitons and Fractals, 2023, 175, 113957.	5.1	12
530	Spiral dynamics in oscillatory bilayer systems with an inhomogeneous inter-layer coupling. Physica A: Statistical Mechanics and Its Applications, 2023, 630, 129228.	2.6	0
531	Reordering and synchronization of electrical turbulence in cardiac tissue through global and partial optogenetical illumination. Physical Review E, 2023, 108, .	2.1	0
532	An efficient high-order compact approach for spiral wave dynamics by the FHN model. Journal of Computational Science, 2023, 73, 102147.	2.9	0
533	Information theory-based direct causality measure to assess cardiac fibrillation dynamics. Journal of the Royal Society Interface, 2023, 20, .	3.4	1
534	Biomimetic Cardiac Tissue Models for In Vitro Arrhythmia Studies. Biomimetics, 2023, 8, 487.	3.3	0

#	Article	IF	CITATIONS
535	Effect of excitability on partially pinned scroll waves in excitable chemical media. Physical Review E, 2023, 108, .	2.1	0
536	Estimation of fibre architecture and scar in myocardial tissue using electrograms: An in-silico study. Biomedical Signal Processing and Control, 2024, 89, 105746.	5.7	0
537	Complex repolarization dynamics in <i>ex vivo</i> human ventricles are independent of the restitution properties. Europace, 2023, 25, .	1.7	0
538	Bistable spiral wave dynamics in electrically excitable media. Physical Review E, 2023, 108, .	2.1	0
539	Spiking at the edge: Excitability at interfaces in reaction–diffusion systems. Proceedings of the National Academy of Sciences of the United States of America, 2024, 121, .	7.1	0
540	An explicit local space-time adaptive framework for monodomain models in cardiac electrophysiology. Computer Methods in Applied Mechanics and Engineering, 2024, 422, 116806.	6.6	0
541	The spiral wave frequency effect in atrial fibrillation. Biophysical Journal, 2024, 123, 782-798.	0.5	0
542	Identifying spiral wave tips with reservoir computing. Chaos, Solitons and Fractals, 2024, 180, 114579.	5.1	0