Igor Efimov

List of Publications by Year in descending order

Source: https://exaly.com/author-pdf/3105679/publications.pdf

Version: 2024-02-01

316 papers	13,783 citations	16451 64 h-index	31849 101 g-index
344 all docs	344 docs citations	344 times ranked	11266 citing authors

#	Article	IF	Citations
1	Systems genetics analysis defines importance of TMEM43/LUMA for cardiac- and metabolic-related pathways. Physiological Genomics, 2022, 54, 22-35.	2.3	10
2	Acetylcholine Reduces IKr and Prolongs Action Potentials in Human Ventricular Cardiomyocytes. Biomedicines, 2022, 10, 244.	3.2	3
3	High-resolution structure-function mapping of intact hearts reveals altered sympathetic control of infarct border zones. JCI Insight, 2022, 7, .	5.0	14
4	Drawnâ€onâ€Skin Sensors from Fully Biocompatible Inks toward Highâ€Quality Electrophysiology. Small, 2022, 18, .	10.0	12
5	Electrophysiology and Arrhythmogenesis in the Human Right Ventricular Outflow Tract. Circulation: Arrhythmia and Electrophysiology, 2022, 15, CIRCEP121010630.	4.8	11
6	Open-source low-cost cardiac optical mapping system. PLoS ONE, 2022, 17, e0259174.	2.5	2
7	Simultaneous triple-parametric optical mapping of transmembrane potential, intracellular calcium and NADH for cardiac physiology assessment. Communications Biology, 2022, 5, 319.	4.4	10
8	Hardwareâ€Mappable Cellular Neural Networks for Distributed Wavefront Detection in Nextâ€Generation Cardiac Implants. Advanced Intelligent Systems, 2022, 4, .	6.1	3
9	Secretome of atrial epicardial adipose tissue facilitates reentrant arrhythmias by myocardial remodeling. Heart Rhythm, 2022, 19, 1461-1470.	0.7	13
10	A transient, closed-loop network of wireless, body-integrated devices for autonomous electrotherapy. Science, 2022, 376, 1006-1012.	12.6	90
11	Innovation in Cardiovascular Bioelectronics. , 2022, , 587-602.		0
12	The Role of Electroporation. , 2021, , 233-241.		0
13	Conformal Electronics Therapy for Defibrillation. , 2021, , 381-389.		0
14	The Virtual Electrode Hypothesis of Defibrillation. , 2021, , 181-197.		0
15	Chromatin Accessibility of Human Mitral Valves and Functional Assessment of MVP Risk Loci. Circulation Research, 2021, 128, e84-e101.	4.5	10
16	Multi-omics integration identifies key upstream regulators of pathomechanisms in hypertrophic cardiomyopathy due to truncating MYBPC3 mutations. Clinical Epigenetics, 2021, 13, 61.	4.1	17
17	Innervation and Neuronal Control of the Mammalian Sinoatrial Node a Comprehensive Atlas. Circulation Research, 2021, 128, 1279-1296.	4.5	64
18	Stretchable and Transparent Metal Nanowire Microelectrodes for Simultaneous Electrophysiology and Optogenetics Applications. Photonics, 2021, 8, 220.	2.0	11

#	Article	IF	Citations
19	It's clearly the heart! Optical transparency, cardiac tissue imaging, and computer modelling. Progress in Biophysics and Molecular Biology, 2021, 168, 18-18.	2.9	6
20	Flexible and Transparent Metal Nanowire Microelectrode Arrays and Interconnects for Electrophysiology, Optogenetics, and Optical Mapping. Advanced Materials Technologies, 2021, 6, 2100225.	5.8	29
21	Fully implantable and bioresorbable cardiac pacemakers without leads or batteries. Nature Biotechnology, 2021, 39, 1228-1238.	17.5	163
22	Architecture of the Atrial Pacemaker Complex Coming Into Focus. JACC: Clinical Electrophysiology, 2021, 7, 703-704.	3.2	1
23	Photocurable bioresorbable adhesives as functional interfaces between flexible bioelectronic devices and soft biological tissues. Nature Materials, 2021, 20, 1559-1570.	27.5	114
24	Microelectrode Arrays: Flexible and Transparent Metal Nanowire Microelectrode Arrays and Interconnects for Electrophysiology, Optogenetics, and Optical Mapping (Adv. Mater. Technol. 7/2021). Advanced Materials Technologies, 2021, 6, 2170041.	5.8	2
25	Differential cardiotoxic electrocardiographic response to doxorubicin treatment in conscious versus anesthetized mice. Physiological Reports, 2021, 9, e14987.	1.7	11
26	Novel Low-Voltage MultiPulse Therapy to Terminate Atrial Fibrillation. JACC: Clinical Electrophysiology, 2021, 7, 988-999.	3.2	6
27	Personalization of Mathematical Models of Human Atrial Action Potential. Smart Innovation, Systems and Technologies, 2021, , 223-236.	0.6	2
28	Advances in Implantable Optogenetic Technology for Cardiovascular Research and Medicine. Frontiers in Physiology, 2021, 12, 720190.	2.8	8
29	Ventricular TLR4 Levels Abrogate TLR2-Mediated Adverse Cardiac Remodeling upon Pressure Overload in Mice. International Journal of Molecular Sciences, 2021, 22, 11823.	4.1	6
30	Heart Rate, Hibernation, and the PowerÂLaw. JACC: Clinical Electrophysiology, 2021, 7, 1345-1347.	3.2	0
31	Graphene-Based Scaffolds: Fundamentals and Applications for Cardiovascular Tissue Engineering. Frontiers in Bioengineering and Biotechnology, 2021, 9, 797340.	4.1	21
32	Elastic titin properties and protein quality control in the aging heart. Biochimica Et Biophysica Acta - Molecular Cell Research, 2020, 1867, 118532.	4.1	12
33	Heart slice culture system reliably demonstrates clinical drug-related cardiotoxicity. Toxicology and Applied Pharmacology, 2020, 406, 115213.	2.8	19
34	Role of angiotensin-converting enzyme 2 and pericytes in cardiac complications of COVID-19 infection. American Journal of Physiology - Heart and Circulatory Physiology, 2020, 319, H1059-H1068.	3.2	39
35	Evidence of Superior and Inferior Sinoatrial Nodes in the Mammalian Heart. JACC: Clinical Electrophysiology, 2020, 6, 1827-1840.	3.2	44
36	Catheter-integrated soft multilayer electronic arrays for multiplexed sensing and actuation during cardiac surgery. Nature Biomedical Engineering, 2020, 4, 997-1009.	22.5	175

#	Article	IF	Citations
37	p38Î´ genetic ablation protects female mice from anthracycline cardiotoxicity. American Journal of Physiology - Heart and Circulatory Physiology, 2020, 319, H775-H786.	3.2	7
38	Response by Handa et al to Letter Regarding Article, â€œGranger Causalityâ€“Based Analysis for Classification of Fibrillation Mechanisms and Localization of Rotational Driversâ€• Circulation: Arrhythmia and Electrophysiology, 2020, 13, e008951.	4.8	1
39	cAMP-dependent regulation of HCN4 controls the tonic entrainment process in sinoatrial node pacemaker cells. Nature Communications, 2020, 11, 5555.	12.8	63
40	Transcriptional Patterning of the Ventricular Cardiac Conduction System. Circulation Research, 2020, 127, e94-e106.	4.5	15
41	ZO-1 Regulates Intercalated Disc Composition and Atrioventricular Node Conduction. Circulation Research, 2020, 127, e28-e43.	4.5	13
42	Genetic algorithm-based personalized models of human cardiac action potential. PLoS ONE, 2020, 15, e0231695.	2.5	19
43	Flexible and Transparent Metal Oxide/Metal Grid Hybrid Interfaces for Electrophysiology and Optogenetics. Advanced Materials Technologies, 2020, 5, 2000322.	5.8	23
44	Preclinical Cardiac Electrophysiology Assessment by Dual Voltage and Calcium Optical Mapping of Human Organotypic Cardiac Slices. Journal of Visualized Experiments, 2020, , .	0.3	9
45	Granger Causalityâ€“Based Analysis for Classification of Fibrillation Mechanisms and Localization of Rotational Drivers. Circulation: Arrhythmia and Electrophysiology, 2020, 13, e008237.	4.8	6
46	Multifunctional Flexible Biointerfaces for Simultaneous Colocalized Optophysiology and Electrophysiology. Advanced Functional Materials, 2020, 30, 1910027.	14.9	33
47	Organ conformal electronics for cardiac therapeutics. , 2020, , 911-937.		0
48	Basic Principles of Cardiac Electrophysiology. Contemporary Cardiology, 2020, , 3-32.	0.1	1
49	Genetic algorithm-based personalized models of human cardiac action potential. , 2020, 15, e0231695.		0
50	Genetic algorithm-based personalized models of human cardiac action potential. , 2020, 15, e0231695.		0
51	Genetic algorithm-based personalized models of human cardiac action potential. , 2020, 15, e0231695.		0
52	Genetic algorithm-based personalized models of human cardiac action potential. , 2020, 15, e0231695.		0
53	Genetic algorithm-based personalized models of human cardiac action potential. , 2020, 15, e0231695.		0
54	Genetic algorithm-based personalized models of human cardiac action potential. , 2020, 15, e0231695.		0

#	Article	IF	Citations
55	Cardiac connexin genotyping for identification of the circuit of atrioventricular nodal re-entrant tachycardia. Europace, 2019, 21, 190-191.	1.7	11
56	Multiparametric slice culture platform for the investigation of human cardiac tissue physiology. Progress in Biophysics and Molecular Biology, 2019, 144, 139-150.	2.9	28
57	Integrative Functional Annotation of 52 Genetic Loci Influencing Myocardial Mass Identifies Candidate Regulatory Variants and Target Genes. Circulation Genomic and Precision Medicine, 2019, 12, e002328.	3.6	7
58	Heart Rhythm Societyâ€"40th anniversary: A history of success. Heart Rhythm, 2019, 16, 651-653.	0.7	0
59	Optocardiography: A review of its past, present, and future. Current Opinion in Biomedical Engineering, 2019, 9, 74-80.	3.4	7
60	Sudden Heart Rate Reduction Upon Optogenetic Release of Acetylcholine From Cardiac Parasympathetic Neurons in Perfused Hearts. Frontiers in Physiology, 2019, 10, 16.	2.8	31
61	Open-Source Multiparametric Optocardiography. Scientific Reports, 2019, 9, 721.	3.3	19
62	Optical Mapping. Cardiac Electrophysiology Clinics, 2019, 11, 495-510.	1.7	10
63	Wireless, battery-free, fully implantable multimodal and multisite pacemakers for applications in small animal models. Nature Communications, 2019, 10, 5742.	12.8	146
64	Identification of atrial fibrillation associated genes and functional non-coding variants. Nature Communications, 2019, 10, 4755.	12.8	64
65	Flotillins in the intercalated disc are potential modulators of cardiac excitability. Journal of Molecular and Cellular Cardiology, 2019, 126, 86-95.	1.9	3
66	RHYTHM: An Open Source Imaging Toolkit for Cardiac Panoramic Optical Mapping. Scientific Reports, 2018, 8, 2921.	3.3	58
67	Left Septal Slow Pathway Ablation for Atrioventricular Nodal Reentrant Tachycardia. Circulation: Arrhythmia and Electrophysiology, 2018, 11, e005907.	4.8	30
68	Ultrafast Volumetric Optoacoustic Imaging of Whole Isolated Beating Mouse Heart. Scientific Reports, 2018, 8, 14132.	3.3	16
69	Critical Volume of Human Myocardium Necessary to Maintain Ventricular Fibrillation. Circulation: Arrhythmia and Electrophysiology, 2018, 11, e006692.	4.8	21
70	Irreversible electroporation: Proceed with caution. Heart Rhythm, 2018, 15, 1880-1881.	0.7	2
71	A coupled-clock system drives the automaticity of human sinoatrial nodal pacemaker cells. Science Signaling, 2018, 11, .	3.6	85
72	Authorsâ€™ Reply: Unravelling the Mysteries Of The Human AV Node. Arrhythmia and Electrophysiology Review, 2018, 7, 64.	2.4	13

#	Article	IF	Citations
73	Specialized impulse conduction pathway in the alligator heart. ELife, 2018, 7, .	6.0	37
74	Capacitively coupled arrays of multiplexed flexible silicon transistors for long-term cardiac electrophysiology. Nature Biomedical Engineering, 2017, 1, .	22.5	210
75	Widespread Down-Regulation of Cardiac Mitochondrial and Sarcomeric Genes in Patients With Sepsis*. Critical Care Medicine, 2017, 45, 407-414.	0.9	76
76	Fractionated electrograms with ST-segment elevation recorded from the human right ventricular outflow tract. HeartRhythm Case Reports, 2017, 3, 546-550.	0.4	13
77	Local transmural action potential gradients are absent in the isolated, intact dog heart but present in the corresponding coronary-perfused wedge. Physiological Reports, 2017, 5, e13251.	1.7	15
78	Pathways to clinical CLARITY: volumetric analysis of irregular, soft, and heterogeneous tissues in development and disease. Scientific Reports, 2017, 7, 5899.	3.3	33
79	Ventricular Fibrillation. Circulation: Arrhythmia and Electrophysiology, 2017, 10, .	4.8	4
80	Î²-adrenergic stimulation augments transmural dispersion of repolarization via modulation of delayed rectifier currents IKs and IKr in the human ventricle. Scientific Reports, 2017, 7, 15922.	3.3	24
81	Transient Notch Activation Induces Long-Term Gene Expression Changes Leading to Sick Sinus Syndrome in Mice. Circulation Research, 2017, 121, 549-563.	4.5	23
82	Why publish in the American Journal of Physiology-Heart and Circulatory Physiology?. American Journal of Physiology - Heart and Circulatory Physiology, 2017, 313, H221-H223.	3.2	4
83	Tachycardia Termination by Shocks and Pacing. , 2017, , 190-212.		0
84	Computational assessment of the functional role of sinoatrial node exit pathways in the human heart. PLoS ONE, 2017, 12, e0183727.	2.5	32
85	At the Atrioventricular Crossroads: Dual Pathway Electrophysiology in the Atrioventricular Node and its underlying Heterogeneities. Arrhythmia and Electrophysiology Review, 2017, 6, 179.	2.4	40
86	Commentary: A Supraventricular Tachycardia: What Is It? Where Should One Ablate?. Journal of Innovations in Cardiac Rhythm Management, 2017, 8, 2684-2688.	0.5	0
87	Intermittent drivers anchoring to structural heterogeneities as a major pathophysiological mechanism of human persistent atrial fibrillation. Journal of Physiology, 2016, 594, 2387-2398.	2.9	132
88	Mitochondrial structure and function are not different between nonfailing donor and endâ€stage failing human hearts. FASEB Journal, 2016, 30, 2698-2707.	0.5	21
89	Technical advances in studying cardiac electrophysiology â€“ Role of rabbit models. Progress in Biophysics and Molecular Biology, 2016, 121, 97-109.	2.9	12
90	Ultrathin Injectable Sensors: Ultrathin Injectable Sensors of Temperature, Thermal Conductivity, and Heat Capacity for Cardiac Ablation Monitoring (Adv. Healthcare Mater. 3/2016). Advanced Healthcare Materials, 2016, 5, 394-394.	7.6	0

#	Article	IF	Citations
91	Optical Mapping of Cardiac Electromechanics. Biophysical Journal, 2016, 111, 269-270.	0.5	2
92	Letter by Ng and Efimov Regarding Article, â€œElectrophysiological Effects of Selective Atrial Coronary Artery Occlusion in Humansâ€. Circulation, 2016, 134, e397-e398.	1.6	0
93	Human Organotypic Cultured Cardiac Slices: New Platform For High Throughput Preclinical Human Trials. Scientific Reports, 2016, 6, 28798.	3.3	98
94	Pitx2 modulates a Tbx5 -dependent gene regulatory network to maintain atrial rhythm. Science Translational Medicine, 2016, 8, 354ra115.	12.4	123
95	Ultrathin Injectable Sensors of Temperature, Thermal Conductivity, and Heat Capacity for Cardiac Ablation Monitoring. Advanced Healthcare Materials, 2016, 5, 373-381.	7.6	47
96	A technical review of optical mapping of intracellular calcium within myocardial tissue. American Journal of Physiology - Heart and Circulatory Physiology, 2016, 310, H1388-H1401.	3.2	67
97	Arrhythmogenic and metabolic remodelling of failing human heart. Journal of Physiology, 2016, 594, 3963-3980.	2.9	18
98	Reduced response to IKr blockade and altered hERG1a/1b stoichiometry in human heart failure. Journal of Molecular and Cellular Cardiology, 2016, 96, 82-92.	1.9	37
99	Towards Geometric Modeling of the Atria using Optical Coherence Tomography. , 2016, , .		0
100	Diet-induced obesity promotes altered remodeling and exacerbated cardiac hypertrophy following pressure overload. Physiological Reports, 2015, 3, e12489.	1.7	15
101	Quantification of the Transmural Dynamics of Atrial Fibrillation by Simultaneous Endocardial and Epicardial Optical Mapping in an Acute Sheep Model. Circulation: Arrhythmia and Electrophysiology, 2015, 8, 456-465.	4.8	44
102	Membranes: Materials and Fractal Designs for 3D Multifunctional Integumentary Membranes with Capabilities in Cardiac Electrotherapy (Adv. Mater. 10/2015). Advanced Materials, 2015, 27, 1730-1730.	21.0	2
103	Dual V _m /Ca Imaging of Premature Ventricular Contractions. Circulation: Arrhythmia and Electrophysiology, 2015, 8, 529-530.	4.8	0
104	Introduction to Noninvasive Cardiac Mapping. Cardiac Electrophysiology Clinics, 2015, 7, 1-16.	1.7	16
105	Rotors in Patients with Persistent Atrial Fibrillation. Cardiac Electrophysiology Clinics, 2015, 7, 157-163.	1.7	2
106	Electrophysiological Changes Correlated with Temperature Increases Induced by High-Intensity Focused Ultrasound Ablation. Ultrasound in Medicine and Biology, 2015, 41, 432-448.	1.5	4
107	Canonical Wnt Signaling Regulates Atrioventricular Junction Programming and Electrophysiological Properties. Circulation Research, 2015, 116, 398-406.	4.5	90
108	Materials and Fractal Designs for 3D Multifunctional Integumentary Membranes with Capabilities in Cardiac Electrotherapy. Advanced Materials, 2015, 27, 1731-1737.	21.0	141

#	Article	IF	Citations
109	Transmural APD gradient synchronizes repolarization in the human left ventricular wall. Cardiovascular Research, 2015, 108, 188-196.	3.8	49
110	An activation-repolarization time metric to predict localized regions of high susceptibility to reentry. Heart Rhythm, 2015, 12, 1644-1653.	0.7	40
111	Feasibility of a semi-automated method for cardiac conduction velocity analysis of high-resolution activation maps. Computers in Biology and Medicine, 2015, 65, 177-183.	7.0	40
112	Imaging of Ventricular Fibrillation and Defibrillation: The Virtual Electrode Hypothesis. Advances in Experimental Medicine and Biology, 2015, 859, 343-365.	1.6	12
113	Arrhythmogenic Remodeling of Î² ₂ Versus Î² ₁ Adrenergic Signaling in the Human Failing Heart. Circulation: Arrhythmia and Electrophysiology, 2015, 8, 409-419.	4.8	73
114	Mechanisms of Atrioventricular Nodal Excitability and Propagation. , 2014, , 275-285.		6
115	Human cardiac systems electrophysiology and arrhythmogenesis: iteration of experiment and computation. Europace, 2014, 16, iv77-iv85.	1.7	8
116	Tuning the electrical properties of the heart by differential trafficking of KATP ion channel complexes. Journal of Cell Science, 2014, 127, 2106-19.	2.0	43
117	Sensors: Stretchable, Multiplexed pH Sensors With Demonstrations on Rabbit and Human Hearts Undergoing Ischemia (Adv. Healthcare Mater. 1/2014). Advanced Healthcare Materials, 2014, 3, 2-2.	7.6	3
118	Adverse Remodeling of the Electrophysiological Response to Ischemiaâ€“Reperfusion in Human Heart Failure Is Associated With Remodeling of Metabolic Gene Expression. Circulation: Arrhythmia and Electrophysiology, 2014, 7, 875-882.	4.8	22
119	3D multifunctional integumentary membranes for spatiotemporal cardiac measurements and stimulation across the entire epicardium. Nature Communications, 2014, 5, 3329.	12.8	485
120	Stretchable, Multiplexed pH Sensors With Demonstrations on Rabbit and Human Hearts Undergoing Ischemia. Advanced Healthcare Materials, 2014, 3, 59-68.	7.6	105
121	A Shocking Past: A Walk Through Generations of Defibrillation Development. IEEE Transactions on Biomedical Engineering, 2014, 61, 1466-1473.	4.2	5
122	Nanoscale three-dimensional imaging of the human myocyte. Journal of Structural Biology, 2014, 188, 55-60.	2.8	14
123	Mitochondrial depolarization and electrophysiological changes during ischemia in the rabbit and human heart. American Journal of Physiology - Heart and Circulatory Physiology, 2014, 307, H1178-H1186.	3.2	11
124	Patient-specific flexible and stretchable devices for cardiac diagnostics and therapy. Progress in Biophysics and Molecular Biology, 2014, 115, 244-251.	2.9	50
125	A Century of Optocardiography. IEEE Reviews in Biomedical Engineering, 2014, 7, 115-125.	18.0	30
126	c-Src Kinase Inhibition Reduces Arrhythmia Inducibility and Connexin43 Dysregulation After Myocardial Infarction. Journal of the American College of Cardiology, 2014, 63, 928-934.	2.8	45

#	Article	IF	Citations
127	Multistage Electrotherapy Delivered Through Chronically-Implanted Leads Terminates Atrial Fibrillation With Lower Energy Than a Single Biphasic Shock. Journal of the American College of Cardiology, 2014, 63, 40-48.	2.8	26
128	Two Centuries of Resuscitation. Journal of the American College of Cardiology, 2013, 62, 2110-2111.	2.8	4
129	Direct reprogramming of mouse fibroblasts to cardiomyocyte-like cells using Yamanaka factors on engineered poly(ethylene glycol) (PEG) hydrogels. Biomaterials, 2013, 34, 6559-6571.	11.4	45
130	Measuring Dynamic 3D Micro-Structures Using a Superfast Digital Binary Phase-Shifting Technique. , 2013, , .		1
131	Mitochondrial dysfunction causing cardiac sodium channel downregulation in cardiomyopathy. Journal of Molecular and Cellular Cardiology, 2013, 54, 25-34.	1.9	71
132	Adverse impact of heart failure on the electrophysiological response to ischaemia-reperfusion in human myocardium. Lancet, The, 2013, 381, S81.	13.7	0
133	Functional roles of KATP channel subunits in metabolic inhibition. Journal of Molecular and Cellular Cardiology, 2013, 62, 90-98.	1.9	12
134	Mechanisms of Cardiac and Renal Dysfunction in Patients Dying of Sepsis. American Journal of Respiratory and Critical Care Medicine, 2013, 187, 509-517.	5.6	392
135	3D absolute shape measurement of live rabbit hearts with a superfast two-frequency phase-shifting technique. Optics Express, 2013, 21, 5822.	3.4	107
136	Three-dimensional printing physiology laboratory technology. American Journal of Physiology - Heart and Circulatory Physiology, 2013, 305, H1569-H1573.	3.2	23
137	â€œFibrillating Atrium: Rabbit Warren! Not Beehive!â€• Journal of Cardiovascular Electrophysiology, 2013, 24, 336-337.	1.7	3
138	Gender Differences in Electrophysiological Gene Expression in Failing and Non-Failing Human Hearts. PLoS ONE, 2013, 8, e54635.	2.5	48
139	mRNA Expression Levels in Failing Human Hearts Predict Cellular Electrophysiological Remodeling: A Population-Based Simulation Study. PLoS ONE, 2013, 8, e56359.	2.5	61
140	Diabetes increases mortality after myocardial infarction by oxidizing CaMKII. Journal of Clinical Investigation, 2013, 123, 1262-1274.	8.2	203
141	Diabetes increases mortality after myocardial infarction by oxidizing CaMKII. Journal of Clinical Investigation, 2013, 123, 2333-2333.	8.2	2
142	A Fully Implantable Pacemaker for the Mouse: From Battery to Wireless Power. PLoS ONE, 2013, 8, e76291.	2.5	32
143	Estimation of Conductivity Tensors from Human Ventricular Optical Mapping Recordings. Lecture Notes in Computer Science, 2013, , 224-231.	1.3	0
144	Hypothermia-induced spatially discordant action potential duration alternans and arrhythmogenesis in nonhibernating versus hibernating mammals. American Journal of Physiology - Heart and Circulatory Physiology, 2012, 303, H1035-H1046.	3.2	33

#	Article	IF	Citations
145	Right ventricular arrhythmogenesis in failing human heart: the role of conduction and repolarization remodeling. American Journal of Physiology - Heart and Circulatory Physiology, 2012, 303, H1426-H1434.	3.2	22
146	Mapping cardiac surface mechanics with structured light imaging. American Journal of Physiology - Heart and Circulatory Physiology, 2012, 303, H712-H720.	3.2	39
147	Focal but reversible diastolic sheet dysfunction reflects regional calcium mishandling in dystrophicmdxmouse hearts. American Journal of Physiology - Heart and Circulatory Physiology, 2012, 303, H559-H568.	3.2	22
148	Electroporation induced by internal defibrillation shock with and without recovery in intact rabbit hearts. American Journal of Physiology - Heart and Circulatory Physiology, 2012, 303, H439-H449.	3.2	24
149	The Future of Optical Mapping is Bright. Circulation Research, 2012, 110, e70-1.	4.5	13
150	Quantification of fiber orientation in the canine atrial pacemaker complex using optical coherence tomography. Journal of Biomedical Optics, 2012, 17, 1.	2.6	32
151	Arrhythmogenic remodelling of activation and repolarization in the failing human heart. Europace, 2012, 14, v50-v57.	1.7	16
152	Three Potential Mechanisms for Failure of High Intensity Focused Ultrasound Ablation in Cardiac Tissue. Circulation: Arrhythmia and Electrophysiology, 2012, 5, 409-416.	4.8	22
153	CD36 Protein Influences Myocardial Ca2+ Homeostasis and Phospholipid Metabolism. Journal of Biological Chemistry, 2012, 287, 38901-38912.	3.4	27
154	The role of dynamic instability and wavelength in arrhythmia maintenance as revealed by panoramic imaging with blebbistatin vs. 2,3-butanedione monoxime. American Journal of Physiology - Heart and Circulatory Physiology, 2012, 302, H262-H269.	3.2	66
155	A Novel Low-Energy Electrotherapy That Terminates Ventricular Tachycardia With Lower Energy Than a Biphasic Shock When Antitachycardia Pacing Fails. Journal of the American College of Cardiology, 2012, 60, 2393-2398.	2.8	52
156	Optical Mapping of Cardiac ATP Sensitive Potassium Channel Function under Metabolic Inhibition. Biophysical Journal, 2012, 102, 339a.	0.5	0
157	Sulfonylurea Receptor Subunit Composition of KATP Channels in Dog and Human Hearts. Biophysical Journal, 2012, 102, 339a.	0.5	0
158	Conduction Remodeling in Human End-Stage Nonischemic Left Ventricular Cardiomyopathy. Circulation, 2012, 125, 1835-1847.	1.6	142
159	Processing and analysis of cardiac optical mapping data obtained with potentiometric dyes. American Journal of Physiology - Heart and Circulatory Physiology, 2012, 303, H753-H765.	3.2	191
160	Longitudinal Study of Cardiac Remodelling in Rabbits Following Infarction. Canadian Journal of Cardiology, 2012, 28, 230-238.	1.7	8
161	Threeâ€dimensional mechanisms of increased vulnerability to electric shocks in myocardial infarction: Altered virtual electrode polarizations and conduction delay in the periâ€infarct zone. Journal of Physiology, 2012, 590, 4537-4551.	2.9	42
162	Remodeling of Calcium Handling in Human Heart Failure. Advances in Experimental Medicine and Biology, 2012, 740, 1145-1174.	1.6	88

#	Article	IF	Citations
163	Structureâ€“Function Relationship in the Sinus and Atrioventricular Nodes. Pediatric Cardiology, 2012, 33, 890-899.	1.3	42
164	Long-term culture of HL-1 cardiomyocytes in modular poly(ethylene glycol) microsphere-based scaffolds crosslinked in the phase-separated state. Acta Biomaterialia, 2012, 8, 31-40.	8.3	36
165	Conduction abnormalities in metabolically stressed CD36 deficient mouse. FASEB Journal, 2012, 26, 137.8.	0.5	0
166	A Method for Measuring 3D Cardiac Surface Mechanics with Highâ€Speed Structured Light Imaging. FASEB Journal, 2012, 26, 864.18.	0.5	0
167	Novel stretchable electronics platform for simultaneous highâ€density electrical and optical recordings from ex vivo hearts. FASEB Journal, 2012, 26, 1053.7.	0.5	0
168	Termination of sustained atrial flutter and fibrillation using low-voltage multiple-shock therapy. Heart Rhythm, 2011, 8, 101-108.	0.7	50
169	Panoramic Imaging Reveals Mechanisms of Resistance to Ventricular Arrhythmias Under Blebbistatin as Compared to 2,3-Butanedione Monoxime (BDM). Biophysical Journal, 2011, 100, 435a.	0.5	0
170	Multiparametric Optical Mapping of the Langendorff-perfused Rabbit Heart. Journal of Visualized Experiments, 2011, , .	0.3	36
171	Molecular architecture of the human specialised atrioventricular conduction axis. Journal of Molecular and Cellular Cardiology, 2011, 50, 642-651.	1.9	97
172	Effects of KATP channel openers diazoxide and pinacidil in coronary-perfused atria and ventricles from failing and non-failing human hearts. Journal of Molecular and Cellular Cardiology, 2011, 51, 215-225.	1.9	109
173	Anatomic Localization and Autonomic Modulation of Atrioventricular Junctional Rhythm in Failing Human Hearts. Circulation: Arrhythmia and Electrophysiology, 2011, 4, 515-525.	4.8	46
174	Optical Mapping of Action Potentials and Calcium Transients in the Mouse Heart. Journal of Visualized Experiments, 2011, , .	0.3	47
175	Spatiotemporal control of heart rate in a rabbit heart. Journal of Electrocardiology, 2011, 44, 626-634.	0.9	32
176	Rabbit-specific ventricular model of cardiac electrophysiological function including specialized conduction system. Progress in Biophysics and Molecular Biology, 2011, 107, 90-100.	2.9	62
177	Minimum Information about a Cardiac Electrophysiology Experiment (MICEE): Standardised reporting for model reproducibility, interoperability, and data sharing. Progress in Biophysics and Molecular Biology, 2011, 107, 4-10.	2.9	75
178	Low-Energy Multistage Atrial Defibrillation Therapy Terminates Atrial Fibrillation With Less Energy Than a Single Shock. Circulation: Arrhythmia and Electrophysiology, 2011, 4, 917-925.	4.8	42
179	Transmural Heterogeneity and Remodeling of Ventricular Excitation-Contraction Coupling in Human Heart Failure. Circulation, 2011, 123, 1881-1890.	1.6	134
180	Role of Pyk2 in cardiac arrhythmogenesis. American Journal of Physiology - Heart and Circulatory Physiology, 2011, 301, H975-H983.	3.2	29

#	Article	IF	Citations
181	Molecular Basis of the Electrical Activity of the Atrioventricular Junction and Purkinje Fibres. , 2011, , 211-230.		1
182	Oxidized CaMKII causes cardiac sinus node dysfunction in mice. Journal of Clinical Investigation, 2011, 121, 3277-3288.	8.2	193
183	Transmural Dispersion of Repolarization in Failing and Nonfailing Human Ventricle. Circulation Research, 2010, 106, 981-991.	4.5	282
184	Anatomy and Electrophysiology of the Human AV Node. PACE - Pacing and Clinical Electrophysiology, 2010, 33, 754-762.	1.2	84
185	Mechanisms of Fibrillation: Neurogenic or Myogenic? Reentrant or Focal? Multiple or Single?: Still Puzzling After 160 Years of Inquiry. Journal of Cardiovascular Electrophysiology, 2010, 21, 1274-1275.	1.7	7
186	Mapping Cardiac Pacemaker Circuits. Circulation Research, 2010, 106, 255-271.	4.5	49
187	Complex Interactions Between the Sinoatrial Node and Atrium During Reentrant Arrhythmias in the Canine Heart. Circulation, 2010, 122, 782-789.	1.6	64
188	Response to Selvaraj and Nair. Circulation Research, 2010, 107, .	4.5	0
189	Structured light imaging of epicardial mechanics. , 2010, 2010, 5157-60.		2
190	Molecular remodeling of ion channels, exchangers and pumps in atrial and ventricular myocytes in ischemic cardiomyopathy. Channels, 2010, 4, 101-107.	2.8	27
191	Multiscale imaging of the human heart: Building the foundation for human systems physiology and translational medicine. , 2010, 2010, 5177-80.		8
192	Functional anatomy of the murine sinus node: high-resolution optical mapping of ankyrin-B heterozygous mice. American Journal of Physiology - Heart and Circulatory Physiology, 2010, 299, H482-H491.	3.2	82
193	Optical Mapping of the Isolated Coronary-Perfused Human Sinus Node. Journal of the American College of Cardiology, 2010, 56, 1386-1394.	2.8	151
194	Differential KATP channel pharmacology in intact mouse heart. Journal of Molecular and Cellular Cardiology, 2010, 48, 152-160.	1.9	84
195	Some recent advance on high-speed, high-resolution 3-D shape measurement using projector defocusing. , 2010, , .		2
196	Enhanced susceptibility to alternans in a rabbit model of chronic myocardial infarction. , 2009, 2009, 4527-30.		8
197	Resolution of Established Cardiac Hypertrophy and Fibrosis and Prevention of Systolic Dysfunction in a Transgenic Rabbit Model of Human Cardiomyopathy Through Thiol-Sensitive Mechanisms. Circulation, 2009, 119, 1398-1407.	1.6	106
198	Virtual histology of the human heart using optical coherence tomography. Journal of Biomedical Optics, 2009, 14, 054002.	2.6	23

#	Article	IF	Citations
199	Cardioversion. Circulation, 2009, 120, 1623-1632.	1.6	35
200	Structural and Functional Evidence for Discrete Exit Pathways That Connect the Canine Sinoatrial Node and Atria. Circulation Research, 2009, 104, 915-923.	4.5	114
201	Membrane Time Constant During Internal Defibrillation Strength Shocks in Intact Heart: Effects of Na⁺ and Ca²⁺ Channel Blockers. Journal of Cardiovascular Electrophysiology, 2009, 20, 85-92.	1.7	10
202	Chronaxie of Defibrillation: A Pathway Toward Further Optimization of Defibrillation Waveform?. Journal of Cardiovascular Electrophysiology, 2009, 20, 315-317.	1.7	3
203	The Virtual Electrode Hypothesis of Defibrillation. , 2009, , 331-356.		4
204	Transient Local Injury Current in Right Ventricular Electrogram After Implantable Cardioverter-Defibrillator Shock Predicts Heart Failure Progression. Journal of the American College of Cardiology, 2009, 54, 822-828.	2.8	58
205	The Role of Electroporation. , 2009, , 441-455.		0
206	Multiple monophasic shocks improve electrotherapy of ventricular tachycardia in a rabbit model of chronic infarction. Heart Rhythm, 2009, 6, 1020-1027.	0.7	54
207	Panoramic imaging reveals basic mechanisms of induction and termination of ventricular tachycardia in rabbit heart with chronic infarction: Implications for low-voltage cardioversion. Heart Rhythm, 2009, 6, 87-97.	0.7	61
208	Electroporation of Cardiac and Nerve Cells. , 2009, , 187-200.		4
209	Naum Lazarevich Gurvich (1905-1981) and his contribution to the history of defibrillation. Cardiology Journal, 2009, 16, 190-3.	1.2	3
210	Quantitative Panoramic Imaging of Epicardial Electrical Activity. Annals of Biomedical Engineering, 2008, 36, 1649-1658.	2.5	45
211	Connexin 43 Expression Delineates Two Discrete Pathways in the Human Atrioventricular Junction. Anatomical Record, 2008, 291, 204-215.	1.4	81
212	Right Pectoral Implantable Cardioverter Defibrillators: Role of the Proximal (SVC) Coil. PACE - Pacing and Clinical Electrophysiology, 2008, 31, 1025-1035.	1.2	15
213	Spatial Distribution and Extent of Electroporation by Strong Internal Shock in Intact Structurally Normal and Chronically Infarcted Rabbit Hearts. Journal of Cardiovascular Electrophysiology, 2008, 19, 1080-1089.	1.7	17
214	Atria are more susceptible to electroporation than ventricles: Implications for atrial stunning, shock-induced arrhythmia and defibrillation failure. Heart Rhythm, 2008, 5, 593-604.	0.7	34
215	Electrophysiological mechanisms of antiarrhythmic protection during hypothermia in winter hibernating versus nonhibernating mammals. Heart Rhythm, 2008, 5, 1587-1596.	0.7	39
216	To the Editorâ€"Response. Heart Rhythm, 2008, 5, 503-504.	0.7	0

#	Article	IF	Citations
217	Nature Versus Nurture in Cardiac Conduction. Circulation Research, 2008, 103, 119-121.	4.5	3
218	Bimodal biophotonic imaging of the structure-function relationship in cardiac tissue. Journal of Biomedical Optics, 2008, 13, 054012.	2.6	31
219	Quantification of cardiac fiber orientation using optical coherence tomography. Journal of Biomedical Optics, 2008, 13, 030505.	2.6	61
220	Optical Mapping of the Human Atrioventricular Junction. Circulation, 2008, 117, 1474-1477.	1.6	50
221	Computer Three-Dimensional Reconstruction of the Atrioventricular Node. Circulation Research, 2008, 102, 975-985.	4.5	106
222	Effect of Electroporation on Cardiac Electrophysiology. Methods in Molecular Biology, 2008, 423, 433-448.	0.9	27
223	Abstract 5286: Human AV Junctional Pacemaker Shift Due to Cholinergic and Adrenergic Stimulations: Optical Imaging with a Novel Long Wavelength Voltage-Sensitive Dye. Circulation, 2008, 118, .	1.6	3
224	Atrioventricular conduction with and without AV nodal delay: two pathways to the bundle of His in the rabbit heart. American Journal of Physiology - Heart and Circulatory Physiology, 2007, 293, H1122-H1130.	3.2	34
225	Effects of sterile pericarditis on connexins 40 and 43 in the atria: correlation with abnormal conduction and atrial arrhythmias. American Journal of Physiology - Heart and Circulatory Physiology, 2007, 293, H1231-H1241.	3.2	75
226	Cloning, sequence analysis and phylogeny of connexin43 isolated from American black bear heart. DNA Sequence, 2007, 18, 380-384.	0.7	4
227	Three-dimensional panoramic imaging of cardiac arrhythmias in rabbit heart. Journal of Biomedical Optics, 2007, 12, 044019.	2.6	45
228	Enhanced Transmural Fiber Rotation and Connexin 43 Heterogeneity Are Associated With an Increased Upper Limit of Vulnerability in a Transgenic Rabbit Model of Human Hypertrophic Cardiomyopathy. Circulation Research, 2007, 101, 1049-1057.	4.5	50
229	Application of blebbistatin as an excitationâ€“contraction uncoupler for electrophysiologic study of rat and rabbit hearts. Heart Rhythm, 2007, 4, 619-626.	0.7	334
230	Innovation in optical imaging: Looking inside the heart. Heart Rhythm, 2007, 4, 925-926.	0.7	2
231	Autonomic control and innervation of the atrioventricular junctional pacemaker. Heart Rhythm, 2007, 4, 1326-1335.	0.7	21
232	Direct measurements of membrane time constant during defibrillation strength shocks. Heart Rhythm, 2007, 4, 478-486.	0.7	12
233	The Role of Photon Scattering in Optical Signal Distortion during Arrhythmia and Defibrillation. Biophysical Journal, 2007, 93, 3714-3726.	0.5	71
234	Optical Coherence Tomography as a Tool for Measuring Morphogenetic Deformation of the Looping Heart. Anatomical Record, 2007, 290, 1057-1068.	1.4	49

#	Article	IF	Citations
235	Natural mechanisms of resistance to ventricular fibrillation during hypothermia: comparative study of a hibernator Citellus undulatus versus rabbit. FASEB Journal, 2007, 21, .	0.5	0
236	Overexpression of Cx43 and NF200 in the ground squirrel Citellus undulatus heart during the hibernation state. FASEB Journal, 2007, 21, A487.	0.5	0
237	Gene Printer: Laser-Scanning Targeted Transfection of Cultured Cardiac Neonatal Rat Cells. Cell Communication and Adhesion, 2006, 13, 217-222.	1.0	25
238	Precordial thump and commotio cordis: The yin and yang of mechanoelectric feedback in the heart. Heart Rhythm, 2006, 3, 187-188.	0.7	5
239	Virtual electrode hypothesis of defibrillation. Heart Rhythm, 2006, 3, 1100-1102.	0.7	27
240	4D embryonic cardiography using gated optical coherence tomography. Optics Express, 2006, 14, 736.	3.4	153
241	Connexins in the Sinoatrial and Atrioventricular Nodes. , 2006, 42, 175-197.		117
242	Connections, connections, connexins: Towards systems biology paradigm of cardiac arrhythmia. Journal of Molecular and Cellular Cardiology, 2006, 41, 949-951.	1.9	7
243	Present Understanding of Shock Polarity for Internal Defibrillation: The Obvious and Non-Obvious Clinical Implications. PACE - Pacing and Clinical Electrophysiology, 2006, 29, 885-891.	1.2	39
244	Three-dimensional anatomy of the conduction system of the early embryonic rabbit heart. The Anatomical Record Part A: Discoveries in Molecular, Cellular, and Evolutionary Biology, 2006, 288A, 3-7.	2.0	4
245	Finite Element Modeling of Electric Field Effects of TASER Devices on Nerve and Muscle. , 2006, 2006, 1277-9.		21
246	Tornado in a dish: Revealing the mechanisms of ventricular arrhythmias in engineered cardiac tissues. Cardiovascular Research, 2006, 69, 307-308.	3.8	0
247	Postganglionic nerve stimulation induces temporal inhibition of excitability in rabbit sinoatrial node. American Journal of Physiology - Heart and Circulatory Physiology, 2006, 291, H612-H623.	3.2	68
248	Mechanisms of unpinning and termination of ventricular tachycardia. American Journal of Physiology - Heart and Circulatory Physiology, 2006, 291, H184-H192.	3.2	78
249	Localization of Na + Channel Isoforms at the Atrioventricular Junction and Atrioventricular Node in the Rat. Circulation, 2006, 114, 1360-1371.	1.6	65
250	4D optical coherence tomography of the embryonic heart using gated imaging. , 2005, 5690, 1.		1
251	Optical mapping of the atrioventricular junction. Journal of Electrocardiology, 2005, 38, 121-125.	0.9	16
252	Fluorescence Imaging for Real-Time Monitoring of High-Intensity Focused Ultrasound Cardiac Ablation. Annals of Biomedical Engineering, 2005, 33, 1352-1359.	2.5	10

#	Article	IF	Citations
253	Optical Coherence Tomography Imaging of the Purkinje Network. Journal of Cardiovascular Electrophysiology, 2005, 16, 559-560.	1.7	15
254	Computer Three-Dimensional Reconstruction of the Sinoatrial Node. Circulation, 2005, 111, 846-854.	1.6	163
255	Electrophysiology and anatomy of embryonic rabbit hearts before and after septation. American Journal of Physiology - Heart and Circulatory Physiology, 2005, 288, H344-H351.	3.2	21
256	Mechanisms of superiority of ascending ramp waveforms: new insights into mechanisms of shock-induced vulnerability and defibrillation. American Journal of Physiology - Heart and Circulatory Physiology, 2005, 289, H569-H577.	3.2	16
257	Mechanisms of enhanced shock-induced arrhythmogenesis in the rabbit heart with healed myocardial infarction. American Journal of Physiology - Heart and Circulatory Physiology, 2005, 289, H1054-H1068.	3.2	19
258	The Gurvich waveform has lower defibrillation threshold than the rectilinear waveform and the truncated exponential waveform in the rabbit heart. Canadian Journal of Physiology and Pharmacology, 2005, 83, 152-160.	1.4	5
259	Chessboard of atrial fibrillation: reentry or focus? Single or multiple source(s)? Neurogenic or myogenic?. American Journal of Physiology - Heart and Circulatory Physiology, 2005, 289, H977-H979.	3.2	12
260	Differences Between Left and Right Ventricular Chamber Geometry Affect Cardiac Vulnerability to Electric Shocks. Circulation Research, 2005, 97, 168-175.	4.5	130
261	Electroporation of the heart. Europace, 2005, 7, S146-S154.	1.7	86
262	Hibernator Citellus undulatus maintains safe cardiac conduction and is protected against tachyarrhythmias during extreme hypothermia: Possible role of Cx43 and Cx45 up-regulation. Heart Rhythm, 2005, 2, 966-975.	0.7	41
263	Effects of electroporation on optically recorded transmembrane potential responses to high-intensity electrical shocks. American Journal of Physiology - Heart and Circulatory Physiology, 2004, 286, H412-H418.	3.2	42
264	Shock-induced arrhythmogenesis is enhanced by 2,3-butanedione monoxime compared with cytochalasin D. American Journal of Physiology - Heart and Circulatory Physiology, 2004, 286, H310-H318.	3.2	28
265	Dynamics of virtual electrode-induced scroll-wave reentry in a 3D bidomain model. American Journal of Physiology - Heart and Circulatory Physiology, 2004, 287, H1570-H1581.	3.2	32
266	Optical Imaging of the Heart. Circulation Research, 2004, 95, 21-33.	4.5	353
267	Functional imaging of the embryonic pacemaking and cardiac conduction system over the past 150 years: Technologies to overcome the challenges. The Anatomical Record, 2004, 280A, 980-989.	1.8	14
268	Structure-function relationship in the AV junction. The Anatomical Record, 2004, 280A, 952-965.	1.8	65
269	OCT imaging of cardiac architecture. , 2004, , .		2
270	Virtual electrode theory explains pacing threshold increase caused by cardiac tissue damage. American Journal of Physiology - Heart and Circulatory Physiology, 2004, 286, H2183-H2194.	3.2	59

#	Article	IF	Citations
271	Mechanisms of AV Nodal Excitability and Propagation. , 2004, , 203-212.		5
272	Diastolic Shocking Experience:. Journal of Cardiovascular Electrophysiology, 2003, 14, 1223-1224.	1.7	4
273	Effects of Lidocaine on Shockâ€Induced Vulnerability. Journal of Cardiovascular Electrophysiology, 2003, 14, S237-S248.	1.7	6
274	Optical Mapping Technique Applied to Biventricular Pacing:. Potential Mechanisms of Ventricular Arrhythmias Occurrence. PACE - Pacing and Clinical Electrophysiology, 2003, 26, 197-205.	1.2	23
275	Cx43 and Dual-Pathway Electrophysiology of the Atrioventricular Node and Atrioventricular Nodal Reentry. Circulation Research, 2003, 92, 469-475.	4.5	61
276	Fibrillation or Neurillation. Circulation Research, 2003, 92, 1062-1064.	4.5	2
277	Site of Origin and Molecular Substrate of Atrioventricular Junctional Rhythm in the Rabbit Heart. Circulation Research, 2003, 93, 1102-1110.	4.5	144
278	Nonlinear effects in subthreshold virtual electrode polarization. American Journal of Physiology - Heart and Circulatory Physiology, 2003, 284, H2368-H2374.	3.2	16
279	Phase I and phase II of short-term mechanical restitution in perfused rat left ventricles. American Journal of Physiology - Heart and Circulatory Physiology, 2002, 282, H1311-H1319.	3.2	7
280	Mechanical alternans and restitution in failing SHHF rat left ventricles. American Journal of Physiology - Heart and Circulatory Physiology, 2002, 282, H1320-H1326.	3.2	27
281	Mechanisms of make and break excitation revisited: paradoxical break excitation during diastolic stimulation. American Journal of Physiology - Heart and Circulatory Physiology, 2002, 282, H565-H575.	3.2	37
282	Mechanisms of shock-induced arrhythmogenesis during acute global ischemia. American Journal of Physiology - Heart and Circulatory Physiology, 2002, 282, H2141-H2151.	3.2	37
283	Anode-break excitation during end-diastolic stimulation is explained by half-cell double layer discharge. IEEE Transactions on Biomedical Engineering, 2002, 49, 1217-1220.	4.2	16
284	The Pinwheel Experiment Re-revisited. Journal of Theoretical Biology, 2002, 214, 147-153.	1.7	12
285	Imaging of the Atrioventricular Node Using Optical Coherence Tomography. Journal of Cardiovascular Electrophysiology, 2002, 13, 95-95.	1.7	25
286	Virtual Electrodes in Virtual Reality of Defibrillation. Journal of Cardiovascular Electrophysiology, 2002, 13, 680-681.	1.7	2
287	The mechanisms of the vulnerable window: the role of virtual electrodes and shock polarity. Canadian Journal of Physiology and Pharmacology, 2001, 79, 25-33.	1.4	33
288	Fluorescent Imaging of a Dual-Pathway Atrioventricular-Nodal Conduction System. Circulation Research, 2001, 88, E23-30.	4.5	29

#	Article	IF	Citations
289	The mechanisms of the vulnerable window: the role of virtual electrodes and shock polarity. Canadian Journal of Physiology and Pharmacology, 2001, 79, 25-33.	1.4	7
290	Virtual Electrode Polarization of Ventricular Epicardium During Bipolar Stimulation. Journal of Cardiovascular Electrophysiology, 2000, 11, 605-605.	1.7	11
291	Direct Evidence of the Role of Virtual Electrode-Induced Phase Singularity in Success and Failure of Defibrillation. Journal of Cardiovascular Electrophysiology, 2000, 11, 861-868.	1.7	81
292	Reversal of Repolarization Gradient Does Not Reverse the Chirality of Shock-Induced Reentry in the Rabbit Heart. Journal of Cardiovascular Electrophysiology, 2000, 11, 998-1007.	1.7	26
293	Virtual Electrodes and Deexcitation: New Insights into Fibrillation Induction and Defibrillation. Journal of Cardiovascular Electrophysiology, 2000, 11, 339-353.	1.7	173
294	Virtual electrode polarization in the far field: implications for external defibrillation. American Journal of Physiology - Heart and Circulatory Physiology, 2000, 279, H1055-H1070.	3.2	94
295	The Role of Electroporation in Defibrillation. Circulation Research, 2000, 87, 797-804.	4.5	143
296	A Shocking Experience. Circulation Research, 2000, 87, 429-430.	4.5	1
297	Virtual Electrodeâ€“Induced Reexcitation. Circulation Research, 1999, 85, 1056-1066.	4.5	124
298	Evidence of Three-Dimensional Scroll Waves with Ribbon-Shaped Filament as a Mechanism of Ventricular Tachycardia in the Isolated Rabbit Heart. Journal of Cardiovascular Electrophysiology, 1999, 10, 1452-1462.	1.7	96
299	Biventricular Shocking Leads Improve Defibrillation Efficacy. Journal of Cardiovascular Electrophysiology, 1999, 10, 561-565.	1.7	2
300	Virtual Electrode Effects in Transvenous Defibrillation-Modulation by Structure and Interface: Evidence from Bidomain Simulations and Optical Mapping. Journal of Cardiovascular Electrophysiology, 1998, 9, 949-961.	1.7	76
301	Hypoxia and Hypothermia Enhance Spatial Heterogeneities of Repolarization in Guinea Pig Hearts:.. Journal of Cardiovascular Electrophysiology, 1998, 9, 164-183.	1.7	43
302	Voltage-sensitive dye RH421 increases contractility of cardiac muscle. Canadian Journal of Physiology and Pharmacology, 1998, 76, 1146-1150.	1.4	8
303	Virtual Electrodeâ€“Induced Phase Singularity. Circulation Research, 1998, 82, 918-925.	4.5	308
304	High-Resolution, Three-dimensional Fluorescent Imaging Reveals Multilayer Conduction Pattern in the Atrioventricular Node. Circulation, 1998, 98, 54-57.	1.6	81
305	Letters to the Editor. American Journal of Physiology - Heart and Circulatory Physiology, 1998, 275, H1905-H1909.	3.2	3
306	Voltage-sensitive dye RH421 increases contractility of cardiac muscle. Canadian Journal of Physiology and Pharmacology, 1998, 76, 1146-1150.	1.4	6

#	Article	IF	Citations
307	Mechanism of atrioventricular nodal facilitation in rabbit heart: role of proximal AV node. American Journal of Physiology - Heart and Circulatory Physiology, 1997, 273, H1658-H1668.	3.2	14
308	Transmembrane Voltage Changes Produced by Real and Virtual Electrodes During Monophasic Defibrillation Shock Delivered by an Implantable Electrode. Journal of Cardiovascular Electrophysiology, 1997, 8, 1031-1045.	1.7	137
309	High-Resolution Fluorescent Imaging Does Not Reveal a Distinct Atrioventricular Nodal Anterior Input Channel (Fast Pathway) in the Rabbit Heart During Sinus Rhythm. Journal of Cardiovascular Electrophysiology, 1997, 8, 295-306.	1.7	52
310	Effects of 2,3-Butanedione Monoxime on Atrial?Atrioventricular Nodal Conduction in Isolated Rabbit Heart. Journal of Cardiovascular Electrophysiology, 1997, 8, 790-802.	1.7	42
311	Relation of the Atrial Input Sites to the Dual Atrioventricular Nodal Pathways:.. Journal of Cardiovascular Electrophysiology, 1997, 8, 1133-1144.	1.7	34
312	Activation and Repolarization Patterns are Governed by Different Structural Characteristics of Ventricular Myocardium:.. Journal of Cardiovascular Electrophysiology, 1996, 7, 512-530.	1.7	67
313	Dynamics of rotating vortices in the Beeler-Reuter model of cardiac tissue. Chaos, Solitons and Fractals, 1995, 5, 513-526.	5.1	97
314	Optical mapping of repolarization and refractoriness from intact hearts.. Circulation, 1994, 90, 1469-1480.	1.6	180
315	Subthreshold stimulation of Purkinje fibers interrupts ventricular tachycardia in intact hearts. Experimental study with voltage-sensitive dyes and imaging techniques.. Circulation Research, 1994, 74, 604-619.	4.5	99
316	Vortices with linear cores in mathematical models of excitable media. Physica A: Statistical Mechanics and Its Applications, 1992, 188, 55-60.	2.6	14