Crystal M Ripplinger

List of Publications by Citations

65 papers	2,927 citations	27 h-index	54 g-index
85 ext. papers	3,599 ext. citations	7.9 avg, IF	5.1 L-index

#	Paper	IF	Citations
65	A tissue-engineered jellyfish with biomimetic propulsion. *Nature Biotechnology*, **2012**, 30, 792-7	44.5	419
64	Diabetic hyperglycaemia activates CaMKII and arrhythmias by O-linked glycosylation. *Nature*, **2013**, 502, 372-6	50.4	382
63	Guidelines for experimental models of myocardial ischemia and infarction. *American Journal of Physiology - Heart and Circulatory Physiology*, **2018**, 314, H812-H838	5.2	249
62	Controlling the contractile strength of engineered cardiac muscle by hierarchal tissue architecture. *Biomaterials*, **2012**, 33, 5732-41	15.6	166
61	A computational model to predict the effects of class I anti-arrhythmic drugs on ventricular rhythms. *Science Translational Medicine*, **2011**, 3, 98ra83	17.5	154
60	The crossroads of inflammation, fibrosis, and arrhythmia following myocardial infarction. *Journal of Molecular and Cellular Cardiology*, **2016**, 91, 114-22	5.8	116
59	Local □adrenergic stimulation overcomes source-sink mismatch to generate focal arrhythmia. *Circulation Research*, **2012**, 110, 1454-64	15.7	100
58	Optical mapping of sarcoplasmic reticulum Ca2+ in the intact heart: ryanodine receptor refractoriness during alternans and fibrillation. *Circulation Research*, **2014**, 114, 1410-21	15.7	93
57	Ion Channels in the Heart. *Comprehensive Physiology*, **2015**, 5, 1423-64	7.7	93
56	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, 1398-407	16.7	88
55	Mechanisms of unpinning and termination of ventricular tachycardia. *American Journal of Physiology - Heart and Circulatory Physiology*, **2006**, 291, H184-92	5.2	63
54	Molecular and cellular neurocardiology: development, and cellular and molecular adaptations to heart disease. *Journal of Physiology*, **2016**, 594, 3853-75	3.9	58
53	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	6.7	56
52	Potassium currents in the heart: functional roles in repolarization, arrhythmia and therapeutics. *Journal of Physiology*, **2017**, 595, 2229-2252	3.9	51
51	Atherosclerosis exacerbates arrhythmia following myocardial infarction: Role of myocardial inflammation. *Heart Rhythm*, **2015**, 12, 169-78	6.7	50
50	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, 1049-57	15.7	50
49	Multiple monophasic shocks improve electrotherapy of ventricular tachycardia in a rabbit model of chronic infarction. *Heart Rhythm*, **2009**, 6, 1020-7	6.7	46

48	Molecular Mechanisms of Sympathetic Remodeling and Arrhythmias. *Circulation: Arrhythmia and Electrophysiology*, **2016**, 9, e001359	6.4	42
47	Antiarrhythmic effects of interleukin 1 inhibition after myocardial infarction. *Heart Rhythm*, **2017**, 14, 727-736	6.7	40
46	Three-dimensional panoramic imaging of cardiac arrhythmias in rabbit heart. *Journal of Biomedical Optics*, **2007**, 12, 044019	3.5	40
45	Functional differences in engineered myocardium from embryonic stem cell-derived versus neonatal cardiomyocytes. *Stem Cell Reports*, **2013**, 1, 387-96	8	39
44	The nervous heart. *Progress in Biophysics and Molecular Biology*, **2016**, 120, 199-209	4.7	36
43	Termination of sustained atrial flutter and fibrillation using low-voltage multiple-shock therapy. *Heart Rhythm*, **2011**, 8, 101-8	6.7	36
42	P. gingivalis lipopolysaccharide intensifies inflammation post-myocardial infarction through matrix metalloproteinase-9. *Journal of Molecular and Cellular Cardiology*, **2014**, 76, 218-26	5.8	34
41	Myocardial Infarction Causes Transient Cholinergic Transdifferentiation of Cardiac Sympathetic Nerves via gp130. *Journal of Neuroscience*, **2016**, 36, 479-88	6.6	32
40	Molecular Mechanisms and New Treatment Paradigm for Atrial Fibrillation. *Circulation: Arrhythmia and Electrophysiology*, **2016**, 9,	6.4	31
39	Antiarrhythmic mechanisms of beta blocker therapy. *Pharmacological Research*, **2019**, 146, 104274	10.2	27
38	In vivo fluorescence reflectance imaging of protease activity in a mouse model of post-traumatic osteoarthritis. *Osteoarthritis and Cartilage*, **2014**, 22, 1461-9	6.2	25
37	Decreased inward rectifying K+ current and increased ryanodine receptor sensitivity synergistically contribute to sustained focal arrhythmia in the intact rabbit heart. *Journal of Physiology*, **2015**, 593, 1479-93	3.9	24
36	Inflammation modulates murine venous thrombosis resolution in vivo: assessment by multimodal fluorescence molecular imaging. *Arteriosclerosis, Thrombosis, and Vascular Biology*, **2012**, 32, 2616-24	9.4	24
35	Quantitative panoramic imaging of epicardial electrical activity. *Annals of Biomedical Engineering*, **2008**, 36, 1649-58	4.7	23
34	Virtual electrode hypothesis of defibrillation. *Heart Rhythm*, **2006**, 3, 1100-2	6.7	23
33	Age-related changes in cardiac electrophysiology and calcium handling in response to sympathetic nerve stimulation. *Journal of Physiology*, **2018**, 596, 3977-3991	3.9	21
32	Exogenous CXCL4 infusion inhibits macrophage phagocytosis by limiting CD36 signalling to enhance post-myocardial infarction cardiac dilation and mortality. *Cardiovascular Research*, **2019**, 115, 395-408	9.9	18
31	Contractile and electrophysiologic characterization of optimized self-organizing engineered heart tissue. *Annals of Thoracic Surgery*, **2012**, 94, 1241-8; discussion 1249	2.7	17

30	Cardiac myocyte alternans in intact heart: Influence of cell-cell coupling and β-adrenergic stimulation. *Journal of Molecular and Cellular Cardiology*, **2015**, 84, 1-9	5.8	14
29	Cardiac sympathetic nerve transdifferentiation reduces action potential heterogeneity after myocardial infarction. *American Journal of Physiology - Heart and Circulatory Physiology*, **2020**, 318, H558-H565	5.2	14
28	Different paths, same destination: divergent action potential responses produce conserved cardiac fight-or-flight response in mouse and rabbit hearts. *Journal of Physiology*, **2019**, 597, 3867-3883	3.9	11
27	Aging Disrupts Normal Time-of-Day Variation in Cardiac Electrophysiology. *Circulation: Arrhythmia and Electrophysiology*, **2020**, 13, e008093	6.4	9
26	Transient denervation of viable myocardium after myocardial infarction does not alter arrhythmia susceptibility. *American Journal of Physiology - Heart and Circulatory Physiology*, **2018**, 314, H415-H423	5.2	8
25	Adrenergic supersensitivity and impaired neural control of cardiac electrophysiology following regional cardiac sympathetic nerve loss. *Scientific Reports*, **2020**, 10, 18801	4.9	8
24	CaMKII Serine 280 O-GlcNAcylation Links Diabetic Hyperglycemia to Proarrhythmia. *Circulation Research*, **2021**, 129, 98-113	15.7	8
23	Calcium-Dependent Arrhythmogenic Foci Created by Weakly Coupled Myocytes in the Failing Heart. *Circulation Research*, **2017**, 121, 1379-1391	15.7	7
22	Optical Mapping of Intra-Sarcoplasmic Reticulum Ca2+ and Transmembrane Potential in the Langendorff-perfused Rabbit Heart. *Journal of Visualized Experiments*, **2015**,	1.6	7
21	Guidelines for in vivo mouse models of myocardial infarction. *American Journal of Physiology - Heart and Circulatory Physiology*, **2021**, 321, H1056-H1073	5.2	7
20	Exposure to Secondhand Smoke and Arrhythmogenic Cardiac Alternans in a Mouse Model. *Environmental Health Perspectives*, **2018**, 126, 127001	8.4	7
19	β-Adrenergic Inhibition Prevents Action Potential and Calcium Handling Changes during Regional Myocardial Ischemia. *Frontiers in Physiology*, **2017**, 8, 630	4.6	5
18	Quantitative cross-species translators of cardiac myocyte electrophysiology: Model training, experimental validation, and applications. *Science Advances*, **2021**, 7, eabg0927	14.3	4
17	Effects of pacing rate on mechanical restitution within the in vivo canine heart: study of the force-frequency relationship. *Journal of Cardiovascular Electrophysiology*, **2007**, 18, 212-7	2.7	3
16	Stop the beat to see the rhythm: excitation-contraction uncoupling in cardiac research. *American Journal of Physiology - Heart and Circulatory Physiology*, **2021**, 321, H1005-H1013	5.2	3
15	Role of Reduced Sarco-Endoplasmic Reticulum Ca-ATPase Function on Sarcoplasmic Reticulum Ca Alternans in the Intact Rabbit Heart. *Frontiers in Physiology*, **2021**, 12, 656516	4.6	3
14	Research Opportunities in Autonomic Neural Mechanisms of Cardiopulmonary Regulation: A Report From the National Heart, Lung, and Blood Institute and the National Institutes of Health Office of the Director Workshop.. *JACC Basic To Translational Science*, **2022**, 7, 265-293	8.7	2
13	Optical Mapping of Sarcoplasmic Reticulum Ca2+ and Transmembrane Potential in the Intact Heart **2019**, 313-320		1

List of Publications

12	The best thing since sliced bread? Optical mapping of transverse cardiac slices in the mouse heart. *Journal of Physiology*, **2018**, 596, 3825-3826	3.9	1
11	Panoramic Optical Imaging of Cardiac Arrhythmias **2012**, 90-97		1
10	Deciphering cellular signals in adult mouse sinoatrial node cells.. *IScience*, **2022**, 25, 103693	6.1	1
9	Understanding Circadian Mechanisms of Sudden Cardiac Death: A Report From the National Heart, Lung, and Blood Institute Workshop, Part 1: Basic and Translational Aspects. *Circulation: Arrhythmia and Electrophysiology*, **2021**, 14, e010181	6.4	1
8	Understanding Circadian Mechanisms of Sudden Cardiac Death: A Report From the National Heart, Lung, and Blood Institute Workshop, Part 2: Population and Clinical Considerations. *Circulation: Arrhythmia and Electrophysiology*, **2021**, 14, e010190	6.4	0
7	Systemic bone loss following myocardial infarction in mice. *Journal of Orthopaedic Research*, **2021**, 39, 739-749	3.8	0
6	Automated Object Detection in Experimental Data Using Combination of Unsupervised and Supervised Methods.. *Frontiers in Physiology*, **2022**, 13, 805161	4.6	0
5	Optical Mapping of Successful and Failed Defibrillation **2019**, 448-463		
4	A leap(frog) forward in understanding focal arrhythmia. *Journal of Physiology*, **2015**, 593, 1383-4	3.9	
3	Imaging Fiber Orientation with Optical Coherence Tomography and Diffusion-Tensor Magnetic Resonance Imaging and its Role in Arrhythmogenesis **2012**, 589-597		
2	Tornado in a dish: revealing the mechanisms of ventricular arrhythmias in engineered cardiac tissues. *Cardiovascular Research*, **2006**, 69, 307-8	9.9	
1	Age-related changes in sympathetic responsiveness and cardiac electrophysiology. *FASEB Journal*, **2018**, 32, 901.13	0.9	