Crystal M Ripplinger

List of Publications by Year
in descending order

79 papers	4,116 citations	147566 31 h-index	123241 61 g-index
85 all docs	85 docs citations	85 times ranked	6328 citing authors

#	ARTICLE	IF	CITATIONS
1	A tissue-engineered jellyfish with biomimetic propulsion. Nature Biotechnology, 2012, 30, 792-797.	9.4	536
2	Diabetic hyperglycaemia activates CaMKII and arrhythmias by O-linked glycosylation. Nature, 2013, 502, 372-376.	13.7	495
3	Guidelines for experimental models of myocardial ischemia and infarction. American Journal of Physiology - Heart and Circulatory Physiology, 2018, 314, H812-H838.	1.5	372
4	Controlling the contractile strength of engineered cardiac muscle by hierarchal tissue architecture. Biomaterials, 2012, 33, 5732-5741.	5.7	195
5	A Computational Model to Predict the Effects of Class I Anti-Arrhythmic Drugs on Ventricular Rhythms. Science Translational Medicine, 2011, 3, 98ra83.	5.8	183
6	The crossroads of inflammation, fibrosis, and arrhythmia following myocardial infarction. Journal of Molecular and Cellular Cardiology, 2016, 91, 114-122.	0.9	181
7	Ion Channels in the Heart. , 2015, 5, 1423-1464.		135
8	Local Î2-Adrenergic Stimulation Overcomes Source-Sink Mismatch to Generate Focal Arrhythmia. Circulation Research, 2012, 110, 1454-1464.	2.0	130
9	Optical Mapping of Sarcoplasmic Reticulum Ca ²⁺ in the Intact Heart. Circulation Research, 2014, 114, 1410-1421.	2.0	119
10	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
11	Molecular and cellular neurocardiology: development, and cellular and molecular adaptations to heart disease. Journal of Physiology, 2016, 594, 3853-3875.	1.3	85
12	Mechanisms of unpinning and termination of ventricular tachycardia. American Journal of Physiology - Heart and Circulatory Physiology, 2006, 291, H184-H192.	1.5	78
13	Potassium currents in the heart: functional roles in repolarization, arrhythmia and therapeutics. Journal of Physiology, 2017, 595, 2229-2252.	1.3	76
14	Atherosclerosis exacerbates arrhythmia following myocardial infarction: Role of myocardial inflammation. Heart Rhythm, 2015, 12, 169-178.	0.3	67
15	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.	0.3	61
16	Antiarrhythmic effects of interleukin 1 inhibition after myocardial infarction. Heart Rhythm, 2017, 14, 727-736.	0.3	61
17	Molecular Mechanisms of Sympathetic Remodeling and Arrhythmias. Circulation: Arrhythmia and Electrophysiology, 2016, 9, e001359.	2.1	59
18	Antiarrhythmic mechanisms of beta blocker therapy. Pharmacological Research, 2019, 146, 104274.	3.1	58

#	Article	IF	Citations
19	Multiple monophasic shocks improve electrotherapy of ventricular tachycardia in a rabbit model of chronic infarction. Heart Rhythm, 2009, 6, 1020-1027.	0.3	54
20	Guidelines for in vivo mouse models of myocardial infarction. American Journal of Physiology - Heart and Circulatory Physiology, 2021, 321, H1056-H1073.	1.5	53
21	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.	2.0	50
22	Termination of sustained atrial flutter and fibrillation using low-voltage multiple-shock therapy. Heart Rhythm, 2011, 8, 101-108.	0.3	50
23	Reinforcing rigor and reproducibility expectations for use of sex and gender in cardiovascular research. American Journal of Physiology - Heart and Circulatory Physiology, 2021, 321, H819-H824.	1.5	49
24	Myocardial Infarction Causes Transient Cholinergic Transdifferentiation of Cardiac Sympathetic Nerves via gp130. Journal of Neuroscience, 2016, 36, 479-488.	1.7	46
25	The nervous heart. Progress in Biophysics and Molecular Biology, 2016, 120, 199-209.	1.4	46
26	Three-dimensional panoramic imaging of cardiac arrhythmias in rabbit heart. Journal of Biomedical Optics, 2007, 12, 044019.	1.4	45
27	Quantitative Panoramic Imaging of Epicardial Electrical Activity. Annals of Biomedical Engineering, 2008, 36, 1649-1658.	1.3	45
28	Functional Differences in Engineered Myocardium from Embryonic Stem Cell-Derived versus Neonatal Cardiomyocytes. Stem Cell Reports, 2013, 1, 387-396.	2.3	43
29	P. gingivalis lipopolysaccharide intensifies inflammation post-myocardial infarction through matrix metalloproteinase-9. Journal of Molecular and Cellular Cardiology, 2014, 76, 218-226.	0.9	41
30	Molecular Mechanisms and New Treatment Paradigm for Atrial Fibrillation. Circulation: Arrhythmia and Electrophysiology, 2016, 9, .	2.1	39
31	CaMKII Serine 280 O-GlcNAcylation Links Diabetic Hyperglycemia to Proarrhythmia. Circulation Research, 2021, 129, 98-113.	2.0	38
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.	1.8	36
33	InÂvivo fluorescence reflectance imaging of protease activity in a mouse model of post-traumatic osteoarthritis. Osteoarthritis and Cartilage, 2014, 22, 1461-1469.	0.6	34
34	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, 1479-1493.	1.3	33
35	Ageâ€related changes in cardiac electrophysiology and calcium handling in response to sympathetic nerve stimulation. Journal of Physiology, 2018, 596, 3977-3991.	1.3	33
36	Reperfused vs. nonreperfused myocardial infarction: when to use which model. American Journal of Physiology - Heart and Circulatory Physiology, 2021, 321, H208-H213.	1.5	29

#	Article	IF	Citations
37	Inflammation Modulates Murine Venous Thrombosis Resolution In Vivo. Arteriosclerosis, Thrombosis, and Vascular Biology, 2012, 32, 2616-2624.	1.1	28
38	Virtual electrode hypothesis of defibrillation. Heart Rhythm, 2006, 3, 1100-1102.	0.3	27
39	Cardiac sympathetic nerve transdifferentiation reduces action potential heterogeneity after myocardial infarction. American Journal of Physiology - Heart and Circulatory Physiology, 2020, 318, H558-H565.	1.5	25
40	Different paths, same destination: divergent action potential responses produce conserved cardiac fightâ€orâ€flight response in mouse and rabbit hearts. Journal of Physiology, 2019, 597, 3867-3883.	1.3	22
41	Quantitative cross-species translators of cardiac myocyte electrophysiology: Model training, experimental validation, and applications. Science Advances, 2021, 7, eabg0927.	4.7	22
42	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.	1.5	21
43	Adrenergic supersensitivity and impaired neural control of cardiac electrophysiology following regional cardiac sympathetic nerve loss. Scientific Reports, 2020, 10, 18801.	1.6	20
44	Cardiac myocyte alternans in intact heart: Influence of cellâ€"cell coupling and Î²-adrenergic stimulation. Journal of Molecular and Cellular Cardiology, 2015, 84, 1-9.	0.9	18
45	Contractile and Electrophysiologic Characterization of Optimized Self-Organizing Engineered Heart Tissue. Annals of Thoracic Surgery, 2012, 94, 1241-1249.	0.7	17
46	Research Opportunities in Autonomic Neural Mechanisms of CardiopulmonaryÂRegulation. JACC Basic To Translational Science, 2022, 7, 265-293.	1.9	17
47	Aging Disrupts Normal Time-of-Day Variation in Cardiac Electrophysiology. Circulation: Arrhythmia and Electrophysiology, 2020, 13, e008093.	2.1	16
48	Calcium-Dependent Arrhythmogenic Foci Created by Weakly Coupled Myocytes in the Failing Heart. Circulation Research, 2017, 121, 1379-1391.	2.0	15
49	Role of Reduced Sarco-Endoplasmic Reticulum Ca2+-ATPase Function on Sarcoplasmic Reticulum Ca2+ Alternans in the Intact Rabbit Heart. Frontiers in Physiology, 2021, 12, 656516.	1.3	15
50	Exposure to Secondhand Smoke and Arrhythmogenic Cardiac Alternans in a Mouse Model. Environmental Health Perspectives, 2018, 126, 127001.	2.8	11
51	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.	1.5	11
52	From drugs to devices and back again: chemical vagal nerve stimulation for the treatment of heart failure. Cardiovascular Research, 2017, 113, 1270-1272.	1.8	10
53	Optical Mapping of Intra-Sarcoplasmic Reticulum Ca²⁺ and Transmembrane Potential in the Langendorff-perfused Rabbit Heart. Journal of Visualized Experiments, 2015, , .	0.2	8
54	Î²-Adrenergic Inhibition Prevents Action Potential and Calcium Handling Changes during Regional Myocardial Ischemia. Frontiers in Physiology, 2017, 8, 630.	1.3	8

#	ARTICLE	IF	CITATIONS
55	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.	2.1	8
56	Human Biological Pacemakers. Circulation, 2012, 125, 856-858.	1.6	6
57	Systemic bone loss following myocardial infarction in mice. Journal of Orthopaedic Research, 2021, 39, 739-749.	1.2	4
58	We are the change we seek. American Journal of Physiology - Heart and Circulatory Physiology, 2021, 320, H1411-H1414.	1.5	4
59	Deciphering cellular signals in adult mouse sinoatrial node cells. IScience, 2022, 25, 103693.	1.9	4
60	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, 212-217.	0.8	3
61	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.	2.1	3
62	Automated Object Detection in Experimental Data Using Combination of Unsupervised and Supervised Methods. Frontiers in Physiology, 2022, 13, 805161.	1.3	3
63	Mouse models of cardiac conduction system markers: Revealing the past, present, and future of pacemaking and conduction. Trends in Cardiovascular Medicine, 2015, 25, 10-11.	2.3	2
64	The best thing since sliced bread? Optical mapping of transverse cardiac slices in the mouse heart. Journal of Physiology, 2018, 596, 3825-3826.	1.3	2
65	Regional cardiac sympathetic denervation produces supersensitivity of action potential and Ca2+ handling properties to Î²â€“adrenergic stimulation. Journal of Molecular and Cellular Cardiology, 2018, 124, 88-89.	0.9	1
66	Putting the pieces together using in vivo optical mapping. Cardiovascular Research, 2019, 115, 1574-1575.	1.8	1
67	Tornado in a dish: Revealing the mechanisms of ventricular arrhythmias in engineered cardiac tissues. Cardiovascular Research, 2006, 69, 307-308.	1.8	0
68	A leap(frog) forward in understanding focal arrhythmia. Journal of Physiology, 2015, 593, 1383-1384.	1.3	0
69	Dual V _m /Ca Imaging of Premature Ventricular Contractions. Circulation: Arrhythmia and Electrophysiology, 2015, 8, 529-530.	2.1	0
70	Recent developments in biophysics & molecular biology of heart rhythm. Progress in Biophysics and Molecular Biology, 2016, 120, 1-2.	1.4	0
71	B-PO03-124 DEVELOPMENT OF A NOVEL IMAGING SYSTEM TO VISUALIZE SPATIO-TEMPORAL CYCLIC AMP SIGNALING AND TRANSMEMBRANE POTENTIAL IN THE LANGENDORFF-PERFUSED HEART. Heart Rhythm, 2021, 18, S239.	0.3	0
72	B-PO04-010 THE EFFECT OF CHRONIC NICOTINE EXPOSURE ON CARDIAC ELECTROPHYSIOLOGY IN THE RABBIT HEART. Heart Rhythm, 2021, 18, S283-S284.	0.3	0

#	Article	IF	Citations
73	B-IN01-04 SPATIO-TEMPORAL CAMP SIGNALING AND ARRHYTHMIA IN THE INTACT HEART. Heart Rhythm, 2021, 18, S465.	0.3	0
74	Ageâ€related changes in sympathetic responsiveness and cardiac electrophysiology. FASEB Journal, 2018, 32, 901.13.	0.2	0
75	PO-616-02 HETEROGENOUS CAMP SIGNALING IN THE INTACT HEART IS SEX DEPENDENT. Heart Rhythm, 2022, 19, S111.	0.3	0
76	PO-676-06 THE ROLE OF REPERFUSION IN MODULATING CYCLIC AMP SIGNALING FOLLOWING MYOCARDIAL INFARCTION. Heart Rhythm, 2022, 19, S344-S345.	0.3	0
77	BS-400-08 HETEROGENOUS CAMP SIGNALING IN THE INTACT HEART IS SEX DEPENDENT. Heart Rhythm, 2022, 19, S510-S511.	0.3	0
78	BS-400-49 THE EFFECT OF CHRONIC NICOTINE EXPOSURE ON CARDIAC ELECTROPHYSIOLOGY IN THE RABBIT HEART. Heart Rhythm, 2022, 19, S508-S509.	0.3	0
79	Abstract 16912: Molecular Mechanisms Underlying the Beneficial Effects of Inhibition of Soluble Epoxide Hydrolase in the Prevention of Atrial Fibrillation. Circulation, 2015, 132, .	1.6	0