David J Christini

List of Publications by Year
in descending order

29 papers	936 citations	516561 16 h-index	526166 27 g-index
30 all docs	30 docs citations	30 times ranked	969 citing authors

#	Article	IF	Citations
1	Real-Time Linux Dynamic Clamp: A Fast and Flexible Way to Construct Virtual Ion Channels in Living Cells. Annals of Biomedical Engineering, 2001, 29, 897-907.	1.3	144
2	Control of Electrical Alternans in Canine Cardiac Purkinje Fibers. Physical Review Letters, 2006, 96, 104101.	2.9	113
3	Cell-Specific Cardiac Electrophysiology Models. PLoS Computational Biology, 2015, 11, e1004242.	1.5	96
4	Introduction: Mapping and control of complex cardiac arrhythmias. Chaos, 2002, 12, 732-739.	1.0	62
5	Calibration of ionic and cellular cardiac electrophysiology models. Wiley Interdisciplinary Reviews: Systems Biology and Medicine, 2020, 12, e1482.	6.6	62
6	Hard real-time closed-loop electrophysiology with the Real-Time eXperiment Interface (RTXI). PLoS Computational Biology, 2017, 13, e1005430.	1.5	55
7	Practical Real-Time Computing System for Biomedical Experiment Interface. Annals of Biomedical Engineering, 1999, 27, 180-186.	1.3	37
8	Improving cardiomyocyte model fidelity and utility via dynamic electrophysiology protocols and optimization algorithms. Journal of Physiology, 2016, 594, 2525-2536.	1.3	36
9	Differential roles of two delayed rectifier potassium currents in regulation of ventricular action potential duration and arrhythmia susceptibility. Journal of Physiology, 2017, 595, 2301-2317.	1.3	33
10	Rapid Genetic Algorithm Optimization of a Mouse Computational Model: Benefits for Anthropomorphization of Neonatal Mouse Cardiomyocytes. Frontiers in Physiology, 2012, 3, 421.	1.3	29
11	Global Optimization of Ventricular Myocyte Model to Multi-Variable Objective Improves Predictions of Drug-Induced Torsades de Pointes. Frontiers in Physiology, 2017, 8, 1059.	1.3	29
12	Light-Activated Dynamic Clamp Using iPSC-Derived Cardiomyocytes. Biophysical Journal, 2018, 115, 2206-2217.	0.2	28
13	Restricted feedback control of one-dimensional maps. Physical Review E, 2001, 63, 046204.	0.8	24
14	Voltage and Calcium Dynamics Both Underlie Cellular Alternans in Cardiac Myocytes. Biophysical Journal, 2014, 106, 2222-2232.	0.2	23
15	Dynamic Clamp in Cardiac and Neuronal Systems Using RTXI. Methods in Molecular Biology, 2014, 1183, 327-354.	0.4	23
16	Anthropomorphizing the Mouse Cardiac Action Potential via a Novel Dynamic Clamp Method. Biophysical Journal, 2009, 97, 2684-2692.	0.2	17
17	Computational Approaches to Understanding the Role of Fibroblast-Myocyte Interactions in Cardiac Arrhythmogenesis. BioMed Research International, 2015, 2015, 1-12.	0.9	17
18	Illuminating Myocyte-Fibroblast Homotypic and Heterotypic Gap Junction Dynamics Using DynamicÂClamp. Biophysical Journal, 2016, 111, 785-797.	0.2	17

#	Article	IF	Citations
19	A human embryonic stem cell reporter line for monitoring chemical-induced cardiotoxicity. Cardiovascular Research, 2020, 116, 658-670.	1.8	17
20	Endocardial detection of repolarization alternans. IEEE Transactions on Biomedical Engineering, 2003, 50, 855-862.	2.5	16
21	Adaptive estimation and control method for unstable periodic dynamics in spike trains. Physical Review E, 2000, 61, 5149-5153.	0.8	15
22	Slow [Na+]i dynamics impacts arrhythmogenesis and spiral wave reentry in cardiac myocyte ionic model. Chaos, 2017, 27, 093907.	1.0	12
23	Overexpression of Map3k7 activates sinoatrial node-like differentiation in mouse ES-derived cardiomyocytes. PLoS ONE, 2017, 12, e0189818.	1.1	10
24	Validation of quantitative measure of repolarization reserve as a novel marker of drug induced proarrhythmia. Journal of Molecular and Cellular Cardiology, 2020, 145, 122-132.	0.9	10
25	Direct biologically based biosensing of dynamic physiological function. American Journal of Physiology - Heart and Circulatory Physiology, 2001, 280, H2006-H2010.	1.5	7
26	NHE Isoform Switching and KChIP2 Upregulation in Aging Porcine Atria. PLoS ONE, 2013, 8, e82951.	1.1	2
27	A dual SHOX2:GFP; MYH6:mCherry knockin hESC reporter line for derivation of human SAN-like cells. IScience, 2022, 25, 104153.	1.9	1
28	Control of Cardiac Electrical Nonlinear Dynamics. , 0, , 683-701.		0
29	Structural Barrier Increases QT-peak Dispersion in Swine Left Ventricle in Vivo. Annual International Conference of the IEEE Engineering in Medicine and Biology Society, 2006, , .	0.5	0