Joseph L Greenstein

List of Publications by Year
in descending order

49 papers	2,260 citations	218677 26 h-index	223800 46 g-index
56 all docs	56 docs citations	56 times ranked	2201 citing authors

#	Article	IF	Citations
1	Computational signatures for post-cardiac arrest trajectory prediction: Importance of early physiological time series. Anaesthesia, Critical Care & Pain Medicine, 2022, 41, 101015.	1.4	8
2	Prediction of Impending Septic Shock in Children With Sepsis. , 2021, 3, e0442.		7
3	Early Prediction of Multiple Organ Dysfunction in the Pediatric Intensive Care Unit. Frontiers in Pediatrics, 2021, 9, 711104.	1.9	10
4	Estimating ectopic beat probability with simplified statistical models that account for experimental uncertainty. PLoS Computational Biology, 2021, 17, e1009536.	3.2	1
5	Predicting Flow Rate Escalation for Pediatric Patients on High Flow Nasal Cannula Using Machine Learning. Frontiers in Pediatrics, 2021, 9, 734753.	1.9	2
6	SWIFT: A deep learning approach to prediction of hypoxemic events in critically-Ill patients using SpO2 waveform prediction. PLoS Computational Biology, 2021, 17, e1009712.	3.2	5
7	Spectral clustering of risk score trajectories stratifies sepsis patients by clinical outcome and interventions received. ELife, 2020, 9, .	6.0	15
8	Data-driven discovery of a novel sepsis pre-shock state predicts impending septic shock in the ICU. Scientific Reports, 2019, 9, 6145.	3.3	56
9	Na+ microdomains and sparks: Role in cardiac excitation-contraction coupling and arrhythmias in ankyrin-B deficiency. Journal of Molecular and Cellular Cardiology, 2019, 128, 145-157.	1.9	10
10	A bilobal model of Ca2+-dependent inactivation to probe the physiology of L-type Ca2+ channels. Journal of General Physiology, 2018, 150, 1688-1701.	1.9	10
11	Mechanisms of the cyclic nucleotide cross-talk signaling network in cardiac L-type calcium channel regulation. Journal of Molecular and Cellular Cardiology, 2017, 106, 29-44.	1.9	7
12	Estimating the probabilities of rare arrhythmic events in multiscale computational models of cardiac cells and tissue. PLoS Computational Biology, 2017, 13, e1005783.	3.2	16
13	Modeling Na + -Ca 2+ exchange in the heart: Allosteric activation, spatial localization, sparks and excitation-contraction coupling. Journal of Molecular and Cellular Cardiology, 2016, 99, 174-187.	1.9	20
14	Modeling calcium regulation of contraction, energetics, signaling, and transcription in the cardiac myocyte. Wiley Interdisciplinary Reviews: Systems Biology and Medicine, 2016, 8, 37-67.	6.6	31
15	Roles of phosphodiesterases in the regulation of the cardiac cyclic nucleotide cross-talk signaling network. Journal of Molecular and Cellular Cardiology, 2016, 91, 215-227.	1.9	33
16	Models and Simulations as a Service: Exploring the Use of Galaxy for Delivering Computational Models. Biophysical Journal, 2016, 110, 1038-1043.	0.5	9
17	On the Adjacency Matrix of RyR2 Cluster Structures. PLoS Computational Biology, 2015, 11, e1004521.	3.2	33
18	Interaction between phosphodiesterases in the regulation of the cardiac Î²-adrenergic pathway. Journal of Molecular and Cellular Cardiology, 2015, 88, 29-38.	1.9	22

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19	Mechanistic Investigation of the Arrhythmogenic Role of Oxidized CaMKII in the Heart. Biophysical Journal, 2015, 109, 838-849.	0.5	27
20	Modeling CaMKII-mediated regulation of L-type Ca2+ channels and ryanodine receptors in the heart. Frontiers in Pharmacology, 2014, 5, 60.	3.5	11
21	Superresolution Modeling of Calcium Release in the Heart. Biophysical Journal, 2014, 107, 3018-3029.	0.5	96
22	Extinguishing the Sparks. Biophysical Journal, 2013, 104, 2115-2117.	0.5	6
23	A Computational Model of Reactive Oxygen Species and Redox Balance in Cardiac Mitochondria. Biophysical Journal, 2013, 105, 1045-1056.	0.5	55
24	An Integrated Mitochondrial ROS Production and Scavenging Model: Implications for Heart Failure. Biophysical Journal, 2013, 105, 2832-2842.	0.5	36
25	Cardiac Resynchronization Therapy Improves Altered Na Channel Gating in Canine Model of Dyssynchronous Heart Failure. Circulation: Arrhythmia and Electrophysiology, 2013, 6, 546-554.	4.8	27
26	Toward an Integrative Computational Model of the Guinea Pig Cardiac Myocyte. Frontiers in Physiology, 2012, 3, 244.	2.8	25
27	Local control model illustrates how action potential morphology affects Ca2+ release. FASEB Journal, 2012, 26, 1053.1.	0.5	0
28	Cardiac myocytes and local signaling in nano-domains. Progress in Biophysics and Molecular Biology, 2011, 107, 48-59.	2.9	17
29	Integrative modeling of the cardiac ventricular myocyte. Wiley Interdisciplinary Reviews: Systems Biology and Medicine, 2011, 3, 392-413.	6.6	30
30	CaMKII-dependent activation of late I<inf>Na</inf> contributes to cellular arrhythmia in a model of the cardiac myocyte. , 2011, 2011, 4665-8.		10
31	Integrative Systems Models of Cardiac Excitationâ€“Contraction Coupling. Circulation Research, 2011, 108, 70-84.	4.5	56
32	Role of CaMKII in RyR leak, EC coupling and action potential duration: A computational model. Journal of Molecular and Cellular Cardiology, 2010, 49, 617-624.	1.9	57
33	K⁺current changes account for the rate dependence of the action potential in the human atrial myocyte. American Journal of Physiology - Heart and Circulatory Physiology, 2009, 297, H1398-H1410.	3.2	129
34	CaMKII-Induced Shift in Modal Gating Explains L-Type Ca2+ Current Facilitation: A Modeling Study. Biophysical Journal, 2009, 96, 1770-1785.	0.5	48
35	Electrotonic Coupling between Human Atrial Myocytes and Fibroblasts Alters Myocyte Excitability and Repolarization. Biophysical Journal, 2009, 97, 2179-2190.	0.5	122
36	Mathematical simulations of ligand-gated and cell-type specific effects on the action potential of human atrium. Progress in Biophysics and Molecular Biology, 2008, 98, 161-170.	2.9	59

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37	From mitochondrial ion channels to arrhythmias in the heart: computational techniques to bridge the spatio-temporal scales. Philosophical Transactions Series A, Mathematical, Physical, and Engineering Sciences, 2008, 366, 3381-3409.	3.4	126
38	Protein Geometry and Placement in the Cardiac Dyad Influence Macroscopic Properties of Calcium-Induced Calcium Release. Biophysical Journal, 2007, 92, 3379-3396.	0.5	57
39	Mechanisms of Excitation-Contraction Coupling in an Integrative Model of the Cardiac Ventricular Myocyte. Biophysical Journal, 2006, 90, 77-91.	0.5	133
40	Multiscale Modeling of Calcium Signaling in the Cardiac Dyad. Annals of the New York Academy of Sciences, 2006, 1080, 362-375.	3.8	19
41	Multi-scale models of local control of calcium induced calcium release. Progress in Biophysics and Molecular Biology, 2006, 90, 136-150.	2.9	36
42	Using models of the myocyte for functional interpretation of cardiac proteomic data. Journal of Physiology, 2005, 563, 73-81.	2.9	19
43	The Role of Stochastic and Modal Gating of Cardiac L-Type Ca2+ Channels on Early After-Depolarizations. Biophysical Journal, 2005, 88, 85-95.	0.5	138
44	The Ongoing Journey to Understand Heart Function Through Integrative Modeling. Circulation Research, 2004, 95, 1135-1136.	4.5	4
45	Modeling the Actions of Î²-Adrenergic Signaling on Excitation-Contraction Coupling Processes. Annals of the New York Academy of Sciences, 2004, 1015, 16-27.	3.8	27
46	A Simplified Local Control Model of Calcium-Induced Calcium Release in Cardiac Ventricular Myocytes. Biophysical Journal, 2004, 87, 3723-3736.	0.5	119
47	An Integrative Model of the Cardiac Ventricular Myocyte Incorporating Local Control of Ca2+ Release. Biophysical Journal, 2002, 83, 2918-2945.	0.5	173
48	Molecular Interactions Between Two Long-QT Syndrome Gene Products, HERG and KCNE2 , Rationalized by In Vitro and In Silico Analysis. Circulation Research, 2001, 89, 33-38.	4.5	104
49	Role of the Calcium-Independent Transient Outward Current <i>I</i> _{to1} in Shaping Action Potential Morphology and Duration. Circulation Research, 2000, 87, 1026-1033.	4.5	197