Joshua I Goldhaber

List of Publications by Year
in descending order

101 papers	5,613 citations	61984 43 h-index	79698 73 g-index
105 all docs	105 docs citations	105 times ranked	5561 citing authors

#	Article	IF	Citations
1	Intracellular Ca2+ Dynamics and the Stability of Ventricular Tachycardia. Biophysical Journal, 1999, 77, 2930-2941.	0.5	290
2	Connexin-43 Hemichannels Opened by Metabolic Inhibition. Journal of Biological Chemistry, 1999, 274, 236-240.	3.4	241
3	Reprogrammed Mouse Fibroblasts Differentiate into Cells of the Cardiovascular and Hematopoietic Lineages. Stem Cells, 2008, 26, 1537-1546.	3.2	227
4	Action Potential Duration Restitution and Alternans in Rabbit Ventricular Myocytes. Circulation Research, 2005, 96, 459-466.	4.5	214
5	Safety and Hemodynamic Effects of Intravenous Triiodothyronine in Advanced Congestive Heart Failure. American Journal of Cardiology, 1998, 81, 443-447.	1.6	196
6	Î² ₁ Integrins Participate in the Hypertrophic Response of Rat Ventricular Myocytes. Circulation Research, 1998, 82, 1160-1172.	4.5	181
7	Metabolic Inhibition Activates a Non-selective Current Through Connexin Hemichannels in Isolated Ventricular Myocytes. Journal of Molecular and Cellular Cardiology, 2000, 32, 1859-1872.	1.9	178
8	Oxygen free radicals and cardiac reperfusion abnormalities.. Hypertension, 1992, 20, 118-127.	2.7	175
9	Functional Adult Myocardium in the Absence of Na + -Ca 2+ Exchange. Circulation Research, 2004, 95, 604-611.	4.5	172
10	The Na+-Ca2+Exchanger Is Essential for the Action of Cardiac Glycosides. Circulation Research, 2002, 90, 305-308.	4.5	165
11	Na⁺/Ca²⁺ exchange and Na⁺/K⁺â€ATPase in the heart. Journal of Physiology, 2015, 593, 1361-1382.	2.9	160
12	Cardiac-Specific Ablation of the Na + -Ca 2+ Exchanger Confers Protection Against Ischemia/Reperfusion Injury. Circulation Research, 2005, 97, 916-921.	4.5	148
13	Pulseless Electric Activity. Circulation, 2013, 128, 2532-2541.	1.6	139
14	Effects of exogenous free radicals on electromechanical function and metabolism in isolated rabbit and guinea pig ventricle. Implications for ischemia and reperfusion injury.. Journal of Clinical Investigation, 1989, 83, 1800-1809.	8.2	136
15	Knockout Mice for Pharmacological Screening. Circulation Research, 2002, 91, 90-92.	4.5	129
16	Next-generation pacemakers: from small devices to biological pacemakers. Nature Reviews Cardiology, 2018, 15, 139-150.	13.7	123
17	Na/Ca exchange and contraction of the heart. Journal of Molecular and Cellular Cardiology, 2013, 61, 28-33.	1.9	104
18	Excitationâ€"Contraction Coupling in Na + â€"Ca 2+ Exchanger Knockout Mice. Circulation Research, 2005, 97, 1288-1295.	4.5	99

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19	Oxygen Free Radicals and Excitation-Contraction Coupling. Antioxidants and Redox Signaling, 2000, 2, 55-64.	5.4	95
20	Mutation in sodium-calcium exchanger 1 (NCX1) causes cardiac fibrillation in zebrafish. Proceedings of the National Academy of Sciences of the United States of America, 2005, 102, 17699-17704.	7.1	92
21	Excitationâ€contraction coupling in single guineaâ€pig ventricular myocytes exposed to hydrogen peroxide.. Journal of Physiology, 1994, 477, 135-147.	2.9	89
22	Novel Features of the Rabbit Transverse Tubular System Revealed by Quantitative Analysis of Three-Dimensional Reconstructions from Confocal Images. Biophysical Journal, 2008, 95, 2053-2062.	0.5	86
23	Activation of reverse Na⁺-Ca²⁺exchange by the Na⁺current augments the cardiac Ca²⁺transient: evidence from NCX knockout mice. Journal of Physiology, 2010, 588, 3267-3276.	2.9	79
24	Spontaneously beating cardiomyocytes derived from white mature adipocytes. Cardiovascular Research, 2010, 85, 17-27.	3.8	73
25	Burst pacemaker activity of the sinoatrial node in sodiumâ€“calcium exchanger knockout mice. Proceedings of the National Academy of Sciences of the United States of America, 2015, 112, 9769-9774.	7.1	71
26	Recapitulation of the embryonic cardiovascular progenitor cell niche. Biomaterials, 2011, 32, 2748-2756.	11.4	70
27	Induction of Monocyte Binding to Endothelial Cells by MM-LDL. Arteriosclerosis, Thrombosis, and Vascular Biology, 1999, 19, 680-686.	2.4	69
28	Naâ€“Caexchange in the regulation of cardiac excitationâ€“contraction coupling. Cardiovascular Research, 2005, 67, 198-207.	3.8	69
29	Mitochondrial Ca2+ uptake by the voltage-dependent anion channel 2 regulates cardiac rhythmicity. ELife, 2015, 4, .	6.0	67
30	Regulation of Cardiac L-Type Ca2+ Current in Na+-Ca2+ Exchanger Knockout Mice: Functional Coupling of the Ca2+ Channel and the Na+-Ca2+ Exchanger. Biophysical Journal, 2007, 92, 1431-1437.	0.5	63
31	Complete Atrial-Specific Knockout of Sodium-Calcium Exchange Eliminates Sinoatrial Node Pacemaker Activity. PLoS ONE, 2013, 8, e81633.	2.5	62
32	Sodium-Calcium Exchange Is Essential for Effective Triggering of Calcium Release in Mouse Heart. Biophysical Journal, 2010, 99, 755-764.	0.5	57
33	Canonical Wnt signaling promotes pacemaker cell specification of cardiac mesodermal cells derived from mouse and human embryonic stem cells. Stem Cells, 2020, 38, 352-368.	3.2	55
34	Mechanisms of excitationâ€contraction coupling failure during metabolic inhibition in guineaâ€pig ventricular myocytes.. Journal of Physiology, 1991, 443, 371-386.	2.9	54
35	Local regulation of the threshold for calcium sparks in rat ventricular myocytes: role of sodium-calcium exchange. Journal of Physiology, 1999, 520, 431-438.	2.9	54
36	Delayed Repolarization Underlies Ventricular Arrhythmias in Rats With Heart Failure and Preserved Ejection Fraction. Circulation, 2017, 136, 2037-2050.	1.6	54

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37	Integrins protect cardiomyocytes from ischemia/reperfusion injury. Journal of Clinical Investigation, 2013, 123, 4294-4308.	8.2	52
38	Role of Inotropic Agents in the Treatment of Heart Failure. Circulation, 2010, 121, 1655-1660.	1.6	50
39	Triple Threat: The Na+/Ca2+ Exchanger in the Pathophysiology of Cardiac Arrhythmia, Ischemia and Heart Failure. Current Drug Targets, 2011, 12, 737-747.	2.1	49
40	Cardiac TRPV1 afferent signaling promotes arrhythmogenic ventricular remodeling after myocardial infarction. JCI Insight, 2020, 5, .	5.0	49
41	Cardiac excitationâ€“contraction coupling in the absence of Na+â€“Ca2+ exchange. Cell Calcium, 2003, 34, 19-26.	2.4	47
42	Mice overexpressing the cardiac sodium-calcium exchanger: defects in excitation-contraction coupling. Journal of Physiology, 2004, 554, 779-789.	2.9	47
43	Na+currents are required for efficient excitation-contraction coupling in rabbit ventricular myocytes: a possible contribution of neuronal Na+channels. Journal of Physiology, 2010, 588, 4249-4260.	2.9	47
44	Embryonic Stem Cellâ€“Derived Cardiac Myocytes Are Not Ready for Human Trials. Circulation Research, 2014, 115, 335-338.	4.5	47
45	Mechanism of shortened action potential duration in Na+-Ca2+ exchanger knockout mice. American Journal of Physiology - Cell Physiology, 2007, 292, C968-C973.	4.6	41
46	Cardiac Sodium-Calcium Exchange and Efficient Excitation-Contraction Coupling: Implications for Heart Disease. Advances in Experimental Medicine and Biology, 2013, 961, 355-364.	1.6	40
47	Proarrhythmia in a non-failing murine model of cardiac-specific Na+/Ca2+ exchanger overexpression: whole heart and cellular mechanisms. Basic Research in Cardiology, 2012, 107, 247.	5.9	39
48	Contribution of small conductance K⁺ channels to sinoatrial node pacemaker activity: insights from atrialâ€specific Na⁺/Ca²⁺ exchange knockout mice. Journal of Physiology, 2017, 595, 3847-3865.	2.9	39
49	GÎ±1-Mediated Cardiac Electrophysiological Remodeling and Arrhythmia in Hypertrophic Cardiomyopathy. Circulation, 2007, 116, 596-605.	1.6	37
50	Distinct features of calcium handling and Î²â€adrenergic sensitivity in heart failure with preserved <i>versus</i> reduced ejection fraction. Journal of Physiology, 2020, 598, 5091-5108.	2.9	37
51	Suppression of Early and Late Afterdepolarizations by Heterozygous Knockout of the Na ⁺ /Ca ²⁺ Exchanger in a Murine Model. Circulation: Arrhythmia and Electrophysiology, 2015, 8, 1210-1218.	4.8	34
52	Ventricular Arrhythmias Underlie Sudden Death in Rats With Heart Failure and Preserved Ejection Fraction. Circulation: Arrhythmia and Electrophysiology, 2018, 11, e006452.	4.8	33
53	Regulation of calcium clockâ€mediated pacemaking by inositolâ€1,4,5â€trisphosphate receptors in mouse sinoatrial nodal cells. Journal of Physiology, 2015, 593, 2649-2663.	2.9	30
54	Heterogeneity of transverse-axial tubule system in mouse atria: Remodeling in atrial-specific Na + â€“Ca 2+ exchanger knockout mice. Journal of Molecular and Cellular Cardiology, 2017, 108, 50-60.	1.9	30

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55	High-density lipoprotein increases intracellular calcium levels by releasing calcium from internal stores in human endothelial cells. Atherosclerosis, 1999, 143, 299-306.	0.8	29
56	Na+/Ca2+ Exchanger Knockout Mice: Plasticity of Cardiac Excitation-Contraction Coupling. Annals of the New York Academy of Sciences, 2007, 1099, 270-275.	3.8	26
57	Genetic manipulation of cardiac Na+/Ca2+ exchange expression. Biochemical and Biophysical Research Communications, 2004, 322, 1336-1340.	2.1	25
58	Metabolic Inhibition Alters Subcellular Calcium Release Patterns in Rat Ventricular Myocytes. Circulation Research, 2005, 96, 551-557.	4.5	24
59	The role of E2F-1 and downstream target genes in mediating ischemia/reperfusion injury in vivo. Journal of Molecular and Cellular Cardiology, 2011, 51, 919-926.	1.9	24
60	Mechanisms of Sinoatrial Node Dysfunction in Heart Failure With Preserved Ejection Fraction. Circulation, 2022, 145, 45-60.	1.6	23
61	Dysfunction of ouabain-induced cardiac contractility in mice with heart-specific ablation of Na,K-ATPase Î²1-subunit. Journal of Molecular and Cellular Cardiology, 2009, 47, 552-560.	1.9	22
62	Reverse electrical remodeling in rats with heart failure and preserved ejection fraction. JCI Insight, 2018, 3, .	5.0	22
63	Effect of Metabolic Inhibition on Couplon Behavior in Rabbit Ventricular Myocytes. Biophysical Journal, 2008, 94, 1656-1666.	0.5	20
64	Return of calcium: Manipulating intracellular calcium to prevent cardiac pathologies. Proceedings of the National Academy of Sciences of the United States of America, 2004, 101, 5697-5698.	7.1	19
65	Movement of vault particles visualized by GFP-tagged major vault protein. Cell and Tissue Research, 2006, 324, 403-410.	2.9	18
66	Homozygous Overexpression of the Na+-Ca2+ Exchanger in Mice: Evidence for Increased Transsarcolemmal Ca2+ Fluxes. Annals of the New York Academy of Sciences, 2007, 1099, 310-314.	3.8	18
67	Molecular determinants of pH regulation in the cardiac Na+â€“Ca2+ exchanger. Journal of General Physiology, 2018, 150, 245-257.	1.9	18
68	A modified local control model for Ca2+ transients in cardiomyocytes: Junctional flux is accompanied by release from adjacent non-junctional RyRs. Journal of Molecular and Cellular Cardiology, 2014, 68, 1-11.	1.9	17
69	Sodium-Calcium Exchange. Circulation Research, 1999, 85, 982-984.	4.5	16
70	Myofilament Phosphorylation in Stem Cell Treated Diastolic Heart Failure. Circulation Research, 2021, 129, 1125-1140.	4.5	16
71	Triggered activity in atrial myocytes is influenced by Na+/Ca2+ exchanger activity in genetically altered mice. Journal of Molecular and Cellular Cardiology, 2016, 101, 106-115.	1.9	14
72	Metabolism in Normal and Ischemic Myocardium. , 1997, , 325-393.		14

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73	Effects of Na+-Ca2+Exchange Expression on Excitation-Contraction Coupling in Genetically Modified Mice. Annals of the New York Academy of Sciences, 2005, 1047, 122-126.	3.8	13
74	Na/Ca exchange in the atrium: Role in sinoatrial node pacemaking and excitation-contraction coupling. Cell Calcium, 2020, 87, 102167.	2.4	13
75	20 Years from NCX Purification and Cloning: Milestones. Advances in Experimental Medicine and Biology, 2013, 961, 17-23.	1.6	12
76	Putative ryanodine receptors in the sarcolemma of ventricular myocytes. Pflugers Archiv European Journal of Physiology, 2000, 440, 125-131.	2.8	11
77	The Cardiac Na ⁺ â€Ca ²⁺ Exchanger: From Structure to Function. , 2021, 12, 2681-2717.		11
78	Modulation of the cardiac Na+-Ca2+ exchanger by cytoplasmic protons: Molecular mechanisms and physiological implications. Cell Calcium, 2020, 87, 102140.	2.4	10
79	Acute Genetic Ablation of Cardiac Sodium/Calcium Exchange in Adult Mice: Implications for Cardiomyocyte Calcium Regulation, Cardioprotection, and Arrhythmia. Journal of the American Heart Association, 2021, 10, e019273.	3.7	10
80	TOWARDS COMPUTATIONAL MODELING OF EXCITATION-CONTRACTION COUPLING IN CARDIAC MYOCYTES: RECONSTRUCTION OF STRUCTURES AND PROTEINS FROM CONFOCAL IMAGING. , 2008, , 328-39.		9
81	The Effects of SEA0400 on Ca2+ Transient Amplitude and Proarrhythmia Depend on the Na+/Ca2+ Exchanger Expression Level in Murine Models. Frontiers in Pharmacology, 2017, 8, 649.	3.5	8
82	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.	4.8	8
83	Distinct Occurrence of Proarrhythmic Afterdepolarizations in Atrial Versus Ventricular Cardiomyocytes: Implications for Translational Research on Atrial Arrhythmia. Frontiers in Pharmacology, 2018, 9, 933.	3.5	7
84	A Framework for Analyzing Confocal Images of Transversal Tubules in Cardiomyocytes. , 2007, , 110-119.		7
85	Effects of physical exercise training in syndrome x. Clinical Cardiology, 1993, 16, 65-66.	1.8	6
86	Lysophosphatidylcholine and Cellular Potassium Loss in Isolated Rabbit Ventricle. Journal of Cardiovascular Pharmacology and Therapeutics, 1998, 3, 37-42.	2.0	6
87	Loss of Intracellular and Intercellular Synchrony of Calcium Release in Systolic Heart Failure. Circulation: Heart Failure, 2009, 2, 157-159.	3.9	6
88	Sub-micrometer anatomical models of the sarcolemma of cardiac myocytes based on confocal imaging. Pacific Symposium on Biocomputing Pacific Symposium on Biocomputing, 2008, , 390-401.	0.7	5
89	Is the Ryanodine Receptor a Target for Antiarrhythmic Therapy?. Circulation Research, 2006, 98, 1232-1233.	4.5	4
90	Oxygen Free Radicals in the Pathophysiology of Myocardial Ischemia/Reperfusion. , 1993, , 250-266.		4

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91	Endothelium-dependent vasodilators do not cause propagated intercellular Ca2+ waves in vascular endothelial monolayers. Cell Calcium, 1996, 19, 97-104.	2.4	3
92	Atrial-Specific NCX KO Mice Reveal Dependence of Sinoatrial Node Pacemaker Activity on Sodium-Calcium Exchange. Biophysical Journal, 2012, 102, 663a.	0.5	3
93	SUB-MICROMETER ANATOMICAL MODELS OF THE SARCOLEMMA OF CARDIAC MYOCYTES BASED ON CONFOCAL IMAGING. , 2007, , .		3
94	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.	4.8	3
95	Persistent Periodic Ca2+ Release in Sinoatrial Node of NA+-CA2+ Exchanger Knockout Mice. Biophysical Journal, 2013, 104, 209a.	0.5	1
96	The Na+-dependent Inactivation of NCX1.1 is Physiologically Relevant to Cardiac Function. Biophysical Journal, 2020, 118, 100a-101a.	0.5	1
97	Relationship of Ryanodine Receptors to the Sarcolemma in Rabbit Ventricular Myocytes. Biophysical Journal, 2009, 96, 517a-518a.	0.5	0
98	Sodium Current-Induced Release of Calcium from the Sarcoplasmic Reticulum in Rabbit Ventricular Myocytes. Biophysical Journal, 2010, 98, 201a.	0.5	0
99	Four Histidines Account for the Inhibitory Effect of Protons on the Cardiac Na+-Ca2+ Exchanger. Biophysical Journal, 2014, 106, 581a.	0.5	0
100	Burst Pacemaker Activity in NCX1 Knockout Mice: Is it Funny Current?. Biophysical Journal, 2014, 106, 631a-632a.	0.5	0
101	Proton Sensitivity of NCX: Modulation by Na, Ca and a Distinct Proton-Sensing Domain. Biophysical Journal, 2017, 112, 275a.	0.5	0