Niall Macquaide

List of Publications by Year
in descending order

49 papers	916 citations	516710 16 h-index	477307 29 g-index
49 all docs	49 docs citations	49 times ranked	1232 citing authors

#	Article	IF	Citations
1	Ryanodine receptor cluster fragmentation and redistribution in persistent atrial fibrillation enhance calcium release. Cardiovascular Research, 2015, 108, 387-398.	3.8	93
2	Ryanodine receptor dispersion disrupts Ca2+ release in failing cardiac myocytes. ELife, 2018, 7, .	6.0	84
3	Dyssynchrony of Ca2+ release from the sarcoplasmic reticulum as subcellular mechanism of cardiac contractile dysfunction. Journal of Molecular and Cellular Cardiology, 2011, 50, 390-400.	1.9	65
4	S100A1 decreases calcium spark frequency and alters their spatial characteristics in permeabilized adult ventricular cardiomyocytes. Cell Calcium, 2007, 41, 135-143.	2.4	59
5	Subcellular Heterogeneity of Ryanodine Receptor Properties in Ventricular Myocytes with Low T-Tubule Density. PLoS ONE, 2011, 6, e25100.	2.5	53
6	Unilateral arm strength training improves contralateral peak force and rate of force development. European Journal of Applied Physiology, 2008, 103, 553-559.	2.5	51
7	Intracellular Dyssynchrony of Diastolic Cytosolic [Ca ²⁺] Decay in Ventricular Cardiomyocytes in Cardiac Remodeling and Human Heart Failure. Circulation Research, 2013, 113, 527-538.	4.5	50
8	Dyadic Plasticity in Cardiomyocytes. Frontiers in Physiology, 2018, 9, 1773.	2.8	48
9	Hyperactive ryanodine receptors in human heart failure and ischaemic cardiomyopathy reside outside of couplons. Cardiovascular Research, 2018, 114, 1512-1524.	3.8	47
10	Activation of the cardiac Na+â€“Ca2+ exchanger by sorcin via the interaction of the respective Ca2+-binding domains. Journal of Molecular and Cellular Cardiology, 2010, 49, 132-141.	1.9	45
11	The effect of exercise training on transverse tubules in normal, remodeled, and reverse remodeled hearts. Journal of Cellular Physiology, 2011, 226, 2235-2243.	4.1	44
12	3D dSTORM imaging reveals novel detail of ryanodine receptor localization in rat cardiac myocytes. Journal of Physiology, 2019, 597, 399-418.	2.9	42
13	Selective Modulation of Coupled Ryanodine Receptors During Microdomain Activation of Calcium/Calmodulin-Dependent Kinase II in the Dyadic Cleft. Circulation Research, 2013, 113, 1242-1252.	4.5	37
14	Measurement and Modeling of Ca2+ Waves in Isolated Rabbit Ventricular Cardiomyocytes. Biophysical Journal, 2007, 93, 2581-2595.	0.5	23
15	Exercise training corrects control of spontaneous calcium waves in hearts from myocardial infarction heart failure rats. Journal of Cellular Physiology, 2012, 227, 20-26.	4.1	21
16	The Direct Actions of Flecainide on the Human Cardiac Ryanodine Receptor. Circulation Research, 2015, 116, 1284-1286.	4.5	21
17	Assessment of Sarcoplasmic Reticulum Ca2+ Depletion During Spontaneous Ca2+ Waves in Isolated Permeabilized Rabbit Ventricular Cardiomyocytes. Biophysical Journal, 2009, 96, 2744-2754.	0.5	15
18	Differential sensitivity of Ca²⁺wave and Ca²⁺spark events to ruthenium red in isolated permeabilised rabbit cardiomyocytes. Journal of Physiology, 2010, 588, 4731-4742.	2.9	13

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19	Electrophysiological heterogeneity in large populations of rabbit ventricular cardiomyocytes. Cardiovascular Research, 2022, 118, 3112-3125.	3.8	13
20	T-Tubule Remodelling and Ryanodine Receptor Organization Modulate Sodium-Calcium Exchange. Advances in Experimental Medicine and Biology, 2013, 961, 375-383.	1.6	12
21	Basic Methods for Monitoring Intracellular Ca²⁺ in Cardiac Myocytes Using Fluo-3. Cold Spring Harbor Protocols, 2015, 2015, pdb.prot076950.	0.3	12
22	Activation of RyR2 by class I kinase inhibitors. British Journal of Pharmacology, 2019, 176, 773-786.	5.4	12
23	Phosphodiesterase type 4 anchoring regulates cAMP signaling to Popeye domain-containing proteins. Journal of Molecular and Cellular Cardiology, 2022, 165, 86-102.	1.9	11
24	Cytoplasmic versus Intra-SR: the Battle of the Ca2+ Diffusion Coefficients in Cardiac Muscle. Biophysical Journal, 2008, 95, 1005-1006.	0.5	7
25	Spontaneous Ca2+ transients in rat pulmonary vein cardiomyocytes are increased in frequency and become more synchronous following electrical stimulation. Cell Calcium, 2018, 76, 36-47.	2.4	7
26	FKBP12.6 overexpression does not protect against remodelling after myocardial infarction. Experimental Physiology, 2013, 98, 134-148.	2.0	6
27	Measuring Sarcoplasmic Reticulum Ca²⁺ Content, Fractional Release, and Ca²⁺ Buffering in Cardiac Myocytes. Cold Spring Harbor Protocols, 2015, 2015, pdb.prot076976.	0.3	4
28	Characterizing the Trigger for Sarcoplasmic Reticulum Ca2+Release in Cardiac Myocytes. Cold Spring Harbor Protocols, 2015, 2015, pdb.prot076968.	0.3	3
29	Assessing Ca²⁺-Removal Pathways in Cardiac Myocytes. Cold Spring Harbor Protocols, 2015, 2015, pdb.prot076992.	0.3	3
30	Exercise Training Corrects Control Of Diastolic Calcium In Hearts From Myocardial Infarction Heart Failure Rats. Medicine and Science in Sports and Exercise, 2009, 41, 174.	0.4	3
31	Altered CamkII and Ros Microdomains Favor Sparks in Orphaned RyR After Myocardial Infarction. Biophysical Journal, 2014, 106, 322a.	0.5	2
32	Super Resolution Imaging of Ryanodine Receptor Cluster Morphology in Rabbit and Human Atrial Myocytes. Biophysical Journal, 2018, 114, 621a.	0.5	2
33	<scp>SUMOylation</scp> does not affect cardiac troponin I stability but alters indirectly the development of force in response to Ca²⁺. FEBS Journal, 2022, 289, 6267-6285.	4.7	2
34	DYNAMICS OF CARDIAC INTRACELLULAR Ca2+ HANDLING â€” FROM EXPERIMENTS TO VIRTUAL CELLS. International Journal of Bifurcation and Chaos in Applied Sciences and Engineering, 2003, 13, 3535-3560.	1.7	1
35	Swallowing a spider to catch a fly: Ca-calmodulin dynamics in adult cardiomyocytes. Journal of Molecular and Cellular Cardiology, 2006, 41, 416-417.	1.9	1
36	Blink and You'll See It. Circulation Research, 2011, 108, 154-156.	4.5	1

#	Article	IF	Citations
37	Structural and Functional Alteration of RyR Clusters After Remodeling in Persistent Atrial Fibrillation. Biophysical Journal, 2014, 106, 431a.	0.5	1
38	A Systematic Approach for Assessing Ca²⁺ Handling in Cardiac Myocytes. Cold Spring Harbor Protocols, 2015, 2015, pdb.top066142.	0.3	1
39	Measuring Ca²⁺ Sparks in Cardiac Myocytes. Cold Spring Harbor Protocols, 2015, 2015, pdb.prot076984.	0.3	1
40	Exercise Training Reduces Spontaneous Ca2+ Waves In Cardiomyocytes From Post-myocardial Infarction Heart Failure Rats. Biophysical Journal, 2009, 96, 274a-275a.	0.5	0
41	UV Ratiometric Imaging Of Isolated Ventricular Cardiomyocytes Using An LED Based Illuminator. Biophysical Journal, 2009, 96, 638a.	0.5	0
42	Upregulation Of Cam Kinase IIÎ´ Modulates Spontaneous Ca2+ Wave Properties In A Rabbit Model Of Heart Failure. Biophysical Journal, 2009, 96, 275a.	0.5	0
43	Intracellular Dyssynchrony in Calcium Removal in Ventricular Cardiac Myocytes. Biophysical Journal, 2012, 102, 552a.	0.5	0
44	3-D Localization of Subcellular Ca2+ Release Reveals a Cytoskeletal Dependence of RyR Activation. Biophysical Journal, 2012, 102, 316a.	0.5	0
45	Variable RyR Cluster Morphology in Sheep Atrial Myocytes: Super Resolution Measurement and Ca2+ Release Simulation. Biophysical Journal, 2012, 102, 309a.	0.5	0
46	High-throughput Study of Rabbit Ventricle Action Potential Populations in MI Model. Biophysical Journal, 2018, 114, 625a.	0.5	0
47	Early Diastolic Ca2+ Sparks Alter Repolarization Rate of Rabbit Cardiomyocytes. Biophysical Journal, 2018, 114, 288a.	0.5	0
48	Physiologic, but not Pathologic Hypertrophy of the Cardiomyocyte sustains Transverse Tubule Density. Medicine and Science in Sports and Exercise, 2007, 39, S97.	0.4	0
49	PO-614-03 ALTERED SUBCELLULAR CALCIUM RELEASE IN THE HEART FAILURE ATRIA. Heart Rhythm, 2022, 19, S104.	0.7	0