Eduardo RÃ-os

List of Publications by Year
in descending order

69 papers	4,194 citations	134610 34 h-index	124990 64 g-index
71 all docs	71 docs citations	71 times ranked	2725 citing authors

#	Article	IF	Citations
1	Fragmentation and roles of junctophilin1 in muscle of patients with cytosolic leak of stored calcium. Journal of General Physiology, 2022, 154, .	0.9	2
2	Quantification of the calcium signaling deficit in muscles devoid of triadin. PLoS ONE, 2022, 17, e0264146.	1.1	1
3	A novel method for determining murine skeletal muscle fiber type using autofluorescence lifetimes. Journal of General Physiology, 2022, 154, .	0.9	0
4	A chloride channel blocker prevents the suppression by inorganic phosphate of the cytosolic calcium signals that control muscle contraction. Journal of Physiology, 2021, 599, 157-170.	1.3	5
5	A multi-dimensional analysis of genotypeâ€“phenotype discordance in malignant hyperthermia susceptibility. British Journal of Anaesthesia, 2020, 125, 995-1001.	1.5	5
6	Intracellular calcium leak lowers glucose storage in human muscle, promoting hyperglycemia and diabetes. ELife, 2020, 9, .	2.8	20
7	The binding interactions that maintain excitationâ€“contraction coupling junctions in skeletal muscle. Journal of General Physiology, 2019, 151, 593-605.	0.9	8
8	Abnormal calcium signalling and the caffeineâ€“halothane contracture test. British Journal of Anaesthesia, 2019, 122, 32-41.	1.5	15
9	Calcium-induced release of calcium in muscle: 50 years of work and the emerging consensus. Journal of General Physiology, 2018, 150, 521-537.	0.9	73
10	Calsequestrin depolymerizes when calcium is depleted in the sarcoplasmic reticulum of working muscle. Proceedings of the National Academy of Sciences of the United States of America, 2017, 114, E638-E647.	3.3	55
11	The voltage sensor of excitationâ€“contraction coupling in mammals: Inactivation and interaction with Ca2+. Journal of General Physiology, 2017, 149, 1041-1058.	0.9	12
12	Perspectives on â€œControl of Ca release from within the cardiac sarcoplasmic reticulumâ€. Journal of General Physiology, 2017, 149, 833-836.	0.9	6
13	Characterization of Post-Translational Modifications to Calsequestrins of Cardiac and Skeletal Muscle. International Journal of Molecular Sciences, 2016, 17, 1539.	1.8	13
14	Calsequestrin Depolymerizes when Ca2+ Concentration Decays in the Sarcoplasmic Reticulum of Skeletal Muscle. Biophysical Journal, 2016, 110, 182a.	0.2	2
15	The couplonopathies: A comparative approach to a class of diseases of skeletal and cardiac muscle. Journal of General Physiology, 2015, 145, 459-474.	0.9	31
16	Characterization of Two Human Skeletal Calsequestrin Mutants Implicated in Malignant Hyperthermia and Vacuolar Aggregate Myopathy. Journal of Biological Chemistry, 2015, 290, 28665-28674.	1.6	27
17	A better method to measure total calcium in biological samples yields immediate payoffs. Journal of General Physiology, 2015, 145, 167-171.	0.9	2
18	On an early demonstration of the cell boundary theorem. Journal of Physiological Sciences, 2013, 63, 161-161.	0.9	1

#	Article	IF	Citations
19	Altered Ca²⁺ concentration, permeability and buffering in the myofibre Ca²⁺ store of a mouse model of malignant hyperthermia. Journal of Physiology, 2013, 591, 4439-4457.	1.3	27
20	Dynamic measurement of the calcium buffering properties of the sarcoplasmic reticulum in mouse skeletal muscle. Journal of Physiology, 2013, 591, 423-442.	1.3	20
21	Isoproterenol Increases the Fraction of Spark-Dependent RyR-Mediated Leak in Ventricular Myocytes. Biophysical Journal, 2013, 104, 976-985.	0.2	18
22	Using Two Dyes with the Same Fluorophore to Monitor Cellular Calcium Concentration in an Extended Range. PLoS ONE, 2013, 8, e55778.	1.1	1
23	Properties of Ca2+ sparks revealed by four-dimensional confocal imaging of cardiac muscle. Journal of General Physiology, 2012, 139, 189-207.	0.9	24
24	Synthetic localized calcium transients directly probe signalling mechanisms in skeletal muscle. Journal of Physiology, 2012, 590, 1389-1411.	1.3	28
25	Mitochondrial Calcium Uptake Regulates Rapid Calcium Transients in Skeletal Muscle during Excitation-Contraction (E-C) Coupling. Journal of Biological Chemistry, 2011, 286, 32436-32443.	1.6	80
26	D4cpv-calsequestrin: a sensitive ratiometric biosensor accurately targeted to the calcium store of skeletal muscle. Journal of General Physiology, 2011, 138, 211-229.	0.9	32
27	Measurement of RyR permeability reveals a role of calsequestrin in termination of SR Ca2+ release in skeletal muscle. Journal of General Physiology, 2011, 138, 231-247.	0.9	42
28	The cell boundary theorem: a simple law of the control of cytosolic calcium concentration. Journal of Physiological Sciences, 2010, 60, 81-4.	0.9	60
29	Paradoxical buffering of calcium by calsequestrin demonstrated for the calcium store of skeletal muscle. Journal of General Physiology, 2010, 136, 325-338.	0.9	39
30	RyR1 Expression and the Cell Boundary Theorem. Journal of Biological Chemistry, 2010, 285, le13.	1.6	4
31	Hyperactive Intracellular Calcium Signaling Associated with Localized Mitochondrial Defects in Skeletal Muscle of an Animal Model of Amyotrophic Lateral Sclerosis. Journal of Biological Chemistry, 2010, 285, 705-712.	1.6	114
32	Ca Sparks Do Not Explain all Ryanodine Receptor-Mediated SR Ca Leak inÂMouse Ventricular Myocytes. Biophysical Journal, 2010, 98, 2111-2120.	0.2	58
33	Deconstructing calsequestrin. Complex buffering in the calcium store of skeletal muscle. Journal of Physiology, 2009, 587, 3101-3111.	1.3	69
34	Indo-1 Derivatives for Local Calcium Sensing. ACS Chemical Biology, 2009, 4, 179-190.	1.6	98
35	Evolution and modulation of intracellular calcium release during longâ€lasting, depleting depolarization in mouse muscle. Journal of Physiology, 2008, 586, 4609-4629.	1.3	41
36	Calcium-dependent Inactivation Terminates Calcium Release in Skeletal Muscle of Amphibians. Journal of General Physiology, 2008, 131, 335-348.	0.9	14

#	Article	IF	Citations
37	Ca2+ sparks operated by membrane depolarization require isoform 3 ryanodine receptor channels in skeletal muscle. Proceedings of the National Academy of Sciences of the United States of America, 2007, 104, 5235-5240.	3.3	71
38	Calcium signalling in muscle: a milestone for modulation studies. Journal of Physiology, 2006, 572, 1-2.	1.3	1
39	The elusive role of store depletion in the control of intracellular calcium release. Journal of Muscle Research and Cell Motility, 2006, 27, 337-350.	0.9	17
40	The Changes in Ca2+ Sparks Associated with Measured Modifications of Intra-store Ca2+ Concentration in Skeletal Muscle. Journal of General Physiology, 2006, 128, 45-54.	0.9	19
41	A probable role of dihydropyridine receptors in repression of Ca2+ sparks demonstrated in cultured mammalian muscle. American Journal of Physiology - Cell Physiology, 2006, 290, C539-C553.	2.1	66
42	Depletion "skraps" and dynamic buffering inside the cellular calcium store. Proceedings of the National Academy of Sciences of the United States of America, 2006, 103, 2982-2987.	3.3	76
43	Confocal imaging of [Ca2+] in cellular organelles by SEER, shifted excitation and emission ratioing of fluorescence. Journal of Physiology, 2005, 567, 523-543.	1.3	62
44	Concerted vs. Sequential. Two Activation Patterns of Vast Arrays of Intracellular Ca2+ Channels in Muscle. Journal of General Physiology, 2005, 126, 301-309.	0.9	19
45	Regulation of Ca2+ Sparks by Ca2+ and Mg2+ in Mammalian and Amphibian Muscle. An RyR Isoform-specific Role in Excitationâ€"Contraction Coupling?. Journal of General Physiology, 2004, 124, 409-428.	0.9	51
46	How Source Content Determines Intracellular Ca2+ Release Kinetics. Simultaneous Measurement of [Ca2+] Transients and [H+] Displacement in Skeletal Muscle. Journal of General Physiology, 2004, 124, 239-258.	0.9	35
47	Control of dual isoforms of Ca2+ release channels in muscle. Biological Research, 2004, 37, 583-91.	1.5	6
48	Differential Effects of Voltage-Dependent Inactivation and Local Anesthetics on Kinetic Phases of Ca2+ Release in Frog Skeletal Muscle. Biophysical Journal, 2003, 85, 245-254.	0.2	13
49	Unitary Ca2+ Current through Mammalian Cardiac and Amphibian Skeletal Muscle Ryanodine Receptor Channels under Near-physiological Ionic Conditions. Journal of General Physiology, 2003, 122, 407-417.	0.9	61
50	Thermodynamically Irreversible Gating of Ryanodine Receptors in Situ Revealed by Stereotyped Duration of Release in Ca2+ Sparks. Biophysical Journal, 2002, 83, 242-251.	0.2	43
51	Intracellular Ca2+ Release as Irreversible Markov Process. Biophysical Journal, 2002, 83, 2511-2521.	0.2	26
52	Excitation-Contraction Coupling in Skeletal Muscle. Advances in Muscle Research, 2002, , 1-48.	0.4	1
53	Initiation and termination of calcium sparks in skeletal muscle. Frontiers in Bioscience - Landmark, 2002, 7, d1212-1222.	3.0	29
54	A Preferred Amplitude of Calcium Sparks in Skeletal Muscle. Biophysical Journal, 2001, 80, 169-183.	0.2	39

#	Article	IF	Citations
55	Fast imaging in two dimensions resolves extensive sources of Ca 2+ sparks in frog skeletal muscle. Journal of Physiology, 2000, 528, 419-433.	1.3	42
56	Unitary Ca2+ Current through Cardiac Ryanodine Receptor Channels under Quasi-Physiological Ionic Conditions. Journal of General Physiology, 1999, 113, 177-186.	0.9	135
57	Local Control Models of Cardiac Excitationâ€“Contraction Coupling. Journal of General Physiology, 1999, 113, 469-489.	0.9	253
58	Calcium Sparks: Release Packets of Uncertain Origin and Fundamental Role. Journal of General Physiology, 1999, 113, 377-384.	0.9	46
59	Calcium Release Flux Underlying Ca2+ Sparks of Frog Skeletal Muscle. Journal of General Physiology, 1999, 114, 31-48.	0.9	74
60	Spatially segregated control of Ca2+release in developing skeletal muscle of mice. Journal of Physiology, 1999, 521, 483-495.	1.3	59
61	Amplitude Distribution of Calcium Sparks in Confocal Images: Theory and Studies with an Automatic Detection Method. Biophysical Journal, 1999, 76, 606-617.	0.2	272
62	Local calcium release in mammalian skeletal muscle. Journal of Physiology, 1998, 512, 377-384.	1.3	130
63	Inactivation of Gating Currents of L-Type Calcium Channels. Journal of General Physiology, 1998, 111, 807-823.	0.9	56
64	Regulation of Skeletal Muscle Ca2+ Release Channel (Ryanodine Receptor) by Ca2+ and Monovalent Cations and Anions. Journal of Biological Chemistry, 1997, 272, 1628-1638.	1.6	146
65	Local Control Model of Excitationâ€“Contraction Coupling in Skeletal Muscle. Journal of General Physiology, 1997, 110, 415-440.	0.9	209
66	CALCIUM IN CLOSE QUARTERS:Microdomain Feedback in Excitation-Contraction Coupling and Other Cell Biological Phenomena. Annual Review of Biophysics and Biomolecular Structure, 1997, 26, 47-82.	18.3	120
67	Small event Ca2+release: a probable precursor of Ca2+sparks in frog skeletal muscle. Journal of Physiology, 1997, 502, 3-11.	1.3	76
68	â€˜Quantalâ€™ calcium release operated by membrane voltage in frog skeletal muscle. Journal of Physiology, 1997, 501, 289-303.	1.3	29
69	Involvement of dihydropyridine receptors in excitationâ€“contraction coupling in skeletal muscle. Nature, 1987, 325, 717-720.	13.7	864