W J Lederer

List of Publications by Year
in descending order

185 papers	27,909 citations	5569 82 h-index	5249 165 g-index
186 all docs	186 docs citations	186 times ranked	13290 citing authors

#	Article	IF	Citations
1	Calcium sparks: elementary events underlying excitation-contraction coupling in heart muscle. Science, 1993, 262, 740-744.	6.0	1,850
2	Sodium/Calcium Exchange: Its Physiological Implications. Physiological Reviews, 1999, 79, 763-854.	13.1	1,551
3	Relaxation of Arterial Smooth Muscle by Calcium Sparks. Science, 1995, 270, 633-637.	6.0	1,306
4	Cloning and expression of an inwardly rectifying ATP-regulated potassium channel. Nature, 1993, 362, 31-38.	13.7	933
5	Ankyrin-B mutation causes type 4 long-QT cardiac arrhythmia and sudden cardiac death. Nature, 2003, 421, 634-639.	13.7	926
6	Defective Excitation-Contraction Coupling in Experimental Cardiac Hypertrophy and Heart Failure. Science, 1997, 276, 800-806.	6.0	715
7	FKBP12.6 Deficiency and Defective Calcium Release Channel (Ryanodine Receptor) Function Linked to Exercise-Induced Sudden Cardiac Death. Cell, 2003, 113, 829-840.	13.5	683
8	Role of calcium ions in transient inward currents and aftercontractions induced by strophanthidin in cardiac Purkinje fibres.. Journal of Physiology, 1978, 281, 187-208.	1.3	609
9	Calcium sparks in smooth muscle. American Journal of Physiology - Cell Physiology, 2000, 278, C235-C256.	2.1	571
10	The control of calcium release in heart muscle. Science, 1995, 268, 1045-1049.	6.0	540
11	Calcium Sparks. Physiological Reviews, 2008, 88, 1491-1545.	13.1	540
12	Calmodulin kinase II inhibition protects against structural heart disease. Nature Medicine, 2005, 11, 409-417.	15.2	526
13	Calcium sparks and [Ca2+]i waves in cardiac myocytes. American Journal of Physiology - Cell Physiology, 1996, 270, C148-C159.	2.1	493
14	X-ROS Signaling: Rapid Mechano-Chemo Transduction in Heart. Science, 2011, 333, 1440-1445.	6.0	485
15	Orphaned ryanodine receptors in the failing heart. Proceedings of the National Academy of Sciences of the United States of America, 2006, 103, 4305-4310.	3.3	409
16	Transient inward current underlying arrhythmogenic effects of cardiotonic steroids in Purkinje fibres.. Journal of Physiology, 1976, 263, 73-100.	1.3	377
17	Cellular and subcellular heterogeneity of [Ca2+]i in single heart cells revealed by fura-2. Science, 1987, 235, 325-328.	6.0	365
18	Effect of membrane potential changes on the calcium transient in single rat cardiac muscle cells. Science, 1987, 238, 1419-1423.	6.0	361

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19	Suppression of voltage-gated L-type Ca2+ currents by polyunsaturated fatty acids in adult and neonatal rat ventricular myocytes. Proceedings of the National Academy of Sciences of the United States of America, 1997, 94, 4182-4187.	3.3	355
20	Spatial non-uniformities in [Ca2+]i during excitation-contraction coupling in cardiac myocytes. Biophysical Journal, 1994, 67, 1942-1956.	0.2	353
21	Rapid adaptation of cardiac ryanodine receptors: modulation by Mg2+ and phosphorylation. Science, 1995, 267, 1997-2000.	6.0	337
22	Leaky Ca2+ release channel/ryanodine receptor 2 causes seizures and sudden cardiac death in mice. Journal of Clinical Investigation, 2008, 118, 2230-45.	3.9	318
23	Two mechanisms of quantized calcium release in skeletal muscle. Nature, 1996, 379, 455-458.	13.7	310
24	Mitofusin-2 Maintains Mitochondrial Structure and Contributes to Stress-Induced Permeability Transition in Cardiac Myocytes. Molecular and Cellular Biology, 2011, 31, 1309-1328.	1.1	306
25	Mitochondrial calcium uptake. Proceedings of the National Academy of Sciences of the United States of America, 2013, 110, 10479-10486.	3.3	301
26	Sodium-calcium exchange in excitable cells: fuzzy space. Science, 1990, 248, 283-283.	6.0	284
27	Nucleotide modulation of the activity of rat heart ATPâ€sensitive K+ channels in isolated membrane patches.. Journal of Physiology, 1989, 419, 193-211.	1.3	280
28	Ca2+channels, ryanodine receptors and Ca2+-activated K+channels: a functional unit for regulating arterial tone. Acta Physiologica Scandinavica, 1998, 164, 577-587.	2.3	274
29	ATP-sensitive potassium channel modulation of the guinea pig ventricular action potential and contraction.. Circulation Research, 1991, 68, 280-287.	2.0	253
30	Phorbol ester increases calcium current and simulates the effects of angiotensin II on cultured neonatal rat heart myocytes.. Circulation Research, 1988, 62, 347-357.	2.0	249
31	Na-Ca exchange: stoichiometry and electrogenicity. American Journal of Physiology - Cell Physiology, 1985, 248, C189-C202.	2.1	241
32	Cellular origins of the transient inward current in cardiac myocytes. Role of fluctuations and waves of elevated intracellular calcium.. Circulation Research, 1989, 65, 115-126.	2.0	228
33	Microtubules Underlie Dysfunction in Duchenne Muscular Dystrophy. Science Signaling, 2012, 5, ra56.	1.6	222
34	Ca2+ ions can affect intracellular pH in mammalian cardiac muscle. Nature, 1983, 301, 522-524.	13.7	218
35	Stabilization of cardiac ryanodine receptor prevents intracellular calcium leak and arrhythmias. Proceedings of the National Academy of Sciences of the United States of America, 2006, 103, 7906-7910.	3.3	209
36	Relation Between the Sarcolemmal Ca ²⁺ Current and Ca ²⁺ Sparks and Local Control Theories for Cardiac Excitation-Contraction Coupling. Circulation Research, 1996, 78, 166-171.	2.0	201

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37	A Simple Numerical Model of Calcium Spark Formation and Detection in Cardiac Myocytes. Biophysical Journal, 1998, 75, 15-32.	0.2	198
38	Frequency modulation of Ca²⁺sparks is involved in regulation of arterial diameter by cyclic nucleotides. American Journal of Physiology - Cell Physiology, 1998, 274, C1346-C1355.	2.1	194
39	Angiotensin II increases spontaneous contractile frequency and stimulates calcium current in cultured neonatal rat heart myocytes: insights into the underlying biochemical mechanisms.. Circulation Research, 1988, 62, 524-534.	2.0	192
40	Voltage-independent calcium release in heart muscle. Science, 1990, 250, 565-568.	6.0	186
41	Dual regulation of Ca2+/calmodulin-dependent kinase II activity by membrane voltage and by calcium influx.. Proceedings of the National Academy of Sciences of the United States of America, 1994, 91, 9659-9663.	3.3	182
42	Ca2+ blinks: Rapid nanoscopic store calcium signaling. Proceedings of the National Academy of Sciences of the United States of America, 2005, 102, 3099-3104.	3.3	182
43	Heart Failure After Myocardial Infarction. Circulation, 2001, 104, 688-693.	1.6	180
44	Excitation-contraction coupling in heart: new insights from Ca2+ sparks. Cell Calcium, 1996, 20, 129-140.	1.1	176
45	Mutually exclusive and cassette exons underlie alternatively spliced isoforms of the Na/Ca exchanger. Journal of Biological Chemistry, 1994, 269, 5145-9.	1.6	174
46	Anoxic contractile failure in rat heart myocytes is caused by failure of intracellular calcium release due to alteration of the action potential.. Proceedings of the National Academy of Sciences of the United States of America, 1988, 85, 6954-6958.	3.3	170
47	Ca2+ Flux Through Promiscuous Cardiac Na+ Channels: Slip-Mode Conductance. Science, 1998, 279, 1027-1033.	6.0	164
48	Inotropic and arrhythmogenic effects of potassiumâ€depleted solutions on mammalian cardiac muscle.. Journal of Physiology, 1979, 294, 255-277.	1.3	162
49	Changes in the calcium current of rat heart ventricular myocytes during development.. Journal of Physiology, 1988, 406, 115-146.	1.3	161
50	Molecular operations of the sodiumâ€“calcium exchanger revealed by conformation currents. Nature, 1991, 349, 621-624.	13.7	159
51	The regulation of ATPâ€sensitive K+ channel activity in intact and permeabilized rat ventricular myocytes.. Journal of Physiology, 1990, 423, 91-110.	1.3	156
52	Characterization of the electrogenic sodium pump in cardiac Purkinje fibres. Journal of Physiology, 1980, 303, 441-474.	1.3	154
53	Intracellular Ca transients in rat cardiac myocytes: role of Na-Ca exchange in excitation-contraction coupling. American Journal of Physiology - Cell Physiology, 1990, 258, C944-C954.	2.1	153
54	The dependence of sodium pumping and tension on intracellular sodium activity in voltage-clamped sheep Purkinje fibres.. Journal of Physiology, 1981, 317, 163-187.	1.3	149

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55	Expression of the Na-Ca exchanger in diverse tissues: a study using the cloned human cardiac Na-Ca exchanger. American Journal of Physiology - Cell Physiology, 1992, 263, C1241-C1249.	2.1	142
56	Modulation of cardiac ryanodine receptors of swine and rabbit by a phosphorylationâ€dephosphorylation mechanism.. Journal of Physiology, 1995, 487, 609-622.	1.3	142
57	Scorpion toxins targeted against the sarcoplasmic reticulum Ca(2+)-release channel of skeletal and cardiac muscle.. Proceedings of the National Academy of Sciences of the United States of America, 1992, 89, 12185-12189.	3.3	134
58	NCLX: The mitochondrial sodium calcium exchanger. Journal of Molecular and Cellular Cardiology, 2013, 59, 205-213.	0.9	132
59	Excitationâ€"contraction coupling changes during postnatal cardiac development. Journal of Molecular and Cellular Cardiology, 2010, 48, 379-386.	0.9	131
60	Ca2+ and voltage inactivate Ca2+ channels in guineaâ€pig ventricular myocytes through independent mechanisms.. Journal of Physiology, 1991, 444, 257-268.	1.3	129
61	Calcium Sparks and Excitation-Contraction Coupling in Phospholamban-Deficient Mouse Ventricular Myocytes. Journal of Physiology, 1997, 503, 21-29.	1.3	129
62	The control of tonic tension by membrane potential and intracellular sodium activity in the sheep cardiac Purkinje fibre.. Journal of Physiology, 1983, 335, 723-743.	1.3	127
63	Role of Sodium Channel Deglycosylation in the Genesis of Cardiac Arrhythmias in Heart Failure. Journal of Biological Chemistry, 2001, 276, 28197-28203.	1.6	123
64	The quantitative relationship between twitch tension and intracellular sodium activity in sheep cardiac Purkinje fibres.. Journal of Physiology, 1984, 355, 251-266.	1.3	120
65	Use of thapsigargin to study Ca2+ homeostasis in cardiac cells. Bioscience Reports, 1995, 15, 341-349.	1.1	120
66	The mechanism of early contractile failure of isolated rat ventricular myocytes subjected to complete metabolic inhibition.. Journal of Physiology, 1989, 413, 329-349.	1.3	113
67	Dynamics of Calcium Sparks and Calcium Leak in the Heart. Biophysical Journal, 2011, 101, 1287-1296.	0.2	112
68	Fluorescence lifetime imaging of intracellular calcium in COS cells using Quin-2. Cell Calcium, 1994, 15, 7-27.	1.1	110
69	The Ca2+ leak paradox and â€œrogue ryanodine receptorsâ€: SR Ca2+ efflux theory and practice. Progress in Biophysics and Molecular Biology, 2006, 90, 172-185.	1.4	110
70	Thapsigargin inhibits contraction and Ca2+ transient in cardiac cells by specific inhibition of the sarcoplasmic reticulum Ca2+ pump. Journal of Biological Chemistry, 1992, 267, 12545-51.	1.6	109
71	Cellular and functional defects in a mouse model of heart failure. American Journal of Physiology - Heart and Circulatory Physiology, 2000, 279, H3101-H3112.	1.5	108
72	X-ROS signaling in the heart and skeletal muscle: Stretch-dependent local ROS regulates [Ca2+]i. Journal of Molecular and Cellular Cardiology, 2013, 58, 172-181.	0.9	107

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73	Immunofluorescence localization of the Na-Ca exchanger in heart cells. American Journal of Physiology - Cell Physiology, 1992, 263, C545-C550.	2.1	103
74	The role of the sodium pump in the effects of potassiumâ€depleted solutions on mammalian cardiac muscle. Journal of Physiology, 1979, 294, 279-301.	1.3	100
75	Ca2+ diffusion and sarcoplasmic reticulum transport both contribute to [Ca2+]i decline during Ca2+ sparks in rat ventricular myocytes.. Journal of Physiology, 1996, 496, 575-581.	1.3	100
76	Local Ca2+ Signaling and EC Coupling in Heart: Ca2+ Sparks and the Regulation of the [Ca2+]i Transient. Journal of Molecular and Cellular Cardiology, 2002, 34, 941-950.	0.9	99
77	Superresolution Modeling of Calcium Release in the Heart. Biophysical Journal, 2014, 107, 3018-3029.	0.2	96
78	Two-photon-excitation fluorescence imaging of three-dimensional calcium-ion activity. Applied Optics, 1994, 33, 662.	2.1	93
79	Membrane depolarization, elevated Ca²⁺entry, and gene expression in cerebral arteries of hypertensive rats. American Journal of Physiology - Heart and Circulatory Physiology, 2001, 281, H2559-H2567.	1.5	91
80	Probing the Outer Mitochondrial Membrane in Cardiac Mitochondria with Nanoparticles. Biophysical Journal, 2007, 92, 1058-1071.	0.2	87
81	Lidocaine's negative inotropic and antiarrhythmic actions. Dependence on shortening of action potential duration and reduction of intracellular sodium activity.. Circulation Research, 1985, 57, 578-590.	2.0	85
82	Dynamic modulation of excitationâ€contraction coupling by protein phosphatases in rat ventricular myocytes.. Journal of Physiology, 1996, 493, 793-800.	1.3	83
83	Novel Subunit Composition of a Renal Epithelial KATPChannel. Journal of Biological Chemistry, 1998, 273, 14165-14171.	1.6	82
84	Mitochondria in cardiomyocyte Ca2+ signaling. International Journal of Biochemistry and Cell Biology, 2009, 41, 1957-1971.	1.2	82
85	Isoform-Specific Regulation of the Na+/Ca2+Exchanger in Rat Astrocytes and Neurons by PKA. Journal of Neuroscience, 1998, 18, 4833-4841.	1.7	81
86	Propagation of excitation-contraction coupling into ventricular myocytes. Pflugers Archiv European Journal of Physiology, 1994, 428, 415-417.	1.3	78
87	Local recovery of Ca2+release in rat ventricular myocytes. Journal of Physiology, 2005, 565, 441-447.	1.3	78
88	The arrhythmogenic current ITI in the absence of electrogenic sodiumâ€calcium exchange in sheep cardiac Purkinje fibres.. Journal of Physiology, 1986, 374, 201-219.	1.3	76
89	Effects of changes of intracellular pH on contraction in sheep cardiac Purkinje fibers.. Journal of General Physiology, 1987, 89, 1015-1032.	0.9	76
90	The effects of rubidium ions and membrane potentials on the intracellular sodium activity of sheep Purkinje fibres.. Journal of Physiology, 1981, 317, 189-205.	1.3	75

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91	The mechanism by which cytoplasmic protons inhibit the sodium-calcium exchanger in guinea-pig heart cells. Journal of Physiology, 1993, 466, 481-99.	1.3	75
92	Alterations of atrial Ca2+ handling as cause and consequence of atrial fibrillation. Cardiovascular Research, 2011, 89, 722-733.	1.8	74
93	Thick slurry bevelling. Pflugers Archiv European Journal of Physiology, 1979, 381, 287-288.	1.3	71
94	Calcium current in isolated neonatal rat ventricular myocytes.. Journal of Physiology, 1987, 391, 169-191.	1.3	71
95	Nuclear Ca2+ regulates cardiomyocyte function. Cell Calcium, 2008, 44, 230-242.	1.1	71
96	The role of intracellular sodium activity in the antiâ€arrhythmic action of local anaesthetics in sheep Purkinje fibres.. Journal of Physiology, 1983, 340, 239-257.	1.3	70
97	Angiotensin-induced desensitization of the phosphoinositide pathway in cardiac cells occurs at the level of the receptor.. Circulation Research, 1991, 69, 800-809.	2.0	69
98	Myosin-binding protein C corrects an intrinsic inhomogeneity in cardiac excitation-contraction coupling. Science Advances, 2015, 1, .	4.7	69
99	A novel experimental chamber for single-cell voltage-clamp and patch-clamp applications with low electrical noise and excellent temperature and flow control. Pflugers Archiv European Journal of Physiology, 1986, 406, 536-539.	1.3	64
100	Molecular identification of a TTX-sensitive Ca²⁺current. American Journal of Physiology - Cell Physiology, 2001, 280, C1327-C1339.	2.1	64
101	Functional differences between cardiac and renal isoforms of the rat Na + â€Ca 2+ exchanger NCX1 expressed in Xenopus oocytes. Journal of Physiology, 2000, 529, 599-610.	1.3	63
102	The action of Na+ as a cofactor in the inhibition by cytoplasmic protons of the cardiac Na(+)â€Ca2+ exchanger in the guineaâ€pig.. Journal of Physiology, 1994, 480, 9-20.	1.3	62
103	Real-time confocal microscopy and calcium measurements in heart muscle cells: Towards the development of a fluorescence microscope with high temporal and spatial resolution. Cell Calcium, 1990, 11, 121-130.	1.1	61
104	ATP dependence of KATP channel kinetics in isolated membrane patches from rat ventricle. Biophysical Journal, 1991, 60, 1164-1177.	0.2	60
105	Ca Sparks Do Not Explain all Ryanodine Receptor-Mediated SR Ca Leak inÂMouse Ventricular Myocytes. Biophysical Journal, 2010, 98, 2111-2120.	0.2	58
106	The role of ATP in energy-deprivation contractures in unloaded rat ventricular myocytes. Canadian Journal of Physiology and Pharmacology, 1990, 68, 183-194.	0.7	56
107	Properties of L-type calcium channel gating current in isolated guinea pig ventricular myocytes.. Journal of General Physiology, 1991, 98, 265-285.	0.9	56
108	STIM1 enhances SR Ca ²⁺ content through binding phospholamban in rat ventricular myocytes. Proceedings of the National Academy of Sciences of the United States of America, 2015, 112, E4792-801.	3.3	55

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109	Partial Inhibition of Ca ²⁺ Current by Methoxyverapamil (D600) Reveals Spatial Nonuniformities in [Ca ²⁺] _i During Excitation-Contraction Coupling in Cardiac Myocytes. Circulation Research, 1995, 76, 236-241.	2.0	55
110	Effect of the immunosupressant FK506 on excitation-contraction coupling and outward K+currents in rat ventricular myocytes. Journal of Physiology, 1997, 501, 509-516.	1.3	54
111	Calcium Biology of the Transverse Tubules in Heart. Annals of the New York Academy of Sciences, 2005, 1047, 99-111.	1.8	54
112	The relationship between sodium pump activity and twitch tension in cardiac Purkinje fibres. Journal of Physiology, 1980, 303, 475-494.	1.3	48
113	Intramembrane charge movement in guineaâ€pig and rat ventricular myocytes.. Journal of Physiology, 1989, 415, 601-624.	1.3	47
114	STIM1â€“Ca ²⁺ signaling modulates automaticity of the mouse sinoatrial node. Proceedings of the National Academy of Sciences of the United States of America, 2015, 112, E5618-27.	3.3	47
115	Dynamics of the mitochondrial permeability transition pore: Transient and permanent opening events. Archives of Biochemistry and Biophysics, 2019, 666, 31-39.	1.4	46
116	On the Mechanism of Inhibition of KATPChannels by Glibenclamide in Rat Ventricular Myocytes. Journal of Cardiovascular Electrophysiology, 1993, 4, 38-47.	0.8	43
117	Models of Ca2+ release channel adaptation. Science, 1995, 267, 2009-2010.	6.0	42
118	Dynamic local changes in sarcoplasmic reticulum calcium: Physiological and pathophysiological roles. Journal of Molecular and Cellular Cardiology, 2012, 52, 304-311.	0.9	42
119	Twenty Years of Calcium Imaging: Cell Physiology to Dye For. Molecular Interventions: Pharmacological Perspectives From Biology, Chemistry and Genomics, 2005, 5, 112-127.	3.4	42
120	Cardiac Na-Ca Exchange and pH. Annals of the New York Academy of Sciences, 1996, 779, 182-198.	1.8	40
121	Na+/Ca2+ exchanger in Drosophila: cloning, expression, and transport differences. American Journal of Physiology - Cell Physiology, 1997, 273, C257-C265.	2.1	40
122	Aqueous Diffusion Pathways as a Part of the Ventricular Cell Ultrastructure. Biophysical Journal, 2006, 90, 1107-1119.	0.2	40
123	Functional groups of ryanodine receptors in rat ventricular cells. Journal of Physiology, 2007, 583, 251-269.	1.3	40
124	Diastolic transient inward current in long QT syndrome type 3 is caused by Ca2+ overload and inhibited by ranolazine. Journal of Molecular and Cellular Cardiology, 2009, 47, 326-334.	0.9	40
125	Activation of Na-Ca exchange current by photolysis of "caged calcium". Biophysical Journal, 1993, 65, 882-891.	0.2	39
126	Overexpression of Î²2-Adrenergic Receptors cAMP-dependent Protein Kinase Phosphorylates and Modulates Slow Delayed Rectifier Potassium Channels Expressed in Murine Heart. Journal of Biological Chemistry, 2004, 279, 40778-40787.	1.6	37

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127	Ryanodine receptor sensitivity governs the stability and synchrony of local calcium release during cardiac excitation-contraction coupling. Journal of Molecular and Cellular Cardiology, 2016, 92, 82-92.	0.9	37
128	The effects of sodium pump activity on the slow inward current in sheep cardiac Purkinje fibres. Proceedings of the Royal Society of London Series B, Containing Papers of A Biological Character, 1982, 214, 249-262.	1.8	36
129	Restitution of Ca2+ Release and Vulnerability to Arrhythmias. Journal of Cardiovascular Electrophysiology, 2006, 17, S64-S70.	0.8	36
130	Repriming and activation alter the frequency of stereotyped discrete Ca2+ release events in frog skeletal muscle.. Journal of Physiology, 1996, 497, 581-588.	1.3	34
131	Sarcoplasmic reticulum in heart failure: central player or bystander?. Cardiovascular Research, 1998, 37, 346-351.	1.8	33
132	On the Adjacency Matrix of RyR2 Cluster Structures. PLoS Computational Biology, 2015, 11, e1004521.	1.5	33
133	On Establishing Primary Cultures of Neonatal Rat Ventricular Myocytes for Analysis Over Long Periods. Journal of Cardiovascular Electrophysiology, 1994, 5, 50-62.	0.8	31
134	Subcellular Ca2+ signaling in the heart: the role of ryanodine receptor sensitivity. Journal of General Physiology, 2010, 136, 135-142.	0.9	31
135	Molecular and cellular actions of platelet-activating factor in rat heart cells.. Journal of Clinical Investigation, 1991, 88, 2106-2116.	3.9	29
136	Effects of extracellular sodium on calcium efflux and membrane current in single muscle cells from the barnacle.. Journal of Physiology, 1983, 341, 325-339.	1.3	28
137	Restoring forces in cardiac myocytes. Insight from relaxations induced by photolysis of caged ATP. Biophysical Journal, 1991, 59, 1123-1135.	0.2	27
138	The Molecular Biology of the Na+-Ca2+ Exchanger and Its Functional Roles in Heart, Smooth Muscle Cells, Neurons, Glia, Lymphocytes, and Nonexcitable Cellsa. Annals of the New York Academy of Sciences, 1996, 779, 7-17.	1.8	26
139	Sodium pump stoicheiometry determined by simultaneous measurements of sodium efflux and membrane current in barnacle.. Journal of Physiology, 1984, 348, 665-677.	1.3	25
140	Modulation of ATP-sensitive potassium channel activity by flash-photolysis of ?caged-ATP? in rat heart cells. Pflugers Archiv European Journal of Physiology, 1990, 415, 510-512.	1.3	25
141	Excitation-Contraction Coupling in Heart Cells.. Annals of the New York Academy of Sciences, 1990, 588, 190-206.	1.8	24
142	Calcium Current in Single Human Cardiac Myocytes. Journal of Cardiovascular Electrophysiology, 1993, 4, 422-437.	0.8	24
143	The cardiac IP3 receptor: Uncovering the role of â€œthe otherâ€•calcium-release channel. Journal of Molecular and Cellular Cardiology, 2008, 45, 159-161.	0.9	24
144	Unique atrial myocyte Ca2+ signaling. Journal of Molecular and Cellular Cardiology, 2009, 46, 448-451.	0.9	24

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145	Independent inhibition of calcineurin and K+ currents by the immunosuppressant FK-506 in rat ventricle. American Journal of Physiology - Heart and Circulatory Physiology, 1998, 275, H2041-H2052.	1.5	22
146	Distribution of ryanodine receptors in rat ventricular myocytes. Journal of Muscle Research and Cell Motility, 2009, 30, 161-170.	0.9	22
147	Ca2+ dynamics in the mitochondria - state of the art. Journal of Molecular and Cellular Cardiology, 2011, 51, 627-631.	0.9	22
148	Phosphorylation and Other Conundrums of Na/Ca Exchanger, NCX1. Annals of the New York Academy of Sciences, 2007, 1099, 103-118.	1.8	19
149	Effects of membrane potential on intracellular calcium concentration in sheep Purkinje fibres in sodiumâ€free solutions.. Journal of Physiology, 1986, 381, 193-203.	1.3	16
150	The mechanism of KATP channel inhibition by ATP.. Journal of General Physiology, 1991, 97, 1095-1098.	0.9	15
151	Functional expression of the human cardiac Na+/Ca2+exchanger in Sf9 cells: rapid and specific Ni2+transport. Cell Calcium, 1999, 25, 9-17.	1.1	15
152	Ryanodine block of calcium oscillations in heart muscle and the sodium-tension relationship. Federation Proceedings, 1985, 44, 2964-9.	1.3	14
153	Alternative Splicing of the Na+-Ca2+ Exchanger Gene, NCX1. Annals of the New York Academy of Sciences, 1996, 779, 46-57.	1.8	13
154	Immunofluorescence Localization of SERCA2a and the Phosphorylated Forms of Phospholamban in Intact Rat Cardiac Ventricular Myocytes a. Annals of the New York Academy of Sciences, 1998, 853, 273-279.	1.8	13
155	Ni²⁺transport by the human Na⁺/Ca²⁺exchanger expressed in Sf 9 cells. American Journal of Physiology - Cell Physiology, 1999, 276, C1184-C1192.	2.1	13
156	Does the Goldilocks Principle apply to calcium release restitution in heart cells?. Journal of Molecular and Cellular Cardiology, 2012, 52, 3-6.	0.9	13
157	Active transport and inotropic state in guinea pig left atrium.. Circulation Research, 1983, 53, 834-836.	2.0	12
158	Excitation-contraction coupling in heart muscle. Molecular and Cellular Biochemistry, 1989, 89, 115-9.	1.4	12
159	Response. Science, 1991, 251, 1371-1371.	6.0	12
160	Ambiguous interactions between diastolic and SR Ca2+ in the regulation of cardiac Ca2+ release. Journal of General Physiology, 2017, 149, 847-855.	0.9	12
161	Photorelease of Ca2+Produces Na-Ca Exchange Currents and Na-Ca Exchange "Gating" Currents. Annals of the New York Academy of Sciences, 1991, 639, 61-70.	1.8	11
162	The growing importance of mitochondrial calcium in health and disease. Proceedings of the National Academy of Sciences of the United States of America, 2015, 112, 11150-11151.	3.3	11

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163	Measurement of intracellular Ca2+ in BC3H-1 muscle cells with Fura-2: Relationship to acetylcholine receptor synthesis. Cell Calcium, 1990, 11, 371-384.	1.1	10
164	Does the use of DM-nitrophen, nitr-5, or diazo-2 interfere with the measurement of indo-1 fluorescence?. Biophysical Journal, 1993, 65, 2537-2546.	0.2	10
165	Ghost sparks. Nature Cell Biology, 2005, 7, 457-459.	4.6	9
166	Novel approach to real-time flash photolysis and confocal [Ca2+] imaging. Pflugers Archiv European Journal of Physiology, 2007, 454, 663-673.	1.3	9
167	Mapping of the human cardiac Na⁺/Ca²⁺ exchanger gene (IMCX1) by fluorescent in situ hybridization to chromosome region 2p22→p23. Cytogenetic and Genome Research, 1993, 63, 192-193.	0.6	8
168	The Effects of Intracellular Na on Contraction and Intracellular pH in Mammalian Cardiac Muscle. , 1985, 5, 313-330.		8
169	An antidote for calcium leak: Targeting molecular arrhythmia mechanisms. Journal of Molecular and Cellular Cardiology, 2010, 48, 279-282.	0.9	7
170	The challenge of molecular medicine: complexity versus Occamâ€™s razor. Journal of Clinical Investigation, 2003, 111, 801-803.	3.9	7
171	Measurement of intracellular Ca2+ concentration using Indo-1 during simultaneous flash photolysis to release Ca2+ from DM-nitrophen. Pflugers Archiv European Journal of Physiology, 1994, 427, 169-177.	1.3	6
172	Another calcium paradox in heart failure. Journal of Molecular and Cellular Cardiology, 2008, 45, 28-31.	0.9	6
173	Voltage-Dependent Block of the Na-Ca Exchanger in Heart Muscle Examined Using Giant Excised Patches from Guinea Pig Cardiac Myocytes. Annals of the New York Academy of Sciences, 1991, 639, 172-176.	1.8	4
174	Arrhythmogenic effects of hypokalaemia on mammalian ventricular muscle [proceedings]. Journal of Physiology, 1978, 280, 74P-75P.	1.3	4
175	Alternative splicing: A key mechanism for ankyrin-B functional diversity?. Journal of Molecular and Cellular Cardiology, 2008, 45, 709-711.	0.9	3
176	Stochastic simulation of cardiac ventricular myocyte calcium dynamics and waves. , 2011, 2011, 4677-80.		3
177	The Electrogenic Na-K Pump in the Sheep Cardiac Purkinje Fibre. , 1981, , 156-163.		3
178	Fluorescence lifetime imaging of intracellular calcium. Journal of Fluorescence, 1993, 3, 161-167.	1.3	2
179	Superresolution Subspace Signaling. Science, 2012, 336, 546-547.	6.0	2
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