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	Dynamics of the mitochondrial permeability transition pore: Transient and permanent opening events. Archives of Biochemistry and Biophysics, 2019, 666, 31-39.	1.4	46
2	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
3	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
4	On the Adjacency Matrix of RyR2 Cluster Structures. PLoS Computational Biology, 2015, 11, e1004521.	1.5	33
5	Myosin-binding protein C corrects an intrinsic inhomogeneity in cardiac excitation-contraction coupling. Science Advances, 2015, 1, .	4.7	69
6	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
7	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
8	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
9	Superresolution Modeling of Calcium Release in the Heart. Biophysical Journal, 2014, 107, 3018-3029.	0.2	96
10	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
11	NCLX: The mitochondrial sodium calcium exchanger. Journal of Molecular and Cellular Cardiology, 2013, 59, 205-213.	0.9	132
12	Mitochondrial calcium uptake. Proceedings of the National Academy of Sciences of the United States of America, 2013, 110, 10479-10486.	3.3	301
13	Microtubules Underlie Dysfunction in Duchenne Muscular Dystrophy. Science Signaling, 2012, 5, ra56.	1.6	222
14	Dynamic local changes in sarcoplasmic reticulum calcium: Physiological and pathophysiological roles. Journal of Molecular and Cellular Cardiology, 2012, 52, 304-311.	0.9	42
15	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
16	Superresolution Subspace Signaling. Science, 2012, 336, 546-547.	6.0	2
17	Dynamics of Calcium Sparks and Calcium Leak in the Heart. Biophysical Journal, 2011, 101, 1287-1296.	0.2	112
18	Ca2+ dynamics in the mitochondria - state of the art. Journal of Molecular and Cellular Cardiology, 2011, 51, 627-631.	0.9	22

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19	X-ROS Signaling: Rapid Mechano-Chemo Transduction in Heart. Science, 2011, 333, 1440-1445.	6.0	485
20	Stochastic simulation of cardiac ventricular myocyte calcium dynamics and waves. , 2011, 2011, 4677-80.		3
21	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
22	Alterations of atrial Ca2+ handling as cause and consequence of atrial fibrillation. Cardiovascular Research, 2011, 89, 722-733.	1.8	74
23	Subcellular Ca2+ signaling in the heart: the role of ryanodine receptor sensitivity. Journal of General Physiology, 2010, 136, 135-142.	0.9	31
24	Ca Sparks Do Not Explain all Ryanodine Receptor-Mediated SR Ca Leak inÂMouse Ventricular Myocytes. Biophysical Journal, 2010, 98, 2111-2120.	0.2	58
25	Excitationâ€"contraction coupling changes during postnatal cardiac development. Journal of Molecular and Cellular Cardiology, 2010, 48, 379-386.	0.9	131
26	An antidote for calcium leak: Targeting molecular arrhythmia mechanisms. Journal of Molecular and Cellular Cardiology, 2010, 48, 279-282.	0.9	7
27	Distribution of ryanodine receptors in rat ventricular myocytes. Journal of Muscle Research and Cell Motility, 2009, 30, 161-170.	0.9	22
28	Mitochondria in cardiomyocyte Ca2+ signaling. International Journal of Biochemistry and Cell Biology, 2009, 41, 1957-1971.	1.2	82
29	Unique atrial myocyte Ca2+ signaling. Journal of Molecular and Cellular Cardiology, 2009, 46, 448-451.	0.9	24
30	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
31	Nuclear Ca2+ regulates cardiomyocyte function. Cell Calcium, 2008, 44, 230-242.	1.1	71
32	Another calcium paradox in heart failure. Journal of Molecular and Cellular Cardiology, 2008, 45, 28-31.	0.9	6
33	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
34	Alternative splicing: A key mechanism for ankyrin-B functional diversity?. Journal of Molecular and Cellular Cardiology, 2008, 45, 709-711.	0.9	3
35	Calcium Sparks. Physiological Reviews, 2008, 88, 1491-1545.	13.1	540
36	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

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37	Probing the Outer Mitochondrial Membrane in Cardiac Mitochondria with Nanoparticles. Biophysical Journal, 2007, 92, 1058-1071.	0.2	87
38	Functional groups of ryanodine receptors in rat ventricular cells. Journal of Physiology, 2007, 583, 251-269.	1.3	40
39	Phosphorylation and Other Conundrums of Na/Ca Exchanger, NCX1. Annals of the New York Academy of Sciences, 2007, 1099, 103-118.	1.8	19
40	Novel approach to real-time flash photolysis and confocal [Ca2+] imaging. Pflugers Archiv European Journal of Physiology, 2007, 454, 663-673.	1.3	9
41	Aqueous Diffusion Pathways as a Part of the Ventricular Cell Ultrastructure. Biophysical Journal, 2006, 90, 1107-1119.	0.2	40
42	Restitution of Ca2+ Release and Vulnerability to Arrhythmias. Journal of Cardiovascular Electrophysiology, 2006, 17, S64-S70.	0.8	36
43	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
44	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
45	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
46	Calcium Biology of the Transverse Tubules in Heart. Annals of the New York Academy of Sciences, 2005, 1047, 99-111.	1.8	54
47	Ghost sparks. Nature Cell Biology, 2005, 7, 457-459.	4.6	9
48	Calmodulin kinase II inhibition protects against structural heart disease. Nature Medicine, 2005, 11, 409-417.	15.2	526
49	Local recovery of Ca2+release in rat ventricular myocytes. Journal of Physiology, 2005, 565, 441-447.	1.3	78
50	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
51	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
52	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
53	Ankyrin-B mutation causes type 4 long-QT cardiac arrhythmia and sudden cardiac death. Nature, 2003, 421, 634-639.	13.7	926
54	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

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55	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.	0.7	1
56	The challenge of molecular medicine: complexity versus Occamâ€™s razor. Journal of Clinical Investigation, 2003, 111, 801-803.	3.9	7
57	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
58	Molecular identification of a TTX-sensitive Ca²⁺current. American Journal of Physiology - Cell Physiology, 2001, 280, C1327-C1339.	2.1	64
59	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
60	Heart Failure After Myocardial Infarction. Circulation, 2001, 104, 688-693.	1.6	180
61	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
62	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
63	Calcium sparks in smooth muscle. American Journal of Physiology - Cell Physiology, 2000, 278, C235-C256.	2.1	571
64	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
65	Sodium/Calcium Exchange: Its Physiological Implications. Physiological Reviews, 1999, 79, 763-854.	13.1	1,551
66	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
67	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
68	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
69	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
70	A Simple Numerical Model of Calcium Spark Formation and Detection in Cardiac Myocytes. Biophysical Journal, 1998, 75, 15-32.	0.2	198
71	Ca2+ Flux Through Promiscuous Cardiac Na+ Channels: Slip-Mode Conductance. Science, 1998, 279, 1027-1033.	6.0	164
72	Novel Subunit Composition of a Renal Epithelial KATPChannel. Journal of Biological Chemistry, 1998, 273, 14165-14171.	1.6	82

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73	Sarcoplasmic reticulum in heart failure: central player or bystander?. Cardiovascular Research, 1998, 37, 346-351.	1.8	33
74	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
75	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
76	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
77	Defective Excitation-Contraction Coupling in Experimental Cardiac Hypertrophy and Heart Failure. Science, 1997, 276, 800-806.	6.0	715
78	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
79	Na+/Ca2+ exchanger in Drosophila: cloning, expression, and transport differences. American Journal of Physiology - Cell Physiology, 1997, 273, C257-C265.	2.1	40
80	Calcium Sparks and Excitation-Contraction Coupling in Phospholamban-Deficient Mouse Ventricular Myocytes. Journal of Physiology, 1997, 503, 21-29.	1.3	129
81	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
82	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
83	Alternative Splicing of the Na+-Ca2+ Exchanger Gene, NCX1. Annals of the New York Academy of Sciences, 1996, 779, 46-57.	1.8	13
84	Cardiac Na-Ca Exchange and pH. Annals of the New York Academy of Sciences, 1996, 779, 182-198.	1.8	40
85	Calcium sparks and [Ca2+]i waves in cardiac myocytes. American Journal of Physiology - Cell Physiology, 1996, 270, C148-C159.	2.1	493
86	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
87	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
88	Excitation-contraction coupling in heart: new insights from Ca2+ sparks. Cell Calcium, 1996, 20, 129-140.	1.1	176
89	Two mechanisms of quantized calcium release in skeletal muscle. Nature, 1996, 379, 455-458.	13.7	310
90	Dynamic modulation of excitationâ€contraction coupling by protein phosphatases in rat ventricular myocytes.. Journal of Physiology, 1996, 493, 793-800.	1.3	83

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91	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
92	Modulation of cardiac ryanodine receptors of swine and rabbit by a phosphorylationâ€dephosphorylation mechanism.. Journal of Physiology, 1995, 487, 609-622.	1.3	142
93	Use of thapsigargin to study Ca2+ homeostasis in cardiac cells. Bioscience Reports, 1995, 15, 341-349.	1.1	120
94	Relaxation of Arterial Smooth Muscle by Calcium Sparks. Science, 1995, 270, 633-637.	6.0	1,306
95	Rapid adaptation of cardiac ryanodine receptors: modulation by Mg2+ and phosphorylation. Science, 1995, 267, 1997-2000.	6.0	337
96	Models of Ca2+ release channel adaptation. Science, 1995, 267, 2009-2010.	6.0	42
97	The control of calcium release in heart muscle. Science, 1995, 268, 1045-1049.	6.0	540
98	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
99	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
100	Propagation of excitation-contraction coupling into ventricular myocytes. Pflugers Archiv European Journal of Physiology, 1994, 428, 415-417.	1.3	78
101	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
102	Fluorescence lifetime imaging of intracellular calcium in COS cells using Quin-2. Cell Calcium, 1994, 15, 7-27.	1.1	110
103	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
104	Spatial non-uniformities in [Ca2+]i during excitation-contraction coupling in cardiac myocytes. Biophysical Journal, 1994, 67, 1942-1956.	0.2	353
105	Two-photon-excitation fluorescence imaging of three-dimensional calcium-ion activity. Applied Optics, 1994, 33, 662.	2.1	93
106	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
107	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
108	Fluorescence lifetime imaging of intracellular calcium. Journal of Fluorescence, 1993, 3, 161-167.	1.3	2

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109	Cloning and expression of an inwardly rectifying ATP-regulated potassium channel. Nature, 1993, 362, 31-38.	13.7	933
110	On the Mechanism of Inhibition of KATPChannels by Glibenclamide in Rat Ventricular Myocytes. Journal of Cardiovascular Electrophysiology, 1993, 4, 38-47.	0.8	43
111	Calcium Current in Single Human Cardiac Myocytes. Journal of Cardiovascular Electrophysiology, 1993, 4, 422-437.	0.8	24
112	Activation of Na-Ca exchange current by photolysis of "caged calcium". Biophysical Journal, 1993, 65, 882-891.	0.2	39
113	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
114	Calcium sparks: elementary events underlying excitation-contraction coupling in heart muscle. Science, 1993, 262, 740-744.	6.0	1,850
115	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
116	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
117	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
118	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
119	Immunofluorescence localization of the Na-Ca exchanger in heart cells. American Journal of Physiology - Cell Physiology, 1992, 263, C545-C550.	2.1	103
120	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
121	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
122	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
123	ATP dependence of KATP channel kinetics in isolated membrane patches from rat ventricle. Biophysical Journal, 1991, 60, 1164-1177.	0.2	60
124	Restoring forces in cardiac myocytes. Insight from relaxations induced by photolysis of caged ATP. Biophysical Journal, 1991, 59, 1123-1135.	0.2	27
125	The mechanism of KATP channel inhibition by ATP.. Journal of General Physiology, 1991, 97, 1095-1098.	0.9	15
126	Molecular operations of the sodiumâ€“calcium exchanger revealed by conformation currents. Nature, 1991, 349, 621-624.	13.7	159

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127	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
128	ATP-sensitive potassium channel modulation of the guinea pig ventricular action potential and contraction.. Circulation Research, 1991, 68, 280-287.	2.0	253
129	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
130	Response. Science, 1991, 251, 1371-1371.	6.0	12
131	Ca2+ and voltage inactivate Ca2+ channels in guineaâ€pig ventricular myocytes through independent mechanisms.. Journal of Physiology, 1991, 444, 257-268.	1.3	129
132	Molecular and cellular actions of platelet-activating factor in rat heart cells.. Journal of Clinical Investigation, 1991, 88, 2106-2116.	3.9	29
133	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
134	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
135	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
136	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
137	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
138	Voltage-independent calcium release in heart muscle. Science, 1990, 250, 565-568.	6.0	186
139	Sodium-calcium exchange in excitable cells: fuzzy space. Science, 1990, 248, 283-283.	6.0	284
140	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
141	Excitation-Contraction Coupling in Heart Cells.. Annals of the New York Academy of Sciences, 1990, 588, 190-206.	1.8	24
142	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
143	Does voltage affect excitation-contraction coupling in the heart?. Science, 1989, 246, 1640-1640.	6.0	1
144	Excitation-contraction coupling in heart muscle. Molecular and Cellular Biochemistry, 1989, 89, 115-9.	1.4	12

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145	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
146	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
147	Intramembrane charge movement in guineaâ€pig and rat ventricular myocytes.. Journal of Physiology, 1989, 415, 601-624.	1.3	47
148	Calcium Current and Excitation-Contraction Coupling in Heart. Developments in Cardiovascular Medicine, 1989, , 3-11.	0.1	0
149	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
150	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
151	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
152	Changes in the calcium current of rat heart ventricular myocytes during development.. Journal of Physiology, 1988, 406, 115-146.	1.3	161
153	Effects of changes of intracellular pH on contraction in sheep cardiac Purkinje fibers.. Journal of General Physiology, 1987, 89, 1015-1032.	0.9	76
154	Effect of membrane potential changes on the calcium transient in single rat cardiac muscle cells. Science, 1987, 238, 1419-1423.	6.0	361
155	Calcium current in isolated neonatal rat ventricular myocytes.. Journal of Physiology, 1987, 391, 169-191.	1.3	71
156	Cellular and subcellular heterogeneity of [Ca2+]i in single heart cells revealed by fura-2. Science, 1987, 235, 325-328.	6.0	365
157	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
158	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
159	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
160	Electrophysiological effects of cardiac glycosides. , 1986, , 69-78.		2
161	Na-Ca exchange: stoichiometry and electrogenicity. American Journal of Physiology - Cell Physiology, 1985, 248, C189-C202.	2.1	241
162	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

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163	The Effects of Intracellular Na on Contraction and Intracellular pH in Mammalian Cardiac Muscle. , 1985, 5, 313-330.		8
164	Ryanodine block of calcium oscillations in heart muscle and the sodium-tension relationship. Federation Proceedings, 1985, 44, 2964-9.	1.3	14
165	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
166	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
167	Ca2+ ions can affect intracellular pH in mammalian cardiac muscle. Nature, 1983, 301, 522-524.	13.7	218
168	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
169	Active transport and inotropic state in guinea pig left atrium.. Circulation Research, 1983, 53, 834-836.	2.0	12
170	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
171	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
172	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
173	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
174	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
175	The Electrogenic Na-K Pump in the Sheep Cardiac Purkinje Fibre. , 1981, , 156-163.		3
176	Characterization of the electrogenic sodium pump in cardiac Purkinje fibres. Journal of Physiology, 1980, 303, 441-474.	1.3	154
177	The relationship between sodium pump activity and twitch tension in cardiac Purkinje fibres. Journal of Physiology, 1980, 303, 475-494.	1.3	48
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