Heping Cheng

List of Publications by Year in Descending Order

160 papers	12,893 citations	63 h-index	111 g-index
164 ext. papers	14,468 ext. citations	11.2 avg, IF	5.9 L-index

#	Paper	IF	Citations
160	Arterial Labeling Ultrasound Subtraction Angiography (ALUSA) Based on Acoustic Phase-Change Nanodroplets.. *Small*, **2022**, e2105989	11	0
159	Functional network topography of the medial entorhinal cortex.. *Proceedings of the National Academy of Sciences of the United States of America*, **2022**, 119,	11.5	2
158	CMYA5 establishes cardiac dyad architecture and positioning.. *Nature Communications*, **2022**, 13, 2185	17.4	0
157	Dynamics of a disinhibitory prefrontal microcircuit in controlling social competition. *Neuron*, **2021**,	13.9	3
156	Spatiotemporal regulation of store-operated calcium entry in cancer metastasis. *Biochemical Society Transactions*, **2021**,	5.1	1
155	Blinking Acoustic Nanodroplets Enable Fast Super-resolution Ultrasound Imaging. *ACS Nano*, **2021**, 15, 16913-16923	16.7	1
154	BacFlash signals acid-resistance gene expression in bacteria. *Cell Research*, **2021**, 31, 703-712	24.7	1
153	Miniature two-photon microscopy for enlarged field-of-view, multi-plane and long-term brain imaging. *Nature Methods*, **2021**, 18, 46-49	21.6	35
152	The mechanosensitive Piezo1 channel mediates heart mechano-chemo transduction. *Nature Communications*, **2021**, 12, 869	17.4	27
151	Prohibitin 2 deficiency impairs cardiac fatty acid oxidation and causes heart failure. *Cell Death and Disease*, **2020**, 11, 181	9.8	14
150	Long-term, in toto live imaging of cardiomyocyte behaviour during mouse ventricle chamber formation at single-cell resolution. *Nature Cell Biology*, **2020**, 22, 332-340	23.4	17
149	An optimized acetylcholine sensor for monitoring in vivo cholinergic activity. *Nature Methods*, **2020**, 17, 1139-1146	21.6	64
148	Imaging Sarcoplasmic Reticulum Ca Signaling in Intact Cardiac Myocytes. *Circulation*, **2020**, 142, 1503-1505	16.7	2
147	Light-sheet fluorescence imaging charts the gastrula origin of vascular endothelial cells in early zebrafish embryos. *Cell Discovery*, **2020**, 6, 74	22.3	3
146	Miniature Fluorescence Microscopy for Imaging Brain Activity in Freely-Behaving Animals. *Neuroscience Bulletin*, **2020**, 36, 1182-1190	4.3	9
145	NDUFAB1 protects against obesity and insulin resistance by enhancing mitochondrial metabolism. *FASEB Journal*, **2019**, 33, 13310-13322	0.9	9
144	Central role of IPR2-mediated Ca oscillation in self-renewal of liver cancer stem cells elucidated by high-signal ER sensor. *Cell Death and Disease*, **2019**, 10, 396	9.8	15

143	Structural and Mechanistic Bases of Nuclear Calcium Signaling in Human Pluripotent Stem Cell-Derived Ventricular Cardiomyocytes. *Stem Cells International*, **2019**, 2019, 8765752	5	3
142	Mitoflash biogenesis and its role in the autoregulation of mitochondrial proton electrochemical potential. *Journal of General Physiology*, **2019**, 151, 727-737	3.4	7
141	Imaging elemental events of store-operated Ca entry in invading cancer cells with plasmalemmal targeted sensors. *Journal of Cell Science*, **2019**, 132,	5.3	11
140	Temperature dependence of mitoflash biogenesis in cardiac mitochondria. *Archives of Biochemistry and Biophysics*, **2019**, 666, 8-15	4.1	
139	Mitochondrial PIP3-binding protein FUNDC2 supports platelet survival via AKT signaling pathway. *Cell Death and Differentiation*, **2019**, 26, 321-331	12.7	16
138	NDUFAB1 confers cardio-protection by enhancing mitochondrial bioenergetics through coordination of respiratory complex and supercomplex assembly. *Cell Research*, **2019**, 29, 754-766	24.7	33
137	Brain activity regulates loose coupling between mitochondrial and cytosolic Ca transients. *Nature Communications*, **2019**, 10, 5277	17.4	13
136	Calcium dysregulation mediates mitochondrial and neurite outgrowth abnormalities in SOD2 deficient embryonic cerebral cortical neurons. *Cell Death and Differentiation*, **2019**, 26, 1600-1614	12.7	10
135	Rapid volumetric imaging with Bessel-Beam three-photon microscopy. *Biomedical Optics Express*, **2018**, 9, 1992-2000	3.5	31
134	Influences: Experimenting with multidisciplinary training. *Journal of General Physiology*, **2018**, 150, 1350-1351	3.4	
133	Programmed Cell Death 5 Provides Negative Feedback on Cardiac Hypertrophy Through the Stabilization of Sarco/Endoplasmic Reticulum Ca-ATPase 2a Protein. *Hypertension*, **2018**, 72, 889-901	8.5	7
132	Fluorescence-Based Measurements of Store-Operated Ca Entry in Cancer Cells Using Fluo-4 and Confocal Live-Cell Imaging. *Methods in Molecular Biology*, **2018**, 1843, 63-68	1.4	3
131	A novel stochastic reaction-diffusion model of Ca 2+ blink in cardiac myocytes. *Science Bulletin*, **2017**, 62, 5-8	10.6	6
130	Absence of physiological Ca transients is an initial trigger for mitochondrial dysfunction in skeletal muscle following denervation. *Skeletal Muscle*, **2017**, 7, 6	5.1	25
129	Deficiency of PHB complex impairs respiratory supercomplex formation and activates mitochondrial flashes. *Journal of Cell Science*, **2017**, 130, 2620-2630	5.3	26
128	Fast high-resolution miniature two-photon microscopy for brain imaging in freely behaving mice. *Nature Methods*, **2017**, 14, 713-719	21.6	229
127	Dendritic mitoflash as a putative signal for stabilizing long-term synaptic plasticity. *Nature Communications*, **2017**, 8, 31	17.4	36
126	Mitochondrial flashes regulate ATP homeostasis in the heart. *ELife*, **2017**, 6,	8.9	40

125	Mitochondrial Flashes: Elemental Signaling Events in Eukaryotic Cells. *Handbook of Experimental Pharmacology*, **2017**, 240, 403-422	3.2	6
124	Regulation of Mitoflash Biogenesis and Signaling by Mitochondrial Dynamics. *Scientific Reports*, **2016**, 6, 32933	4.9	10
123	Mitochondrial Flash: Integrative Reactive Oxygen Species and pH Signals in Cell and Organelle Biology. *Antioxidants and Redox Signaling*, **2016**, 25, 534-49	8.4	43
122	Mitochondrial flashes: From indicator characterization to in vivo imaging. *Methods*, **2016**, 109, 12-20	4.6	8
121	Identification of EFHD1 as a novel Ca(2+) sensor for mitoflash activation. *Cell Calcium*, **2016**, 59, 262-70	4	19
120	Cyclophilin D regulates mitochondrial flashes and metabolism in cardiac myocytes. *Journal of Molecular and Cellular Cardiology*, **2016**, 91, 63-71	5.8	24
119	Protons Trigger Mitochondrial Flashes. *Biophysical Journal*, **2016**, 111, 386-394	2.9	26
118	Large-field high-resolution two-photon digital scanned light-sheet microscopy. *Cell Research*, **2015**, 25, 254-7	24.7	52
117	Remodeling of Mitochondrial Flashes in Muscular Development and Dystrophy in Zebrafish. *PLoS ONE*, **2015**, 10, e0132567	3.7	19
116	Mitoflash altered by metabolic stress in insulin-resistant skeletal muscle. *Journal of Molecular Medicine*, **2015**, 93, 1119-30	5.5	22
115	Mitoflash frequency in early adulthood predicts lifespan in Caenorhabditis elegans. *Nature*, **2014**, 508, 128-32	50.4	105
114	Imaging Ca2+ nanosparks in heart with a new targeted biosensor. *Circulation Research*, **2014**, 114, 412-20	15.7	59
113	Cheng et al. reply. *Nature*, **2014**, 514, E14-5	50.4	18
112	STIM1- and Orai1-mediated Ca(2+) oscillation orchestrates invadopodium formation and melanoma invasion. *Journal of Cell Biology*, **2014**, 207, 535-48	7.3	110
111	Hydrogen peroxide primes heart regeneration with a derepression mechanism. *Cell Research*, **2014**, 24, 1091-107	24.7	83
110	Mitochondrial flashes: new insights into mitochondrial ROS signalling and beyond. *Journal of Physiology*, **2014**, 592, 3703-13	3.9	49
109	Regulation of superoxide flashes by transient and steady mitochondrial calcium elevations. *Science China Life Sciences*, **2014**, 57, 495-501	8.5	16
108	Mechanistic basis of excitation-contraction coupling in human pluripotent stem cell-derived ventricular cardiomyocytes revealed by Ca2+ spark characteristics: direct evidence of functional Ca2+-induced Ca2+ release. *Heart Rhythm*, **2014**, 11, 133-40	6.7	20

107	Adiponectin regulates SR Ca(2+) cycling following ischemia/reperfusion via sphingosine 1-phosphate-CaMKII signaling in mice. *Journal of Molecular and Cellular Cardiology*, **2014**, 74, 183-92	5.8	23
106	Permeability transition pore-mediated mitochondrial superoxide flashes mediate an early inhibitory effect of amyloid beta1-42 on neural progenitor cell proliferation. *Neurobiology of Aging*, **2014**, 35, 975-89	5.6	49
105	Imaging ROS signaling in cells and animals. *Journal of Molecular Medicine*, **2013**, 91, 917-27	5.5	114
104	Overnutrition stimulates intestinal epithelium proliferation through β-catenin signaling in obese mice. *Diabetes*, **2013**, 62, 3736-46	0.9	63
103	β-adrenergic-stimulated L-type channel Ca^{2+} entry mediates hypoxic Ca^{2+} overload in intact heart. *Journal of Molecular and Cellular Cardiology*, **2013**, 65, 51-8	5.8	14
102	Kissing and nanotunneling mediate intermitochondrial communication in the heart. *Proceedings of the National Academy of Sciences of the United States of America*, **2013**, 110, 2846-51	11.5	113
101	Synergistic triggering of superoxide flashes by mitochondrial Ca2+ uniport and basal reactive oxygen species elevation. *Journal of Biological Chemistry*, **2013**, 288, 4602-12	5.4	67
100	1B50-1, a mAb raised against recurrent tumor cells, targets liver tumor-initiating cells by binding to the calcium channel α2δ1 subunit. *Cancer Cell*, **2013**, 23, 541-56	24.3	122
99	Superoxide constitutes a major signal of mitochondrial superoxide flash. *Life Sciences*, **2013**, 93, 178-86	6.8	33
98	ROS regulation of microdomain Ca(2+) signalling at the dyads. *Cardiovascular Research*, **2013**, 98, 248-58	9.9	48
97	Respective contribution of mitochondrial superoxide and pH to mitochondria-targeted circularly permuted yellow fluorescent protein (mt-cpYFP) flash activity. *Journal of Biological Chemistry*, **2013**, 288, 10567-77	5.4	62
96	Proinflammatory Cytokines Stimulate Mitochondrial Superoxide Flashes in Articular Chondrocytes In Vitro and In Situ. *PLoS ONE*, **2013**, 8, e66444	3.7	24
95	Superoxide flashes: elemental events of mitochondrial ROS signaling in the heart. *Journal of Molecular and Cellular Cardiology*, **2012**, 52, 940-8	5.8	46
94	Mitochondrial superoxide production negatively regulates neural progenitor proliferation and cerebral cortical development. *Stem Cells*, **2012**, 30, 2535-47	5.8	68
93	Superoxide flashes reveal novel properties of mitochondrial reactive oxygen species excitability in cardiomyocytes. *Biophysical Journal*, **2012**, 102, 1011-21	2.9	52
92	Calcium gradients underlying cell migration. *Current Opinion in Cell Biology*, **2012**, 24, 254-61	9	114
91	Recombinant MG53 protein modulates therapeutic cell membrane repair in treatment of muscular dystrophy. *Science Translational Medicine*, **2012**, 4, 139ra85	17.5	128
90	Central role of mitofusin 2 in autophagosome-lysosome fusion in cardiomyocytes. *Journal of Biological Chemistry*, **2012**, 287, 23615-25	5.4	140

89	Elementary calcium release events from the sarcoplasmic reticulum in the heart. *Advances in Experimental Medicine and Biology*, **2012**, 740, 499-509	3.6	11
88	Response to "A critical evaluation of cpYFP as a probe for superoxide". *Free Radical Biology and Medicine*, **2011**, 51, 1937-40	7.8	32
87	Anomalous Subdiffusion of Calcium Spark in Cardiac Myocytes. *Cellular and Molecular Bioengineering*, **2011**, 4, 457-465	3.9	4
86	Superoxide flashes: early mitochondrial signals for oxidative stress-induced apoptosis. *Journal of Biological Chemistry*, **2011**, 286, 27573-81	5.4	98
85	Imaging superoxide flash and metabolism-coupled mitochondrial permeability transition in living animals. *Cell Research*, **2011**, 21, 1295-304	24.7	99
84	Rhesus macaques develop metabolic syndrome with reversible vascular dysfunction responsive to pioglitazone. *Circulation*, **2011**, 124, 77-86	16.7	37
83	Quarky calcium release in the heart. *Circulation Research*, **2011**, 108, 210-8	15.7	56
82	A method to measure myocardial calcium handling in adult Drosophila. *Circulation Research*, **2011**, 108, 1306-15	15.7	25
81	Carvedilol and its new analogs suppress arrhythmogenic store overload-induced Ca2+ release. *Nature Medicine*, **2011**, 17, 1003-9	50.5	157
80	Catecholaminergic-induced arrhythmias in failing cardiomyocytes associated with human HRCS96A variant overexpression. *American Journal of Physiology - Heart and Circulatory Physiology*, **2011**, 301, H1588-95	5.2	16
79	Cardioprotection by CaMKII-deltaB is mediated by phosphorylation of heat shock factor 1 and subsequent expression of inducible heat shock protein 70. *Circulation Research*, **2010**, 106, 102-10	15.7	98
78	Rad as a novel regulator of excitation-contraction coupling and beta-adrenergic signaling in heart. *Circulation Research*, **2010**, 106, 317-27	15.7	56
77	Cardioprotection of ischemia/reperfusion injury by cholesterol-dependent MG53-mediated membrane repair. *Circulation Research*, **2010**, 107, 76-83	15.7	111
76	T-tubule remodeling during transition from hypertrophy to heart failure. *Circulation Research*, **2010**, 107, 520-31	15.7	290
75	Simulation of the effect of rogue ryanodine receptors on a calcium wave in ventricular myocytes with heart failure. *Physical Biology*, **2010**, 7, 026005	3	13
74	Deciphering ryanodine receptor array operation in cardiac myocytes. *Journal of General Physiology*, **2010**, 136, 129-33	3.4	16
73	Flickering calcium microdomains signal turning of migrating cells. *Canadian Journal of Physiology and Pharmacology*, **2010**, 88, 105-10	2.4	22
72	Exogenous nucleic acids aggregate in non-P-body cytoplasmic granules when transfected into cultured cells. *Frontiers in Biology*, **2010**, 5, 272-281		

71	Beta-adrenergic signaling accelerates and synchronizes cardiac ryanodine receptor response to a single L-type Ca2+ channel. *Proceedings of the National Academy of Sciences of the United States of America*, **2009**, 106, 18028-33	11.5	49
70	Calcium flickers steer cell migration. *Nature*, **2009**, 457, 901-5	50.4	452
69	Nuclear Ca2+ sparks and waves mediated by inositol 1,4,5-trisphosphate receptors in neonatal rat cardiomyocytes. *Cell Calcium*, **2008**, 43, 165-74	4	83
68	Superoxide flashes in single mitochondria. *Cell*, **2008**, 134, 279-90	56.2	584
67	Calcium sparks. *Physiological Reviews*, **2008**, 88, 1491-545	47.9	447
66	Bidirectional regulation of Ca2+ sparks by mitochondria-derived reactive oxygen species in cardiac myocytes. *Cardiovascular Research*, **2008**, 77, 432-41	9.9	112
65	Superoxide flashes: illuminating new insights into cardiac ischemia/reperfusion injury. *Future Cardiology*, **2008**, 4, 551-554	1.3	20
64	Systemic ablation of RyR3 alters Ca2+ spark signaling in adult skeletal muscle. *Cell Calcium*, **2007**, 42, 548-55	4	21
63	Functional consequence of protein kinase A-dependent phosphorylation of the cardiac ryanodine receptor: sensitization of store overload-induced Ca2+ release. *Journal of Biological Chemistry*, **2007**, 282, 30256-64	5.4	61
62	Mitofusin-2 is a major determinant of oxidative stress-mediated heart muscle cell apoptosis. *Journal of Biological Chemistry*, **2007**, 282, 23354-61	5.4	143
61	Nitroxyl improves cellular heart function by directly enhancing cardiac sarcoplasmic reticulum Ca2+ cycling. *Circulation Research*, **2007**, 100, 96-104	15.7	188
60	Hypersensitivity of BKCa to Ca2+ sparks underlies hyporeactivity of arterial smooth muscle in shock. *Circulation Research*, **2007**, 101, 493-502	15.7	46
59	Activation of CaMKIIdeltaC is a common intermediate of diverse death stimuli-induced heart muscle cell apoptosis. *Journal of Biological Chemistry*, **2007**, 282, 10833-9	5.4	105
58	Ca2+/calmodulin kinase II-dependent phosphorylation of ryanodine receptors suppresses Ca2+ sparks and Ca2+ waves in cardiac myocytes. *Circulation Research*, **2007**, 100, 399-407	15.7	77
57	An anomalous subdiffusion model for calcium spark in cardiac myocytes. *Applied Physics Letters*, **2007**, 91, 183901	3.4	61
56	High basal protein kinase A-dependent phosphorylation drives rhythmic internal Ca2+ store oscillations and spontaneous beating of cardiac pacemaker cells. *Circulation Research*, **2006**, 98, 505-14	15.7	224
55	Orphaned ryanodine receptors in the failing heart. *Proceedings of the National Academy of Sciences of the United States of America*, **2006**, 103, 4305-10	11.5	347
54	Ser-2030, but not Ser-2808, is the major phosphorylation site in cardiac ryanodine receptors responding to protein kinase A activation upon beta-adrenergic stimulation in normal and failing hearts. *Biochemical Journal*, **2006**, 396, 7-16	3.8	136

53	ASF/SF2-regulated CaMKIIdelta alternative splicing temporally reprograms excitation-contraction coupling in cardiac muscle. *Cell*, **2005**, 120, 59-72	56.2	261
52	Uncontrolled calcium sparks act as a dystrophic signal for mammalian skeletal muscle. *Nature Cell Biology*, **2005**, 7, 525-30	23.4	138
51	Heterodimerization of beta1- and beta2-adrenergic receptor subtypes optimizes beta-adrenergic modulation of cardiac contractility. *Circulation Research*, **2005**, 97, 244-51	15.7	92
50	Ca2+ blinks: rapid nanoscopic store calcium signaling. *Proceedings of the National Academy of Sciences of the United States of America*, **2005**, 102, 3099-104	11.5	170
49	Ca2+ sparks and secretion in dorsal root ganglion neurons. *Proceedings of the National Academy of Sciences of the United States of America*, **2005**, 102, 12259-64	11.5	50
48	Paradoxical cellular Ca2+ signaling in severe but compensated canine left ventricular hypertrophy. *Circulation Research*, **2005**, 97, 457-64	15.7	58
47	Ca(2+)-induced Ca(2+) release in sensory neurons: low gain amplification confers intrinsic stability. *Journal of Biological Chemistry*, **2005**, 280, 15898-902	5.4	21
46	Characterization of a novel PKA phosphorylation site, serine-2030, reveals no PKA hyperphosphorylation of the cardiac ryanodine receptor in canine heart failure. *Circulation Research* , **2005**, 96, 847-55	15.7	158
45	The quantal nature of Ca2+ sparks and in situ operation of the ryanodine receptor array in cardiac cells. *Proceedings of the National Academy of Sciences of the United States of America*, **2004**, 101, 3979-84	11.5	110
44	Imaging microdomain Ca2+ in muscle cells. *Circulation Research*, **2004**, 94, 1011-22	15.7	66
43	Sustained beta1-adrenergic stimulation modulates cardiac contractility by Ca2+/calmodulin kinase signaling pathway. *Circulation Research*, **2004**, 95, 798-806	15.7	160
42	Prostaglandin A2-mediated stabilization of p21 mRNA through an ERK-dependent pathway requiring the RNA-binding protein HuR. *Journal of Biological Chemistry*, **2004**, 279, 49298-306	5.4	64
41	Dilated cardiomyopathy caused by tissue-specific ablation of SC35 in the heart. *EMBO Journal*, **2004** , 23, 885-96	13	113
40	Putting out the fire: what terminates calcium-induced calcium release in cardiac muscle?. *Cell Calcium*, **2004**, 35, 591-601	4	127
39	Contribution of spontaneous L-type Ca2+ channel activation to the genesis of Ca2+ sparks in resting cardiac myocytes. *Science in China Series C: Life Sciences*, **2004**, 47, 31-7		4
38	Subtype-specific beta-adrenoceptor signaling pathways in the heart and their potential clinical implications. *Trends in Pharmacological Sciences*, **2004**, 25, 358-65	13.2	119
37	RyR2 mutations linked to ventricular tachycardia and sudden death reduce the threshold for store-overload-induced Ca2+ release (SOICR). *Proceedings of the National Academy of Sciences of the United States of America*, **2004**, 101, 13062-7	11.5	356
36	Polymorphism of Ca2+ sparks evoked from in-focus Ca2+ release units in cardiac myocytes. *Biophysical Journal*, **2004**, 86, 182-90	2.9	28

35	Enhanced G(i) signaling selectively negates beta2-adrenergic receptor (AR)--but not beta1-AR-mediated positive inotropic effect in myocytes from failing rat hearts. *Circulation*, **2003**, 108, 1633-9	16.7	105
34	Calmodulin regulation of excitation-contraction coupling in cardiac myocytes. *Circulation Research*, **2003**, 92, 659-67	15.7	28
33	The third intracellular loop and the carboxyl terminus of beta2-adrenergic receptor confer spontaneous activity of the receptor. *Molecular Pharmacology*, **2003**, 64, 1048-58	4.3	28
32	Linkage of □1-adrenergic stimulation to apoptotic heart cell death through protein kinase A□independent activation of Ca2+/calmodulin kinase II. *Journal of Clinical Investigation*, **2003**, 111, 617-625	15.9	310
31	Calcium signaling between sarcolemmal calcium channels and ryanodine receptors in heart cells. *Frontiers in Bioscience - Landmark*, **2002**, 7, d1867	2.8	14
30	Dysfunction of store-operated calcium channel in muscle cells lacking mg29. *Nature Cell Biology*, **2002**, 4, 379-83	23.4	143
29	Ca(2+) signaling in cardiac myocytes overexpressing the alpha(1) subunit of L-type Ca(2+) channel. *Circulation Research*, **2002**, 90, 174-81	15.7	59
28	p38 Mitogen-activated protein kinase mediates a negative inotropic effect in cardiac myocytes. *Circulation Research*, **2002**, 90, 190-6	15.7	153
27	Thermodynamically irreversible gating of ryanodine receptors in situ revealed by stereotyped duration of release in Ca(2+) sparks. *Biophysical Journal*, **2002**, 83, 242-51	2.9	40
26	Intracellular Ca(2+) release as irreversible Markov process. *Biophysical Journal*, **2002**, 83, 2511-21	2.9	26
25	Adaptive mechanisms of intracellular calcium homeostasis in mammalian hibernators. *Journal of Experimental Biology*, **2002**, 205, 2957-62	3	74
24	Ca2+ signalling between single L-type Ca2+ channels and ryanodine receptors in heart cells. *Nature*, **2001**, 410, 592-6	50.4	343
23	RyR3 amplifies RyR1-mediated Ca(2+)-induced Ca(2+) release in neonatal mammalian skeletal muscle. *Journal of Biological Chemistry*, **2001**, 276, 40210-4	5.4	37
22	beta-Adrenergic stimulation synchronizes intracellular Ca(2+) release during excitation-contraction coupling in cardiac myocytes. *Circulation Research*, **2001**, 88, 794-801	15.7	129
21	Site-specific antibody of (Na(+) + K(+))-ATPase augments cardiac myocyte contraction without inactivating enzyme activity. *Biochemical and Biophysical Research Communications*, **2001**, 289, 167-72	3.4	5
20	Sparks and puffs in oligodendrocyte progenitors: cross talk between ryanodine receptors and inositol trisphosphate receptors. *Journal of Neuroscience*, **2001**, 21, 3860-70	6.6	79
19	Electrophysiological effects of protopine in cardiac myocytes: inhibition of multiple cation channel currents. *British Journal of Pharmacology*, **2000**, 129, 893-900	8.6	34
18	Culture and adenoviral infection of adult mouse cardiac myocytes: methods for cellular genetic physiology. *American Journal of Physiology - Heart and Circulatory Physiology*, **2000**, 279, H429-36	5.2	221

17	Frequency-encoding Thr17 phospholamban phosphorylation is independent of Ser16 phosphorylation in cardiac myocytes. *Journal of Biological Chemistry*, **2000**, 275, 22532-6	5.4	104
16	Sinoatrial node pacemaker activity requires Ca(2+)/calmodulin-dependent protein kinase II activation. *Circulation Research*, **2000**, 87, 760-7	15.7	149
15	Inhibition of spontaneous beta 2-adrenergic activation rescues beta 1-adrenergic contractile response in cardiomyocytes overexpressing beta 2-adrenoceptor. *Journal of Biological Chemistry*, **2000**, 275, 21773-9	5.4	20
14	G(i)-dependent localization of beta(2)-adrenergic receptor signaling to L-type Ca(2+) channels. *Biophysical Journal*, **2000**, 79, 2547-56	2.9	129
13	Local control models of cardiac excitation-contraction coupling. A possible role for allosteric interactions between ryanodine receptors. *Journal of General Physiology*, **1999**, 113, 469-89	3.4	225
12	G(i) protein-mediated functional compartmentalization of cardiac beta(2)-adrenergic signaling. *Journal of Biological Chemistry*, **1999**, 274, 22048-52	5.4	131
11	Cardiac-specific overexpression of the alpha(1) subunit of the L-type voltage-dependent Ca(2+) channel in transgenic mice. Loss of isoproterenol-induced contraction. *Journal of Biological Chemistry*, **1999**, 274, 21503-6	5.4	54
10	Calcium sparks: release packets of uncertain origin and fundamental role. *Journal of General Physiology*, **1999**, 113, 377-84	3.4	43
9	Constitutive beta2-adrenergic signalling enhances sarcoplasmic reticulum Ca2+ cycling to augment contraction in mouse heart. *Journal of Physiology*, **1999**, 521 Pt 2, 351-61	3.9	49
8	Coupling of beta2-adrenoceptor to Gi proteins and its physiological relevance in murine cardiac myocytes. *Circulation Research*, **1999**, 84, 43-52	15.7	332
7	Amplitude distribution of calcium sparks in confocal images: theory and studies with an automatic detection method. *Biophysical Journal*, **1999**, 76, 606-17	2.9	240
6	Direct measurement of SR release flux by tracking ŔCa2+ spikesŔin rat cardiac myocytes. *Journal of Physiology*, **1998**, 512 (Pt 3), 677-91	3.9	140
5	A simple numerical model of calcium spark formation and detection in cardiac myocytes. *Biophysical Journal*, **1998**, 75, 15-32	2.9	182
4	Partial depletion of sarcoplasmic reticulum calcium does not prevent calcium sparks in rat ventricular myocytes. *Journal of Physiology*, **1997**, 505 (Pt 3), 665-75	3.9	56
3	Enhanced proliferation and migration and altered cytoskeletal proteins in early passage smooth muscle cells from young and old rat aortic explants. *Experimental and Molecular Pathology*, **1997**, 64, 1-11	4.4	61
2	Two-photon-excitation fluorescence imaging of three-dimensional calcium-ion activity. *Applied Optics*, **1994**, 33, 662-9	1.7	73
1	Functional network topography of the medial entorhinal cortex		1