Long-Sheng Song

List of Publications by Citations

95 papers	8,258 citations	45 h-index	90 g-index
103 ext. papers	9,325 ext. citations	11.9 avg, IF	5.28 L-index

#	Paper	IF	Citations
95	Ankyrin-B mutation causes type 4 long-QT cardiac arrhythmia and sudden cardiac death. *Nature*, **2003**, 421, 634-9	50.4	812
94	FKBP12.6 deficiency and defective calcium release channel (ryanodine receptor) function linked to exercise-induced sudden cardiac death. *Cell*, **2003**, 113, 829-40	56.2	589
93	Calmodulin kinase II inhibition protects against structural heart disease. *Nature Medicine*, **2005**, 11, 409-17	50.5	465
92	Calcium flickers steer cell migration. *Nature*, **2009**, 457, 901-5	50.4	452
91	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
90	Ca2+ signalling between single L-type Ca2+ channels and ryanodine receptors in heart cells. *Nature*, **2001**, 410, 592-6	50.4	343
89	CaMKII determines mitochondrial stress responses in heart. *Nature*, **2012**, 491, 269-73	50.4	290
88	T-tubule remodeling during transition from hypertrophy to heart failure. *Circulation Research*, **2010**, 107, 520-31	15.7	290
87	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
86	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
85	Oxidized Ca(2+)/calmodulin-dependent protein kinase II triggers atrial fibrillation. *Circulation*, **2013**, 128, 1748-57	16.7	186
84	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, 7906-10	11.5	180
83	Carvedilol and its new analogs suppress arrhythmogenic store overload-induced Ca2+ release. *Nature Medicine*, **2011**, 17, 1003-9	50.5	157
82	Direct measurement of SR release flux by tracking 'Ca2+ spikes'in rat cardiac myocytes. *Journal of Physiology*, **1998**, 512 (Pt 3), 677-91	3.9	140
81	Dysfunction in ankyrin-B-dependent ion channel and transporter targeting causes human sinus node disease. *Proceedings of the National Academy of Sciences of the United States of America*, **2008**, 105, 15617-22	11.5	136
80	The ryanodine receptor store-sensing gate controls Ca2+ waves and Ca2+-triggered arrhythmias. *Nature Medicine*, **2014**, 20, 184-92	50.5	135
79	beta-Adrenergic stimulation synchronizes intracellular Ca(2+) release during excitation-contraction coupling in cardiac myocytes. *Circulation Research*, **2001**, 88, 794-801	15.7	129

78	Calmodulin kinase II is required for fight or flight sinoatrial node physiology. *Proceedings of the National Academy of Sciences of the United States of America*, **2009**, 106, 5972-7	11.5	112
77	Emerging mechanisms of T-tubule remodelling in heart failure. *Cardiovascular Research*, **2013**, 98, 204-15	9.9	111
76	The mitochondrial uniporter controls fight or flight heart rate increases. *Nature Communications*, **2015**, 6, 6081	17.4	106
75	Inhibition of MCU forces extramitochondrial adaptations governing physiological and pathological stress responses in heart. *Proceedings of the National Academy of Sciences of the United States of America*, **2015**, 112, 9129-34	11.5	102
74	CaV1.2 beta-subunit coordinates CaMKII-triggered cardiomyocyte death and afterdepolarizations. *Proceedings of the National Academy of Sciences of the United States of America*, **2010**, 107, 4996-5000	11.5	101
73	Microtubule-mediated defects in junctophilin-2 trafficking contribute to myocyte transverse-tubule remodeling and Ca2+ handling dysfunction in heart failure. *Circulation*, **2014**, 129, 1742-50	16.7	92
72	The Ca 2+ leak paradox and rogue ryanodine receptors: SR Ca 2+ efflux theory and practice. *Progress in Biophysics and Molecular Biology*, **2006**, 90, 172-85	4.7	92
71	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
70	Analysis of Cardiac Myocyte Maturation Using CASAAV, a Platform for Rapid Dissection of Cardiac Myocyte Gene Function In Vivo. *Circulation Research*, **2017**, 120, 1874-1888	15.7	76
69	Junctophilin-2 is necessary for T-tubule maturation during mouse heart development. *Cardiovascular Research*, **2013**, 100, 44-53	9.9	73
68	Sildenafil prevents and reverses transverse-tubule remodeling and Ca(2+) handling dysfunction in right ventricle failure induced by pulmonary artery hypertension. *Hypertension*, **2012**, 59, 355-62	8.5	73
67	Local recovery of Ca2+ release in rat ventricular myocytes. *Journal of Physiology*, **2005**, 565, 441-7	3.9	71
66	Proarrhythmic defects in Timothy syndrome require calmodulin kinase II. *Circulation*, **2008**, 118, 2225-34	16.7	69
65	A comparison of murine smooth muscle cells generated from embryonic versus induced pluripotent stem cells. *Stem Cells and Development*, **2009**, 18, 741-8	4.4	68
64	Critical roles of junctophilin-2 in T-tubule and excitation-contraction coupling maturation during postnatal development. *Cardiovascular Research*, **2013**, 100, 54-62	9.9	67
63	Imaging microdomain Ca2+ in muscle cells. *Circulation Research*, **2004**, 94, 1011-22	15.7	66
62	Overexpression of junctophilin-2 does not enhance baseline function but attenuates heart failure development after cardiac stress. *Proceedings of the National Academy of Sciences of the United States of America*, **2014**, 111, 12240-5	11.5	62
61	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

60	Ca□+ microdomains organized by junctophilins. *Cell Calcium*, **2015**, 58, 349-56	4	58
59	Paradoxical cellular Ca2+ signaling in severe but compensated canine left ventricular hypertrophy. *Circulation Research*, **2005**, 97, 457-64	15.7	58
58	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
57	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
56	Repression of the Central Splicing Regulator RBFox2 Is Functionally Linked to Pressure Overload-Induced Heart Failure. *Cell Reports*, **2015**, 10, 1521-1533	10.6	53
55	Phospholamban knockout breaks arrhythmogenic Ca□+ waves and suppresses catecholaminergic polymorphic ventricular tachycardia in mice. *Circulation Research*, **2013**, 113, 517-26	15.7	52
54	□-Adrenergic receptor antagonists ameliorate myocyte T-tubule remodeling following myocardial infarction. *FASEB Journal*, **2012**, 26, 2531-7	0.9	51
53	Calcium biology of the transverse tubules in heart. *Annals of the New York Academy of Sciences*, **2005**, 1047, 99-111	6.5	49
52	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
51	E-C coupling structural protein junctophilin-2 encodes a stress-adaptive transcription regulator. *Science*, **2018**, 362,	33.3	49
50	AutoTT: automated detection and analysis of T-tubule architecture in cardiomyocytes. *Biophysical Journal*, **2014**, 106, 2729-36	2.9	45
49	Propofol and arrhythmias: two sides of the coin. *Acta Pharmacologica Sinica*, **2011**, 32, 817-23	8	43
48	FKBP12 is a critical regulator of the heart rhythm and the cardiac voltage-gated sodium current in mice. *Circulation Research*, **2011**, 108, 1042-52	15.7	43
47	PI3Ks maintain the structural integrity of T-tubules in cardiac myocytes. *PLoS ONE*, **2011**, 6, e24404	3.7	42
46	Calpain-dependent cleavage of junctophilin-2 and T-tubule remodeling in a mouse model of reversible heart failure. *Journal of the American Heart Association*, **2014**, 3, e000527	6	41
45	Molecular Determinants of Calpain-dependent Cleavage of Junctophilin-2 Protein in Cardiomyocytes. *Journal of Biological Chemistry*, **2015**, 290, 17946-17955	5.4	40
44	Genetic inhibition of Na+-Ca2+ exchanger current disables fight or flight sinoatrial node activity without affecting resting heart rate. *Circulation Research*, **2013**, 112, 309-17	15.7	40
43	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

42	Imaging calcium sparks in cardiac myocytes. *Methods in Molecular Biology*, **2011**, 689, 205-14	1.4	40
41	I(f) and SR Ca(2+) release both contribute to pacemaker activity in canine sinoatrial node cells. *Journal of Molecular and Cellular Cardiology*, **2010**, 49, 33-40	5.8	39
40	Critical Roles of STAT3 in β-Adrenergic Functions in the Heart. *Circulation*, **2016**, 133, 48-61	16.7	36
39	Twenty years of calcium imaging: cell physiology to dye for. *Molecular Interventions: Pharmacological Perspectives From Biology, Chemistry and Genomics*, **2005**, 5, 112-27		36
38	Stress Signaling JNK2 Crosstalk With CaMKII Underlies Enhanced Atrial Arrhythmogenesis. *Circulation Research*, **2018**, 122, 821-835	15.7	35
37	Role of Stress Kinase JNK in Binge Alcohol-Evoked Atrial Arrhythmia. *Journal of the American College of Cardiology*, **2018**, 71, 1459-1470	15.1	35
36	Spontaneous beta(2)-adrenergic signaling fails to modulate L-type Ca(2+) current in mouse ventricular myocytes. *Molecular Pharmacology*, **1999**, 56, 485-93	4.3	35
35	Electrophysiological effects of protopine in cardiac myocytes: inhibition of multiple cation channel currents. *British Journal of Pharmacology*, **2000**, 129, 893-900	8.6	34
34	Restitution of Ca(2+) release and vulnerability to arrhythmias. *Journal of Cardiovascular Electrophysiology*, **2006**, 17 Suppl 1, S64-S70	2.7	32
33	Local control of Ca2+-induced Ca2+ release in mouse sinoatrial node cells. *Journal of Molecular and Cellular Cardiology*, **2009**, 47, 706-15	5.8	30
32	Calmodulin regulation of excitation-contraction coupling in cardiac myocytes. *Circulation Research*, **2003**, 92, 659-67	15.7	28
31	Polymorphism of Ca2+ sparks evoked from in-focus Ca2+ release units in cardiac myocytes. *Biophysical Journal*, **2004**, 86, 182-90	2.9	28
30	In situ confocal imaging in intact heart reveals stress-induced Ca(2+) release variability in a murine catecholaminergic polymorphic ventricular tachycardia model of type 2 ryanodine receptor(R4496C+/-) mutation. *Circulation: Arrhythmia and Electrophysiology*, **2012**, 5, 841-9	6.4	26
29	Calsequestrin accumulation in rough endoplasmic reticulum promotes perinuclear Ca2+ release. *Journal of Biological Chemistry*, **2012**, 287, 16670-80	5.4	25
28	Targeting Calpain for Heart Failure Therapy: Implications From Multiple Murine Models. *JACC Basic To Translational Science*, **2018**, 3, 503-517	8.7	25
27	Regional distribution of T-tubule density in left and right atria in dogs. *Heart Rhythm*, **2017**, 14, 273-281	6.7	24
26	Non-β-blocking R-carvedilol enantiomer suppresses Ca2+ waves and stress-induced ventricular tachyarrhythmia without lowering heart rate or blood pressure. *Biochemical Journal*, **2015**, 470, 233-42	3.8	24
25	Catecholamine-independent heart rate increases require Ca2+/calmodulin-dependent protein kinase II. *Circulation: Arrhythmia and Electrophysiology*, **2011**, 4, 379-87	6.4	24

24	Suppression of ryanodine receptor function prolongs Ca2+ release refractoriness and promotes cardiac alternans in intact hearts. *Biochemical Journal*, **2016**, 473, 3951-3964	3.8	20
23	Sarcolemmal ATP-sensitive potassium channels modulate skeletal muscle function under low-intensity workloads. *Journal of General Physiology*, **2014**, 143, 119-34	3.4	19
22	In situ single photon confocal imaging of cardiomyocyte T-tubule system from Langendorff-perfused hearts. *Frontiers in Physiology*, **2015**, 6, 134	4.6	17
21	Ectopic expression of Cdk8 induces eccentric hypertrophy and heart failure. *JCI Insight*, **2017**, 2,	9.9	15
20	MG53 is dispensable for T-tubule maturation but critical for maintaining T-tubule integrity following cardiac stress. *Journal of Molecular and Cellular Cardiology*, **2017**, 112, 123-130	5.8	15
19	Integrin 1D Deficiency-Mediated RyR2 Dysfunction Contributes to Catecholamine-Sensitive Ventricular Tachycardia in Arrhythmogenic Right Ventricular Cardiomyopathy. *Circulation*, **2020**, 141, 1477-1493	16.7	14
18	Sildenafil ameliorates left ventricular T-tubule remodeling in a pressure overload-induced murine heart failure model. *Acta Pharmacologica Sinica*, **2016**, 37, 473-82	8	14
17	The cardiac ryanodine receptor luminal Ca2+ sensor governs Ca2+ waves, ventricular tachyarrhythmias and cardiac hypertrophy in calsequestrin-null mice. *Biochemical Journal*, **2014**, 461, 99-106	3.8	14
16	Oxidized CaMKII and O-GlcNAcylation cause increased atrial fibrillation in diabetic mice by distinct mechanisms. *Journal of Clinical Investigation*, **2021**, 131,	15.9	14
15	Ablation of the GNB3 gene in mice does not affect body weight, metabolism or blood pressure, but causes bradycardia. *Cellular Signalling*, **2014**, 26, 2514-20	4.9	13
14	Effects of propofol on ischemia-induced ventricular arrhythmias and mitochondrial ATP-sensitive potassium channels. *Acta Pharmacologica Sinica*, **2012**, 33, 1495-501	8	12
13	Effects of ginkgo biloba extract on cation currents in rat ventricular myocytes. *Life Sciences*, **2005**, 76, 1111-21	6.8	12
12	Cholesterol is required for maintaining T-tubule integrity and intercellular connections at intercalated discs in cardiomyocytes. *Journal of Molecular and Cellular Cardiology*, **2016**, 97, 204-12	5.8	10
11	Nebivolol suppresses cardiac ryanodine receptor-mediated spontaneous Ca2+ release and catecholaminergic polymorphic ventricular tachycardia. *Biochemical Journal*, **2016**, 473, 4159-4172	3.8	9
10	Spontaneous Aortic Regurgitation and Valvular Cardiomyopathy in Mice. *Arteriosclerosis, Thrombosis, and Vascular Biology*, **2015**, 35, 1653-62	9.4	7
9	Joiner et al. reply. *Nature*, **2014**, 513, E3	50.4	7
8	The challenge of molecular medicine: complexity versus Occam's razor. *Journal of Clinical Investigation*, **2003**, 111, 801-3	15.9	6
7	Decreased KCNE2 Expression Participates in the Development of Cardiac Hypertrophy by Regulation of Calcineurin-NFAT (Nuclear Factor of Activated T Cells) and Mitogen-Activated Protein Kinase Pathways. *Circulation: Heart Failure*, **2017**, 10,	7.6	5

6	Transient activation of PKC results in long-lasting detrimental effects on systolic [Ca] in cardiomyocytes by altering actin cytoskeletal dynamics and T-tubule integrity. *Journal of Molecular and Cellular Cardiology*, **2018**, 115, 104-114	5.8	4
5	Cephalosporin antibiotics specifically and selectively target nasopharyngeal carcinoma through HMOX1-induced ferroptosis. *Life Sciences*, **2021**, 277, 119457	6.8	3
4	A mouse model of Huntington's disease shows altered ultrastructure of transverse tubules in skeletal muscle fibers. *Journal of General Physiology*, **2021**, 153,	3.4	2
3	Gene Therapy With the N-Terminus of Junctophilin-2 Improves Heart Failure in Mice.. *Circulation Research*, **2022**, CIRCRESAHA121320680	15.7	2
2	O-GlcNAcylation, oxidation and CaMKII contribute to atrial fibrillation in type 1 and type 2 diabetes by distinct mechanisms		1
1	Calpain-2 specifically cleaves Junctophilin-2 at the same site as Calpain-1 but with less efficacy. *Biochemical Journal*, **2021**, 478, 3539-3553	3.8	1