Muthu Periasamy

List of Publications by Citations

57 papers	2,955 citations	29 h-index	54 g-index
60 ext. papers	3,546 ext. citations	6.5 avg, IF	5.35 L-index

#	Paper	IF	Citations
57	Sarcolipin is a newly identified regulator of muscle-based thermogenesis in mammals. *Nature Medicine*, **2012**, 18, 1575-9	50.5	353
56	SERCA pump isoforms: their role in calcium transport and disease. *Muscle and Nerve*, **2007**, 35, 430-42	3.4	344
55	SERCA pump level is a critical determinant of Ca(2+)homeostasis and cardiac contractility. *Journal of Molecular and Cellular Cardiology*, **2001**, 33, 1053-63	5.8	236
54	Regulation of sarcoplasmic reticulum Ca2+ ATPase pump expression and its relevance to cardiac muscle physiology and pathology. *Cardiovascular Research*, **2008**, 77, 265-73	9.9	171
53	The role of skeletal-muscle-based thermogenic mechanisms in vertebrate endothermy. *Biological Reviews*, **2015**, 90, 1279-97	13.5	111
52	Differential expression of sarcolipin protein during muscle development and cardiac pathophysiology. *Journal of Molecular and Cellular Cardiology*, **2007**, 43, 215-22	5.8	109
51	Ablation of sarcolipin enhances sarcoplasmic reticulum calcium transport and atrial contractility. *Proceedings of the National Academy of Sciences of the United States of America*, **2007**, 104, 17867-72	11.5	104
50	Sarcolipin and phospholamban as regulators of cardiac sarcoplasmic reticulum Ca2+ ATPase. *Journal of Molecular and Cellular Cardiology*, **2007**, 42, 903-11	5.8	103
49	Sarcolipin Is a Key Determinant of the Basal Metabolic Rate, and Its Overexpression Enhances Energy Expenditure and Resistance against Diet-induced Obesity. *Journal of Biological Chemistry*, **2015**, 290, 10840-9	5.4	86
48	Calsequestrin 2 deletion causes sinoatrial node dysfunction and atrial arrhythmias associated with altered sarcoplasmic reticulum calcium cycling and degenerative fibrosis within the mouse atrial pacemaker complex1. *European Heart Journal*, **2015**, 36, 686-97	9.5	86
47	Loss of SM-B myosin affects muscle shortening velocity and maximal force development. *Nature Cell Biology*, **2001**, 3, 1025-9	23.4	79
46	Sarcolipin protein interaction with sarco(endo)plasmic reticulum Ca2+ ATPase (SERCA) is distinct from phospholamban protein, and only sarcolipin can promote uncoupling of the SERCA pump. *Journal of Biological Chemistry*, **2013**, 288, 6881-9	5.4	75
45	Uncoupling Protein 1 and Sarcolipin Are Required to Maintain Optimal Thermogenesis, and Loss of Both Systems Compromises Survival of Mice under Cold Stress. *Journal of Biological Chemistry*, **2015**, 290, 12282-9	5.4	74
44	Skeletal Muscle Thermogenesis and Its Role in Whole Body Energy Metabolism. *Diabetes and Metabolism Journal*, **2017**, 41, 327-336	5	67
43	Sarcolipin: A Key Thermogenic and Metabolic Regulator in Skeletal Muscle. *Trends in Endocrinology and Metabolism*, **2016**, 27, 881-892	8.8	66
42	miR-155 Deletion in Female Mice Prevents Diet-Induced Obesity. *Scientific Reports*, **2016**, 6, 22862	4.9	60
41	Both brown adipose tissue and skeletal muscle thermogenesis processes are activated during mild to severe cold adaptation in mice. *Journal of Biological Chemistry*, **2017**, 292, 16616-16625	5.4	58

40	Targeted overexpression of sarcolipin in the mouse heart decreases sarcoplasmic reticulum calcium transport and cardiac contractility. *Journal of Biological Chemistry*, **2006**, 281, 3972-9	5.4	56
39	Increased Reliance on Muscle-based Thermogenesis upon Acute Minimization of Brown Adipose Tissue Function. *Journal of Biological Chemistry*, **2016**, 291, 17247-57	5.4	51
38	Phospholamban and sarcolipin: Are they functionally redundant or distinct regulators of the Sarco(Endo)Plasmic Reticulum Calcium ATPase?. *Journal of Molecular and Cellular Cardiology*, **2016**, 91, 81-91	5.8	51
37	Enhanced Ca2+ transport and muscle relaxation in skeletal muscle from sarcolipin-null mice. *American Journal of Physiology - Cell Physiology*, **2011**, 301, C841-9	5.4	48
36	Threonine-5 at the N-terminus can modulate sarcolipin function in cardiac myocytes. *Journal of Molecular and Cellular Cardiology*, **2009**, 47, 723-9	5.8	45
35	The N Terminus of Sarcolipin Plays an Important Role in Uncoupling Sarco-endoplasmic Reticulum Ca2+-ATPase (SERCA) ATP Hydrolysis from Ca2+ Transport. *Journal of Biological Chemistry*, **2015**, 290, 14057-67	5.4	41
34	Sarcolipin Signaling Promotes Mitochondrial Biogenesis and Oxidative Metabolism in Skeletal Muscle. *Cell Reports*, **2018**, 24, 2919-2931	10.6	41
33	Sarcolipin trumps β-adrenergic receptor signaling as the favored mechanism for muscle-based diet-induced thermogenesis. *FASEB Journal*, **2013**, 27, 3871-8	0.9	40
32	Sarcolipin overexpression improves muscle energetics and reduces fatigue. *Journal of Applied Physiology*, **2015**, 118, 1050-8	3.7	37
31	Overexpression of sarcolipin decreases myocyte contractility and calcium transient. *Cardiovascular Research*, **2005**, 65, 177-86	9.9	37
30	Role of SERCA Pump in Muscle Thermogenesis and Metabolism. *Comprehensive Physiology*, **2017**, 7, 879-890	7.7	36
29	Sarcolipin and uncoupling protein 1 play distinct roles in diet-induced thermogenesis and do not compensate for one another. *Obesity*, **2016**, 24, 1430-3	8	34
28	Ablation of sarcolipin results in atrial remodeling. *American Journal of Physiology - Cell Physiology*, **2012**, 302, C1762-71	5.4	28
27	Cold adaptation overrides developmental regulation of sarcolipin expression in mice skeletal muscle: SOS for muscle-based thermogenesis?. *Journal of Experimental Biology*, **2015**, 218, 2321-5	3	25
26	Ablation of phospholamban and sarcolipin results in cardiac hypertrophy and decreased cardiac contractility. *Cardiovascular Research*, **2011**, 89, 353-61	9.9	25
25	Sarcolipin is a novel regulator of muscle metabolism and obesity. *Pharmacological Research*, **2015**, 102, 270-5	10.2	24
24	Exercise protects against diet-induced insulin resistance through downregulation of protein kinase Cζ in mice. *PLoS ONE*, **2013**, 8, e81364	3.7	23
23	Uncoupling of sarcoendoplasmic reticulum calcium ATPase pump activity by sarcolipin as the basis for muscle non-shivering thermogenesis. *Philosophical Transactions of the Royal Society B: Biological Sciences*, **2020**, 375, 20190135	5.8	22

22	Obligatory role of neuronal nitric oxide synthase in the heartÃ¢ antioxidant adaptation with exercise. *Journal of Molecular and Cellular Cardiology*, **2015**, 81, 54-61	5.8	21
21	The Role of Sarcolipin in Muscle Non-shivering Thermogenesis. *Frontiers in Physiology*, **2018**, 9, 1217	4.6	21
20	Sarcoplasmic reticulum Ca2+ ATPase pump is a major regulator of glucose transport in the healthy and diabetic heart. *Biochimica Et Biophysica Acta - Molecular Basis of Disease*, **2015**, 1852, 873-81	6.9	20
19	Muscle damage, metabolism, and oxidative stress in mdx mice: Impact of aerobic running. *Muscle and Nerve*, **2016**, 54, 110-7	3.4	14
18	SERCA2a gene therapy for heart failure: ready for primetime?. *Molecular Therapy*, **2008**, 16, 1002-4	11.7	13
17	Genetic and Environmental Factors Contributing to Visceral Adiposity in Asian Populations. *Endocrinology and Metabolism*, **2020**, 35, 681-695	3.5	5
16	Epiregulin induces leptin secretion and energy expenditure in high-fat diet-fed mice. *Journal of Endocrinology*, **2018**, 239, 377-388	4.7	3
15	Structural basis for sarcolipinÃ¢ regulation of muscle thermogenesis by the sarcoplasmic reticulum Ca-ATPase. *Science Advances*, **2021**, 7, eabi7154	14.3	3
14	Is Upregulation of Sarcolipin Beneficial or Detrimental to Muscle Function?. *Frontiers in Physiology*, **2021**, 12, 633058	4.6	3
13	Skeletal muscle inefficiency protects against obesity. *Nature Metabolism*, **2019**, 1, 849-850	14.6	2
12	Sarcolipin Ablation Increases Ca2+ Pump Efficiency in Mouse Skeletal Muscle. *FASEB Journal*, **2008**, 22, 1157.5	0.9	1
11	A novel mechanism for UCP1-independent thermogenesis. *FASEB Journal*, **2013**, 27, 1152.24	0.9	1
10	Strain-specific differences in muscle Ca transport and mitochondrial electron transport chain proteins between FVB/N and C57BL/6J mice. *Journal of Experimental Biology*, **2021**, 224,	3	1
9	Paracardial fat remodeling affects systemic metabolism through alcohol dehydrogenase 1. *Journal of Clinical Investigation*, **2021**, 131,	15.9	1
8	Glutathiolation and Nitration of Sarcoplasmic Reticulum Ca2+-ATPase (SERCA) in hearts overexpressing SERCA1a-pump. *FASEB Journal*, **2007**, 21, A535	0.9	
7	Improvement of Ca2+ Transport and Muscle Relaxation in Skeletal Muscle From Sarcolipin Null Mice. *FASEB Journal*, **2008**, 22, 962.34	0.9	
6	Deficiency of smooth muscle myosin heavy chain isoform 2 increases muscle contractility and causes premature postnatal death in mice. *FASEB Journal*, **2008**, 22, 145-145	0.9	
5	Sarcolipin **2018**, 4832-4836		

List of Publications

4	SLN overexpression upregulates mitochondrial dynamics and promotes oxidative metabolism during caloric restriction.. *FASEB Journal*, **2018**, 32, lb388	0.9
3	Frequency dependent myofilament desensitization is impaired in rabbit right ventricular hypertrophy. *FASEB Journal*, **2009**, 23, 953.1	0.9
2	Sarcolipin is a novel regulator of muscle based thermogenesis and metabolism in mammals. *FASEB Journal*, **2013**, 27, 736.1	0.9
1	Sarcolipin interaction with SERCA is distinct from Phospholamban; only Sarcolipin can promote uncoupling of the SERCA pump (LB244). *FASEB Journal*, **2014**, 28, LB244	0.9