James T Stull

List of Publications by Year
in descending order

85 papers	5,620 citations	66343 42 h-index	76900 74 g-index
86 all docs	86 docs citations	86 times ranked	4430 citing authors

#	Article	IF	Citations
1	Dedicated Myosin Light Chain Kinases with Diverse Cellular Functions. Journal of Biological Chemistry, 2001, 276, 4527-4530.	3.4	499
2	Activation of skeletal muscle myosin light chain kinase by calcium(2+) and calmodulin. Biochemistry, 1980, 19, 5608-5614.	2.5	331
3	Role for Î±-dystrobrevin in the pathogenesis of dystrophin-dependent muscular dystrophies. Nature Cell Biology, 1999, 1, 215-220.	10.3	300
4	Mutations in Myosin Light Chain Kinase Cause Familial Aortic Dissections. American Journal of Human Genetics, 2010, 87, 701-707.	6.2	267
5	Mechanical loading regulates NOS expression and activity in developing and adult skeletal muscle. American Journal of Physiology - Cell Physiology, 1998, 275, C260-C266.	4.6	194
6	Myosin light chain kinases. Journal of Muscle Research and Cell Motility, 1997, 18, 1-16.	2.0	191
7	Altered Smooth Muscle Cell Force Generation as a Driver of Thoracic Aortic Aneurysms and Dissections. Arteriosclerosis, Thrombosis, and Vascular Biology, 2017, 37, 26-34.	2.4	175
8	Myosin light chain kinase and myosin phosphorylation effect frequency-dependent potentiation of skeletal muscle contraction. Proceedings of the National Academy of Sciences of the United States of America, 2005, 102, 17519-17524.	7.1	173
9	Myosin Light Chain Kinase Is Central to Smooth Muscle Contraction and Required for Gastrointestinal Motility in Mice. Gastroenterology, 2008, 135, 610-620.e2.	1.3	161
10	Myosin light chain phosphorylation and phosphorylase a activity in rat extensor digitorum longus muscle. Biochemical and Biophysical Research Communications, 1979, 90, 164-170.	2.1	140
11	nNOS and eNOS modulate cGMP formation and vascular response in contracting fast-twitch skeletal muscle. Physiological Genomics, 2000, 2, 21-27.	2.3	138
12	Myosin light chain kinase and the role of myosin light chain phosphorylation in skeletal muscle. Archives of Biochemistry and Biophysics, 2011, 510, 120-128.	3.0	138
13	Effects of pH, ionic strength, and temperature on activation by calmodulin and catalytic activity of myosin light-chain kinase. Biochemistry, 1982, 21, 2386-2391.	2.5	118
14	Real-time evaluation of myosin light chain kinase activation in smooth muscle tissues from a transgenic calmodulin-biosensor mouse. Proceedings of the National Academy of Sciences of the United States of America, 2004, 101, 6279-6284.	7.1	117
15	Localization and Activity of Myosin Light Chain Kinase Isoforms during the Cell Cycle. Journal of Cell Biology, 2000, 151, 697-708.	5.2	107
16	Cardiac Myosin Light Chain Kinase Is Necessary for Myosin Regulatory Light Chain Phosphorylation and Cardiac Performance in Vivo. Journal of Biological Chemistry, 2010, 285, 40819-40829.	3.4	103
17	Myosin light chain kinase activation and calcium sensitization in smooth muscle in vivo. American Journal of Physiology - Cell Physiology, 2008, 295, C358-C364.	4.6	94
18	Signaling to Myosin Regulatory Light Chain in Sarcomeres. Journal of Biological Chemistry, 2011, 286, 9941-9947.	3.4	90

#	Article	IF	Citations
19	Skeletal muscle contractions stimulate cGMP formation and attenuate vascular smooth muscle myosin phosphorylation via nitric oxide. FEBS Letters, 1998, 431, 71-74.	2.8	87
20	Myosin Phosphatase Target Subunit 1 (MYPT1) Regulates the Contraction and Relaxation of Vascular Smooth Muscle and Maintains Blood Pressure. Journal of Biological Chemistry, 2014, 289, 22512-22523.	3.4	87
21	Enhanced Skeletal Muscle Contraction with Myosin Light Chain Phosphorylation by a Calmodulin-sensing Kinase. Journal of Biological Chemistry, 2007, 282, 20447-20454.	3.4	86
22	Rare, Nonsynonymous Variant in the Smooth Muscle-Specific Isoform of Myosin Heavy Chain, <i>MYH11</i> , R247C, Alters Force Generation in the Aorta and Phenotype of Smooth Muscle Cells. Circulation Research, 2012, 110, 1411-1422.	4.5	81
23	Myosin light chain phosphorylation and isometric twitch potentiation in intact human muscle. Pflugers Archiv European Journal of Physiology, 1985, 403, 348-352.	2.8	80
24	Structures of Calmodulin and a Functional Myosin Light Chain Kinase in the Activated Complex:Â A Neutron Scattering Studyâ€. Biochemistry, 1997, 36, 6017-6023.	2.5	80
25	Structural and Functional Responses of Mammalian Thick Filaments to Alterations in Myosin Regulatory Light Chains. Journal of Structural Biology, 1998, 122, 149-161.	2.8	74
26	4 Calmodulin-Dependent Protein Kinases. The Enzymes, 1986, 17, 113-166.	1.7	73
27	Ca2+-dependent Cell Signaling through Calmodulin-activated Protein Phosphatase and Protein Kinases Minireview Series. Journal of Biological Chemistry, 2001, 276, 2311-2312.	3.4	67
28	Myosin Light Chain Kinase Is Necessary for Tonic Airway Smooth Muscle Contraction. Journal of Biological Chemistry, 2010, 285, 5522-5531.	3.4	66
29	Neutron-Scattering Studies Reveal Further Details of the Ca2+/Calmodulin-Dependent Activation Mechanism of Myosin Light Chain Kinaseâ€. Biochemistry, 1998, 37, 13997-14004.	2.5	62
30	Altered Contractile Phenotypes of Intestinal Smooth Muscle in Mice Deficient in Myosin Phosphatase Target Subunit 1. Gastroenterology, 2013, 144, 1456-1465.e5.	1.3	62
31	Changes in Interfilament Spacing Mimic the Effects of Myosin Regulatory Light Chain Phosphorylation in Rabbit Psoas Fibers. Journal of Structural Biology, 1998, 122, 139-148.	2.8	59
32	Phosphorylation kinetics of skeletal muscle myosin and the effect of phosphorylation on actomyosin ATPase activity. Biochemistry, 1984, 23, 4144-4150.	2.5	57
33	Myosin Regulatory Light Chain Phosphorylation Attenuates Cardiac Hypertrophy. Journal of Biological Chemistry, 2008, 283, 19748-19756.	3.4	57
34	Signaling through Myosin Light Chain Kinase in Smooth Muscles. Journal of Biological Chemistry, 2013, 288, 7596-7605.	3.4	57
35	Role of myosin light chain kinase in regulation of basal blood pressure and maintenance of salt-induced hypertension. American Journal of Physiology - Heart and Circulatory Physiology, 2011, 301, H584-H591.	3.2	55
36	<i>In vivo</i> roles for myosin phosphatase targeting subunitâ€1 phosphorylation sites T694 and T852 in bladder smooth muscle contraction. Journal of Physiology, 2015, 593, 681-700.	2.9	55

#	Article	IF	Citations
37	Constitutive Phosphorylation of Cardiac Myosin Regulatory Light Chain in Vivo. Journal of Biological Chemistry, 2015, 290, 10703-10716.	3.4	52
38	Signaling Processes for Initiating Smooth Muscle Contraction upon Neural Stimulation. Journal of Biological Chemistry, 2009, 284, 15541-15548.	3.4	51
39	Phosphorylation of rabbit skeletal muscle myosin in situ. Journal of Cellular Physiology, 1985, 125, 301-305.	4.1	47
40	Binding of Myosin Light Chain Kinase to Cellular Actin-Myosin Filaments. Journal of Biological Chemistry, 1997, 272, 7412-7420.	3.4	46
41	Quantitative measurements of Ca2+/calmodulin binding and activation of myosin light chain kinase in cells. FEBS Letters, 2004, 557, 121-124.	2.8	45
42	Myosin phosphorylation and force potentiation in skeletal muscle: evidence from animal models. Journal of Muscle Research and Cell Motility, 2013, 34, 317-332.	2.0	45
43	Properties of Filament-bound Myosin Light Chain Kinase. Journal of Biological Chemistry, 1999, 274, 5987-5994.	3.4	43
44	Light chain phosphorylation alters the conformation of skeletal muscle myosin. Biochemical and Biophysical Research Communications, 1980, 93, 209-214.	2.1	42
45	Properties of Long Myosin Light Chain Kinase Binding to F-Actin in Vitro and in Vivo. Journal of Biological Chemistry, 2002, 277, 35597-35604.	3.4	42
46	Cardiac myosin light chain is phosphorylated by Ca ²⁺ /calmodulin-dependent and -independent kinase activities. Proceedings of the National Academy of Sciences of the United States of America, 2016, 113, E3824-33.	7.1	41
47	Intrasteric Regulation of Myosin Light Chain Kinase. Journal of Biological Chemistry, 1995, 270, 16848-16853.	3.4	40
48	Myosin light chain kinase binding to a unique site on F-actin revealed by three-dimensional image reconstruction. Journal of Cell Biology, 2001, 154, 611-618.	5.2	40
49	Myosin light chain kinase binding to actin filaments. FEBS Letters, 2000, 480, 298-300.	2.8	33
50	Cardiac Myosin Is a Substrate for Zipper-interacting Protein Kinase (ZIPK). Journal of Biological Chemistry, 2010, 285, 5122-5126.	3.4	30
51	Activation of Myosin Light Chain Kinase Requires Translocation of Bound Calmodulin. Journal of Biological Chemistry, 2001, 276, 4535-4538.	3.4	29
52	Role of myosin light chain phosphatase in cardiac physiology and pathophysiology. Journal of Molecular and Cellular Cardiology, 2016, 101, 35-43.	1.9	26
53	Variants of Unknown Significance in Genes Associated with Heritable Thoracic Aortic Disease Can Be Low Penetrant â€œRisk Variantsâ€• American Journal of Human Genetics, 2018, 103, 138-143.	6.2	26
54	Neuronal nitric oxide synthase localizes through multiple structural motifs to the sarcolemma in mouse myotubes. FEBS Letters, 2000, 482, 65-70.	2.8	25

#	Article	IF	Citations
55	Signalling to contractile proteins by muscarinic and purinergic pathways in neurally stimulated bladder smooth muscle. Journal of Physiology, 2012, 590, 5107-5121.	2.9	23
56	Regulatory Segments of Ca2+/Calmodulin-dependent Protein Kinases. Journal of Biological Chemistry, 1998, 273, 8951-8957.	3.4	22
57	Constitutive phosphorylation of myosin phosphatase targeting subunitâ€1 in smooth muscle. Journal of Physiology, 2014, 592, 3031-3051.	2.9	22
58	The Î±₁A-adrenergic receptor subtype mediates increased contraction of failing right ventricular myocardium. American Journal of Physiology - Heart and Circulatory Physiology, 2015, 309, H888-H896.	3.2	22
59	Site-specific dephosphorylation of smooth muscle myosin light chain kinase by protein phosphatases 1 and 2A. Biochemistry, 1992, 31, 11915-11920.	2.5	21
60	Localization of an actin binding domain in smooth muscle myosin light chain kinase. , 1997, 173, 51-57.		21
61	Myosin light chain diphosphorylation is enhanced by growth promotion of cultured smooth muscle cells. Pflugers Archiv European Journal of Physiology, 1996, 432, 7-13.	2.8	20
62	Phosphorylation of Myosin Light Chain by a Protease-Activated Kinase from Rabbit Skeletal Muscle. FEBS Journal, 1982, 129, 205-209.	0.2	19
63	Physiological signalling to myosin phosphatase targeting subunitâ€1 phosphorylation in ileal smooth muscle. Journal of Physiology, 2016, 594, 3209-3225.	2.9	19
64	Dynamic Modulation of the Regulatory Domain of Myosin Heads by pH, Ionic Strength, and RLC Phosphorylation in Synthetic Myosin Filaments. Biochemistry, 1999, 38, 3127-3132.	2.5	17
65	Photoaffinity Labeling of a Peptide Substrate to Myosin Light Chain Kinase. Journal of Biological Chemistry, 1995, 270, 10125-10135.	3.4	16
66	GTP/ggS-Induced phosphorylation of myosin light chain kinase in smooth muscle. FEBS Letters, 1993, 331, 272-275.	2.8	14
67	Physiological <i>vs</i>. pharmacological signalling to myosin phosphorylation in airway smooth muscle. Journal of Physiology, 2017, 595, 6231-6247.	2.9	13
68	Interaction of posttetanic potentiation and the catchlike property in mouse skeletal muscle. Muscle and Nerve, 2016, 54, 308-316.	2.2	12
69	The Effects of Neuregulin on Cardiac Myosin Light Chain Kinase Gene-Ablated Hearts. PLoS ONE, 2013, 8, e66720.	2.5	10
70	Vascular disease-causing mutation, smooth muscle Î±-actin R258C, dominantly suppresses functions of Î±-actin in human patient fibroblasts. Proceedings of the National Academy of Sciences of the United States of America, 2017, 114, E5569-E5578.	7.1	10
71	Activation mechanism of rabbit skeletal muscle myosin light chain kinase 5â€²-p-Fluorosulfonylbenzoyl adenosine as a probe of the MgATP-binding site of the calmodulin-bound and calmodulin-free enzyme. FEBS Letters, 1991, 286, 217-220.	2.8	9
72	The dominant protein phosphatase PP1c isoform in smooth muscle cells, PP1cÎ², is essential for smooth muscle contraction. Journal of Biological Chemistry, 2018, 293, 16677-16686.	3.4	9

#	Article	IF	Citations
73	Conformational requirements for Ca2+/calmodulin binding and activation of myosin light chain kinase. FEBS Letters, 2000, 472, 148-152.	2.8	8
74	Genetic approaches to identify pathological limitations in aortic smooth muscle contraction. PLoS ONE, 2018, 13, e0193769.	2.5	8
75	Resistance of Acta2 mice to aortic disease is associated with defective release of mutant smooth muscle Î±-actin from the chaperonin-containing TCP1 folding complex. Journal of Biological Chemistry, 2021, 297, 101228.	3.4	7
76	Functional Assembly of Fragments from Bisected Smooth Muscle Myosin Light Chain Kinase. Journal of Biological Chemistry, 2000, 275, 26665-26673.	3.4	7
77	The force dependence of isometric and concentric potentiation in mouse muscle with and without skeletal myosin light chain kinase. Canadian Journal of Physiology and Pharmacology, 2015, 93, 23-32.	1.4	6
78	The Force Dependency of Potentiation in Mouse Skeletal Muscle With and Without Myosin Light Chain Kinase (skMLCK). FASEB Journal, 2015, 29, 947.28.	0.5	1
79	Reply. Gastroenterology, 2013, 145, 1495.	1.3	0
80	Myosin phosphatase targeting subunit 1 undergoes phosphorylation and translocates from the nucleus to cytoplasm during skeletal muscle differentiation. FASEB Journal, 2006, 20, A804.	0.5	0
81	Effect of myosin light chain kinase overexpression on twitch force potentiation in skeletal muscle. FASEB Journal, 2006, 20, A804.	0.5	0
82	Signaling processes for initiating smooth muscle contraction. FASEB Journal, 2008, 22, 1181.7.	0.5	0
83	Fractional activation of myosin light chain kinase is sufficient for robust smooth muscle contraction. FASEB Journal, 2011, 25, 1115.8.	0.5	0
84	Signaling to contractile proteins by muscarinic and purinergic pathways in neurallyâ€stimulated bladder smooth muscle. FASEB Journal, 2011, 25, 1115.9.	0.5	0
85	Phosphorylators: <i>Protein Kinases</i> . James Robert Woodgett, Ed. IRL (Oxford University Press), New York, 1995. xvi, 273 pp., illus. $85 or Â£55; paper, $46 or Â£29.50. Frontiers in Molecular Biology.. Science, 1996, 271, 1076-1076.	12.6	0