Yin-Biao Sun

List of Publications by Year
in descending order

36 papers	1,568 citations	361045 20 h-index	360668 35 g-index
37 all docs	37 docs citations	37 times ranked	1192 citing authors

#	Article	IF	Citations
1	The myosin motor in muscle generates a smaller and slower working stroke at higher load. Nature, 2004, 428, 578-581.	13.7	183
2	Mechanism of force generation by myosin heads in skeletal muscle. Nature, 2002, 415, 659-662.	13.7	133
3	Myosin light chain phosphorylation enhances contraction of heart muscle via structural changes in both thick and thin filaments. Proceedings of the National Academy of Sciences of the United States of America, 2016, 113, E3039-47.	3.3	105
4	Myosin binding protein-C activates thin filaments and inhibits thick filaments in heart muscle cells. Proceedings of the National Academy of Sciences of the United States of America, 2014, 111, 18763-18768.	3.3	103
5	Conformation of the myosin motor during force generation in skeletal muscle. Nature Structural Biology, 2000, 7, 482-485.	9.7	98
6	Skeletal muscle resists stretch by rapid binding of the second motor domain of myosin to actin. Proceedings of the National Academy of Sciences of the United States of America, 2007, 104, 20114-20119.	3.3	95
7	Calciumâ€•and myosinâ€dependent changes in troponin structure during activation of heart muscle. Journal of Physiology, 2009, 587, 155-163.	1.3	89
8	Omecamtiv mercabil and blebbistatin modulate cardiac contractility by perturbing the regulatory state of the myosin filament. Journal of Physiology, 2018, 596, 31-46.	1.3	83
9	A structural and functional perspective into the mechanism of Ca2+-sensitizers that target the cardiac troponin complex. Journal of Molecular and Cellular Cardiology, 2010, 49, 1031-1041.	0.9	60
10	In Situ Orientations of Protein Domains. Molecular Cell, 2003, 11, 865-874.	4.5	51
11	The molecular basis of the steep forceâ€"calcium relation in heart muscle. Journal of Molecular and Cellular Cardiology, 2010, 48, 859-865.	0.9	50
12	Distinct contributions of the thin and thick filaments to length-dependent activation in heart muscle. ELife, 2017, 6, .	2.8	48
13	Site-specific phosphorylation of myosin binding protein-C coordinates thin and thick filament activation in cardiac muscle. Proceedings of the National Academy of Sciences of the United States of America, 2019, 116, 15485-15494.	3.3	48
14	Structural changes in troponin in response to Ca2+ and myosin binding to thin filaments during activation of skeletal muscle. Proceedings of the National Academy of Sciences of the United States of America, 2006, 103, 17771-17776.	3.3	40
15	Uncoordinated Transcription and Compromised Muscle Function in the Lmna-Null Mouse Model of Emery-Dreifuss Muscular Dystrophy. PLoS ONE, 2011, 6, e16651.	1.1	37
16	Structural dynamics of troponin during activation of skeletal muscle. Proceedings of the National Academy of Sciences of the United States of America, 2014, 111, 4626-4631.	3.3	35
17	X-ray diffraction studies of the contractile mechanism in single muscle fibres. Philosophical Transactions of the Royal Society B: Biological Sciences, 2004, 359, 1883-1893.	1.8	33
18	Actomyosin energy turnover declines while force remains constant during isometric muscle contraction. Journal of Physiology, 2004, 555, 27-43.	1.3	28

#	Article	IF	Citations
19	Conformation of the Troponin Core Complex in the Thin Filaments of Skeletal Muscle during Relaxation and Active Contraction. Journal of Molecular Biology, 2012, 421, 125-137.	2.0	26
20	Structure-Function Relation of the Myosin Motor in Striated Muscle. Annals of the New York Academy of Sciences, 2005, 1047, 232-247.	1.8	22
21	Regulatory domain of troponin moves dynamically during activation of cardiac muscle. Journal of Molecular and Cellular Cardiology, 2014, 75, 181-187.	0.9	22
22	Structural and functional effects of myosin-binding protein-C phosphorylation in heart muscle are not mimicked by serine-to-aspartate substitutions. Journal of Biological Chemistry, 2018, 293, 14270-14275.	1.6	19
23	The structural and functional effects of the familial hypertrophic cardiomyopathy-linked cardiac troponin C mutation, L29Q. Journal of Molecular and Cellular Cardiology, 2015, 87, 257-269.	0.9	18
24	Orientation of the Essential Light Chain Region of Myosin in Relaxed, Active, and Rigor Muscle. Biophysical Journal, 2008, 95, 3882-3891.	0.2	17
25	Probing the mechanism of cardiovascular drugs using a covalent levosimendan analog. Journal of Molecular and Cellular Cardiology, 2016, 92, 174-184.	0.9	16
26	15-deoxy-Î”12,14-Prostaglandin J2 inhibits human soluble epoxide hydrolase by a dual orthosteric and allosteric mechanism. Communications Biology, 2019, 2, 188.	2.0	16
27	Cardiac myosin regulatory light chain kinase modulates cardiac contractility by phosphorylating both myosin regulatory light chain and troponin I. Journal of Biological Chemistry, 2020, 295, 4398-4410.	1.6	16
28	Orientation of the N- and C-Terminal Lobes of the Myosin Regulatory Light Chain in Cardiac Muscle. Biophysical Journal, 2015, 108, 304-314.	0.2	15
29	Reversible Covalent Binding to Cardiac Troponin C by the Ca²⁺-Sensitizer Levosimendan. Biochemistry, 2016, 55, 6032-6045.	1.2	14
30	Novel myosin-based therapies for congenital cardiac and skeletal myopathies. Journal of Medical Genetics, 2016, 53, 651-654.	1.5	11
31	Toward Protein Structure In Situ: Comparison of Two Bifunctional Rhodamine Adducts of Troponin C. Biophysical Journal, 2007, 93, 1008-1020.	0.2	10
32	The highâ€force region of the forceâ€velocity relation in frog skinned muscle fibres. Acta Physiologica Scandinavica, 1993, 148, 243-252.	2.3	9
33	Orientation of the N-Terminal Lobe of the Myosin Regulatory Light Chain inÂSkeletal Muscle Fibers. Biophysical Journal, 2012, 102, 1418-1426.	0.2	8
34	Reversible Covalent Reaction of Levosimendan with Cardiac Troponin C <i>in Vitro</i> and <i>in Situ</i>. Biochemistry, 2018, 57, 2256-2265.	1.2	8
35	Tryptophan Mutants of Cardiac Troponin C:â€‰ 3D Structure, Troponin I Affinity, and <i>in Situ</i> Activity[,]. Biochemistry, 2008, 47, 597-606.	1.2	2
36	Interference X-ray Diffraction from Single Muscle Cells Reveals the Molecular Basis of Muscle Braking. , 2011, , 183-189.		0