Michael J Previs

List of Publications by Citations

25 papers	498 citations	15 h-index	22 g-index
28 ext. papers	739 ext. citations	6.8 avg, IF	3.53 L-index

#	Paper	IF	Citations
25	Unique single molecule binding of cardiac myosin binding protein-C to actin and phosphorylation-dependent inhibition of actomyosin motility requires 17 amino acids of the motif domain. *Journal of Molecular and Cellular Cardiology*, **2012**, 52, 219-27	5.8	69
24	Phosphorylation and calcium antagonistically tune myosin-binding protein C's structure and function. *Proceedings of the National Academy of Sciences of the United States of America*, **2016**, 113, 3239-44	11.5	54
23	Omecamtiv Mecarbil Enhances the Duty Ratio of Human [illegible]Cardiac Myosin Resulting in Increased Calcium Sensitivity and Slowed Force Development in Cardiac Muscle. *Journal of Biological Chemistry*, **2017**, 292, 3768-3778	5.4	51
22	Myosin-binding protein C corrects an intrinsic inhomogeneity in cardiac excitation-contraction coupling. *Science Advances*, **2015**, 1,	14.3	47
21	Roles for cardiac MyBP-C in maintaining myofilament lattice rigidity and prolonging myosin cross-bridge lifetime. *Biophysical Journal*, **2011**, 101, 1661-9	2.9	34
20	Plasmodium myosin A drives parasite invasion by an atypical force generating mechanism. *Nature Communications*, **2019**, 10, 3286	17.4	27
19	Skeletal myosin binding protein-C isoforms regulate thin filament activity in a Ca-dependent manner. *Scientific Reports*, **2018**, 8, 2604	4.9	24
18	MYBPC3 truncation mutations enhance actomyosin contractile mechanics in human hypertrophic cardiomyopathy. *Journal of Molecular and Cellular Cardiology*, **2019**, 127, 165-173	5.8	24
17	Reconstitution of the core of the malaria parasite glideosome with recombinant class XIV myosin A and actin. *Journal of Biological Chemistry*, **2017**, 292, 19290-19303	5.4	22
16	Revealing the mechanism of how cardiac myosin-binding protein C N-terminal fragments sensitize thin filaments for myosin binding. *Proceedings of the National Academy of Sciences of the United States of America*, **2019**, 116, 6828-6835	11.5	21
15	Quantification of protein phosphorylation by liquid chromatography-mass spectrometry. *Analytical Chemistry*, **2008**, 80, 5864-72	7.8	21
14	Phosphorylation modulates the mechanical stability of the cardiac myosin-binding protein C motif. *Biophysical Journal*, **2013**, 104, 442-52	2.9	20
13	Effects of MYBPC3 loss-of-function mutations preceding hypertrophic cardiomyopathy. *JCI Insight*, **2020**, 5,	9.9	20
12	Skeletal MyBP-C isoforms tune the molecular contractility of divergent skeletal muscle systems. *Proceedings of the National Academy of Sciences of the United States of America*, **2019**, 116, 21882-21892	11.5	15
11	Molecular modulation of actomyosin function by cardiac myosin-binding protein C. *Pflugers Archiv European Journal of Physiology*, **2014**, 466, 439-44	4.6	15
10	Can Selenoenzymes Resist Electrophilic Modification? Evidence from Thioredoxin Reductase and a Mutant Containing [illegible]Methylselenocysteine. *Biochemistry*, **2020**, 59, 3300-3315	3.2	10
9	CryoEM structure of flight muscle thick filaments at 7 Å resolution. *Life Science Alliance*, **2020**, 3,	5.8	8

8	The N terminus of myosin-binding protein C extends toward actin filaments in intact cardiac muscle. *Journal of General Physiology*, **2021**, 153,	3.4	4
7	Physiologic biomechanics enhance reproducible contractile development in a stem cell derived cardiac muscle platform. *Nature Communications*, **2021**, 12, 6167	17.4	3
6	Modifications of myofilament protein phosphorylation and function in response to cardiac arrest induced in a swine model. *Frontiers in Physiology*, **2015**, 6, 199	4.6	2
5	Examining Targeted Protein Degradation from Physiological and Analytical Perspectives: Enabling Translation between Cells and Subjects. *ACS Chemical Biology*, **2020**, 15, 2623-2635	4.9	2
4	Impact of regulatory light chain mutation K104E on the ATPase and motor properties of cardiac myosin. *Journal of General Physiology*, **2021**, 153,	3.4	2
3	Amino terminus of cardiac myosin binding protein-C regulates cardiac contractility. *Journal of Molecular and Cellular Cardiology*, **2021**, 156, 33-44	5.8	2
2	Defects in the Proteome and Metabolome in Human Hypertrophic Cardiomyopathy.. *Circulation: Heart Failure*, **2022**, CIRCHEARTFAILURE121009521	7.6	1
1	Cardiac myosin binding protein-C phosphorylation accelerates cardiac myosin detachment rate in mouse myocardium. *American Journal of Physiology - Heart and Circulatory Physiology*, **2021**, 320, H1822-H1835	5.2	0