Samantha P Harris

List of Publications by Year
in descending order

41 papers	2,490 citations	236925 25 h-index	289244 40 g-index
41 all docs	41 docs citations	41 times ranked	1515 citing authors

#	Article	IF	Citations
1	Hypertrophic Cardiomyopathy in Cardiac Myosin Binding Protein-C Knockout Mice. Circulation Research, 2002, 90, 594-601.	4.5	326
2	In the Thick of It. Circulation Research, 2011, 108, 751-764.	4.5	188
3	The Myosin-binding Protein C Motif Binds to F-actin in a Phosphorylation-sensitive Manner. Journal of Biological Chemistry, 2009, 284, 12318-12327.	3.4	187
4	Loaded Shortening, Power Output, and Rate of Force Redevelopment Are Increased With Knockout of Cardiac Myosin Binding Protein-C. Circulation Research, 2003, 93, 752-758.	4.5	152
5	Understanding the Organisation and Role of Myosin Binding Protein C in Normal Striated Muscle by Comparison with MyBP-C Knockout Cardiac Muscle. Journal of Molecular Biology, 2008, 384, 60-72.	4.2	117
6	Effects of the N-terminal Domains of Myosin Binding Protein-C in an in Vitro Motility Assay. Journal of Biological Chemistry, 2006, 281, 35846-35854.	3.4	115
7	Ablation of cardiac myosin binding protein-C disrupts the super-relaxed state of myosin in murine cardiomyocytes. Journal of Molecular and Cellular Cardiology, 2016, 94, 65-71.	1.9	113
8	Cardiac myosin-binding protein C decorates F-actin: Implications for cardiac function. Proceedings of the National Academy of Sciences of the United States of America, 2008, 105, 18360-18365.	7.1	107
9	MYBPC3 mutations are associated with a reduced super-relaxed state in patients with hypertrophic cardiomyopathy. PLoS ONE, 2017, 12, e0180064.	2.5	106
10	Role of Cardiac Myosin Binding Protein C in Sustaining Left Ventricular Systolic Stiffening. Circulation Research, 2004, 94, 1249-1255.	4.5	101
11	A Small Molecule Inhibitor of Sarcomere Contractility Acutely Relieves Left Ventricular Outflow Tract Obstruction in Feline Hypertrophic Cardiomyopathy. PLoS ONE, 2016, 11, e0168407.	2.5	92
12	Binding of the N-terminal fragment C0â€"C2 of cardiac MyBP-C to cardiac F-actin. Journal of Structural Biology, 2011, 174, 44-51.	2.8	78
13	Binding of Myosin Binding Protein-C to Myosin Subfragment S2 Affects Contractility Independent of a Tether Mechanism. Circulation Research, 2004, 95, 930-936.	4.5	71
14	N-Terminal Domains of Cardiac Myosin Binding Protein C Cooperatively Activate the Thin Filament. Structure, 2018, 26, 1604-1611.e4.	3.3	57
15	C0 and C1 N-terminal Ig domains of myosin binding protein C exert different effects on thin filament activation. Proceedings of the National Academy of Sciences of the United States of America, 2016, 113, 1558-1563.	7.1	50
16	Contribution of the Myosin Binding Protein C Motif to Functional Effects in Permeabilized Rat Trabeculae. Journal of General Physiology, 2008, 132, 575-585.	1.9	48
17	The genetic basis of hypertrophic cardiomyopathy in cats and humans. Journal of Veterinary Cardiology, 2015, 17, S53-S73.	0.9	44
18	Orientation of Myosin Binding Protein C in the Cardiac Muscle Sarcomere Determined by Domain-Specific Immuno-EM. Journal of Molecular Biology, 2015, 427, 274-286.	4.2	43

#	Article	IF	Citations
19	Earning stripes: myosin binding protein-C interactions with actin. Pflugers Archiv European Journal of Physiology, 2014, 466, 445-450.	2.8	42
20	Mechanical Unfolding of Cardiac Myosin Binding Protein-C by Atomic Force Microscopy. Biophysical Journal, 2011, 101, 1968-1977.	0.5	40
21	A Gain-of-Function Mutation in the M-domain of Cardiac Myosin-binding Protein-C Increases Binding to Actin. Journal of Biological Chemistry, 2013, 288, 21496-21505.	3.4	38
22	Effects of Cardiac Myosin Binding Protein-C on Actin Motility Are Explained with a Drag-Activation-Competition Model. Biophysical Journal, 2015, 108, 10-13.	0.5	34
23	Species-specific differences in the Pro-Ala rich region of cardiac myosin binding protein-C. Journal of Muscle Research and Cell Motility, 2009, 30, 303-306.	2.0	33
24	Thin filament length in the cardiac sarcomere varies with sarcomere length but is independent of titin and nebulin. Journal of Molecular and Cellular Cardiology, 2016, 97, 286-294.	1.9	32
25	Functional Differences between the N-Terminal Domains of Mouse and Human Myosin Binding Protein-C. Journal of Biomedicine and Biotechnology, 2010, 2010, 1-9.	3.0	31
26	Modulation of Thin Filament Activation of Myosin ATP Hydrolysis by N-Terminal Domains of Cardiac Myosin Binding Protein-C. Biochemistry, 2014, 53, 6717-6724.	2.5	30
27	A Novel â€œCut and Pasteâ€•Method for In Situ Replacement of cMyBP-C Reveals a New Role for cMyBP-C in the Regulation of Contractile Oscillations. Circulation Research, 2020, 126, 737-749.	4.5	27
28	Making waves: A proposed new role for myosin-binding protein C in regulating oscillatory contractions in vertebrate striated muscle. Journal of General Physiology, 2021, 153, .	1.9	27
29	Myosin S2 is not required for effects of myosin binding protein-C on motility. FEBS Letters, 2007, 581, 1501-1504.	2.8	26
30	The A31P missense mutation in cardiac myosin binding protein C alters protein structure but does not cause haploinsufficiency. Archives of Biochemistry and Biophysics, 2016, 601, 133-140.	3.0	19
31	The cMyBP-C HCM variant L348P enhances thin filament activation through an increased shift in tropomyosin position. Journal of Molecular and Cellular Cardiology, 2016, 91, 141-147.	1.9	19
32	Cardiac Effects of a Single Dose of Pimobendan in Cats With Hypertrophic Cardiomyopathy; A Randomized, Placebo-Controlled, Crossover Study. Frontiers in Veterinary Science, 2019, 6, 15.	2.2	17
33	Altered interactions between cardiac myosin binding protein-c and Î±-cardiac actin variants associated with cardiomyopathies. Archives of Biochemistry and Biophysics, 2014, 550-551, 28-32.	3.0	14
34	Point mutations in the tri-helix bundle of the M-domain of cardiac myosin binding protein-C influence systolic duration and delay cardiac relaxation. Journal of Molecular and Cellular Cardiology, 2018, 119, 116-124.	1.9	14
35	Myofilament glycation in diabetes reduces contractility by inhibiting tropomyosin movement, is rescued by cMyBPC domains. Journal of Molecular and Cellular Cardiology, 2022, 162, 1-9.	1.9	12
36	Solution Structure of Heavy Meromyosin by Small-angle Scattering. Journal of Biological Chemistry, 2003, 278, 6034-6040.	3.4	10

#	Article	IF	Citations
37	Precision medicine validation: identifying the <i>MYBPC</i>3 A31P variant with whole-genome sequencing in two Maine Coon cats with hypertrophic cardiomyopathy. Journal of Feline Medicine and Surgery, 2019, 21, 1086-1093.	1.6	10
38	Normal cardiac contraction in mice lacking the prolineâ€“alanine rich region and C1 domain of cardiac myosin binding protein C. Journal of Molecular and Cellular Cardiology, 2015, 88, 124-132.	1.9	9
39	Interaction of the C2 Ig-like Domain of Cardiac Myosin Binding Protein-C with F-actin. Journal of Molecular Biology, 2021, 433, 167178.	4.2	8
40	Ambulatory electrocardiography, heart rate variability, and pharmacologic stress testing in cats with subclinical hypertrophic cardiomyopathy. Scientific Reports, 2022, 12, 1963.	3.3	2
41	Sarcomeric mutations in cardiac diseases. Pflugers Archiv European Journal of Physiology, 2019, 471, 659-660.	2.8	1