Kerry S Mcdonald

List of Publications by Citations

55 papers	2,099 citations	24 h-index	45 g-index
59 ext. papers	2,316 ext. citations	5.8 avg, IF	4.69 L-index

#	Paper	IF	Citations
55	Hypertrophic cardiomyopathy in cardiac myosin binding protein-C knockout mice. *Circulation Research*, **2002**, 90, 594-601	15.7	280
54	Small amounts of alpha-myosin heavy chain isoform expression significantly increase power output of rat cardiac myocyte fragments. *Circulation Research*, **2002**, 90, 1150-2	15.7	170
53	Loaded shortening, power output, and rate of force redevelopment are increased with knockout of cardiac myosin binding protein-C. *Circulation Research*, **2003**, 93, 752-8	15.7	132
52	Osmotic compression of single cardiac myocytes eliminates the reduction in Ca2+ sensitivity of tension at short sarcomere length. *Circulation Research*, **1995**, 77, 199-205	15.7	122
51	The determinants of skeletal muscle force and power: their adaptability with changes in activity pattern. *Journal of Biomechanics*, **1991**, 24 Suppl 1, 111-22	2.9	111
50	Loaded shortening and power output in cardiac myocytes are dependent on myosin heavy chain isoform expression. *American Journal of Physiology - Heart and Circulatory Physiology*, **2001**, 281, H1217-22	5.2	106
49	Rate of tension development in cardiac muscle varies with level of activator calcium. *Circulation Research*, **1995**, 76, 154-60	15.7	92
48	Power output is linearly related to MyHC content in rat skinned myocytes and isolated working hearts. *American Journal of Physiology - Heart and Circulatory Physiology*, **2005**, 289, H801-12	5.2	88
47	Power output is increased after phosphorylation of myofibrillar proteins in rat skinned cardiac myocytes. *Circulation Research*, **2001**, 89, 1184-90	15.7	72
46	Sarcomere length dependence of the rate of tension redevelopment and submaximal tension in rat and rabbit skinned skeletal muscle fibres. *Journal of Physiology*, **1997**, 501 (Pt 3), 607-21	3.9	68
45	Cardiac function and modulation of sarcomeric function by length. *Cardiovascular Research*, **2008**, 77, 627-36	9.9	67
44	Heart failure with preserved ejection fraction: chronic low-intensity interval exercise training preserves myocardial O2 balance and diastolic function. *Journal of Applied Physiology*, **2013**, 114, 131-47	3.7	50
43	Sarcomere length dependence of rat skinned cardiac myocyte mechanical properties: dependence on myosin heavy chain. *Journal of Physiology*, **2007**, 581, 725-39	3.9	49
42	Ca2+ dependence of loaded shortening in rat skinned cardiac myocytes and skeletal muscle fibres. *Journal of Physiology*, **2000**, 525 Pt 1, 169-81	3.9	48
41	Eccentric contraction injury in dystrophic canine muscle. *Archives of Physical Medicine and Rehabilitation*, **2002**, 83, 1572-8	2.8	46
40	TEAD-1 overexpression in the mouse heart promotes an age-dependent heart dysfunction. *Journal of Biological Chemistry*, **2010**, 285, 13721-35	5.4	37
39	Force-velocity and power-load curves in rat skinned cardiac myocytes. *Journal of Physiology*, **1998**, 511 (Pt 2), 519-31	3.9	37

38	Length dependence of force generation exhibit similarities between rat cardiac myocytes and skeletal muscle fibres. *Journal of Physiology*, **2010**, 588, 2891-903	3.9	36
37	Length dependence of striated muscle force generation is controlled by phosphorylation of cTnI at serines 23/24. *Journal of Physiology*, **2013**, 591, 4535-47	3.9	28
36	Sarcomere length dependence of power output is increased after PKA treatment in rat cardiac myocytes. *American Journal of Physiology - Heart and Circulatory Physiology*, **2009**, 296, H1524-31	5.2	28
35	Inorganic phosphate speeds loaded shortening in rat skinned cardiac myocytes. *American Journal of Physiology - Cell Physiology*, **2004**, 287, C500-7	5.4	26
34	Western Diet-Fed, Aortic-Banded Ossabaw Swine: A Preclinical Model of Cardio-Metabolic Heart Failure. *JACC Basic To Translational Science*, **2019**, 4, 404-421	8.7	25
33	Exercise improves impaired ventricular function and alterations of cardiac myofibrillar proteins in diabetic dyslipidemic pigs. *Journal of Applied Physiology*, **2005**, 98, 461-7	3.7	24
32	Incorporation of the troponin regulatory complex of post-ischemic stunned porcine myocardium reduces myofilament calcium sensitivity in rabbit psoas skeletal muscle fibers. *Journal of Molecular and Cellular Cardiology*, **1998**, 30, 285-96	5.8	24
31	Saxagliptin and Tadalafil Differentially Alter Cyclic Guanosine Monophosphate (cGMP) Signaling and Left Ventricular Function in Aortic-Banded Mini-Swine. *Journal of the American Heart Association*, **2016**, 5, e003277	6	20
30	Ca2+ binding to troponin C in skinned skeletal muscle fibers assessed with caged Ca2+ and a Ca2+ fluorophore. Invariance of Ca2+ binding as a function of sarcomere length. *Journal of Biological Chemistry*, **1997**, 272, 6018-27	5.4	20
29	The interdependence of Ca2+ activation, sarcomere length, and power output in the heart. *Pflugers Archiv European Journal of Physiology*, **2011**, 462, 61-7	4.6	19
28	Protein kinase C depresses cardiac myocyte power output and attenuates myofilament responses induced by protein kinase A. *Journal of Muscle Research and Cell Motility*, **2012**, 33, 439-48	3.5	17
27	Length and PKA Dependence of Force Generation and Loaded Shortening in Porcine Cardiac Myocytes. *Biochemistry Research International*, **2012**, 2012, 371415	2.4	17
26	Regulation of myofilament force and loaded shortening by skeletal myosin binding protein C. *Journal of General Physiology*, **2019**, 151, 645-659	3.4	16
25	Regulatory light chain phosphorylation increases eccentric contraction-induced injury in skinned fast-twitch fibers. *Muscle and Nerve*, **2004**, 29, 313-7	3.4	16
24	Molecule specific effects of PKA-mediated phosphorylation on rat isolated heart and cardiac myofibrillar function. *Archives of Biochemistry and Biophysics*, **2016**, 601, 22-31	4.1	15
23	Strongly binding myosin crossbridges regulate loaded shortening and power output in cardiac myocytes. *Circulation Research*, **2000**, 87, 768-73	15.7	15
22	Histone deacetyltransferase inhibitors Trichostatin A and Mocetinostat differentially regulate MMP9, IL-18 and RECK expression, and attenuate Angiotensin II-induced cardiac fibroblast migration and proliferation. *Hypertension Research*, **2016**, 39, 709-716	4.7	14
21	Dantrolene suppresses spontaneous Ca2+ release without altering excitation-contraction coupling in cardiomyocytes of aged mice. *American Journal of Physiology - Heart and Circulatory Physiology*, **2014**, 307, H818-29	5.2	14

20	Porcine cardiac myocyte power output is increased after chronic exercise training. *Journal of Applied Physiology*, **2006**, 101, 40-6	3.7	14
19	Cardiac myofibrillar contractile properties during the progression from hypertension to decompensated heart failure. *American Journal of Physiology - Heart and Circulatory Physiology*, **2017**, 313, H103-H113	5.2	13
18	Isometric and dynamic contractile properties of porcine skinned cardiac myocytes after stunning. *Circulation Research*, **1995**, 77, 964-72	15.7	13
17	Chronic low-intensity exercise attenuates cardiomyocyte contractile dysfunction and impaired adrenergic responsiveness in aortic-banded mini-swine. *Journal of Applied Physiology*, **2018**, 124, 1034-1044	3.7	13
16	Attenuated sarcomere lengthening of the aged murine left ventricle observed using two-photon fluorescence microscopy. *American Journal of Physiology - Heart and Circulatory Physiology*, **2015**, 309, H918-25	5.2	12
15	It takes "heart" to win: what makes the heart powerful?. *Physiology*, **2002**, 17, 185-90	9.8	12
14	Skinned single fibers from normal and dystrophin-deficient dogs incur comparable stretch-induced force deficits. *Muscle and Nerve*, **2005**, 31, 768-71	3.4	11
13	Elevated Ca2+ transients and increased myofibrillar power generation cause cardiac hypercontractility in a model of Noonan syndrome with multiple lentigines. *American Journal of Physiology - Heart and Circulatory Physiology*, **2015**, 308, H1086-95	5.2	10
12	Titin-mediated control of cardiac myofibrillar function. *Archives of Biochemistry and Biophysics*, **2014**, 552-553, 83-91	4.1	10
11	Regulation of Myofilament Contractile Function in Human Donor and Failing Hearts. *Frontiers in Physiology*, **2020**, 11, 468	4.6	7
10	Maximal ATPase activity and calcium sensitivity of reconstituted myofilaments are unaltered by the fetal troponin T re-expressed during human heart failure. *Journal of Molecular and Cellular Cardiology*, **2002**, 34, 797-805	5.8	7
9	Transient receptor potential vanilloid-4 contributes to stretch-induced hypercontractility and time-dependent dysfunction in the aged heart. *Cardiovascular Research*, **2020**, 116, 1887-1896	9.9	7
8	Beta-myosin heavy chain myocytes are more resistant to changes in power output induced by ischemic conditions. *American Journal of Physiology - Heart and Circulatory Physiology*, **2006**, 290, H869-77	5.2	4
7	Cardiac MyBP-C phosphorylation regulates the Frank-Starling relationship in murine hearts. *Journal of General Physiology*, **2021**, 153,	3.4	4
6	Regulating myofilament power: The determinant of health. *Archives of Biochemistry and Biophysics*, **2019**, 663, 160-164	4.1	2
5	Determinants of Loaded Shortening in Cardiac Myocytes. *Biophysical Journal*, **2010**, 98, 152a	2.9	2
4	Stretch-induced force deficits in murine extensor digitorum longus muscles after cardiotoxin injection. *Muscle and Nerve*, **2006**, 34, 485-8	3.4	2
3	Jack-of-many-trades: discovering new roles for troponin C. *Journal of Physiology*, **2018**, 596, 4553-4554	3.9	1

2	Regulation of cardiac muscle contraction: how paramount are the sarcomeres?. *American Journal of Physiology - Regulatory Integrative and Comparative Physiology*, **2007**, 293, R961-R962	3.2
1	AMP activated kinase 1 subunit knock-out causes concentric hypertrophy and elevated ventricular function. *FASEB Journal*, **2009**, 23, 989.4	0.9