Robyn M Murphy

List of Publications by Year
in descending order

110 papers	3,824 citations	109321 35 h-index	161849 54 g-index
117 all docs	117 docs citations	117 times ranked	4039 citing authors

#	Article	IF	Citations
1	Skeletal muscle cell-specific differences in type 2 diabetes. Cellular and Molecular Life Sciences, 2022, 79, 256.	5.4	6
2	Age Related Changes in Muscle Mass and Force Generation in the Triple Transgenic (3xTgAD) Mouse Model of Alzheimerâ€™s Disease. Frontiers in Aging Neuroscience, 2022, 14, 876816.	3.4	6
3	Time course and fibre typeâ€dependent nature of calciumâ€handling protein responses to sprint interval exercise in human skeletal muscle. Journal of Physiology, 2022, 600, 2897-2917.	2.9	6
4	Autophagy is not involved in lipid accumulation and the development of insulin resistance in skeletal muscle. Biochemical and Biophysical Research Communications, 2021, 534, 533-539.	2.1	4
5	Expression of titin-linked putative mechanosensing proteins in skeletal muscle after power resistance exercise in resistance-trained men. Journal of Applied Physiology, 2021, 130, 545-561.	2.5	5
6	Human skeletal muscle fiber type-specific responses to sprint interval and moderate-intensity continuous exercise: acute and training-induced changes. Journal of Applied Physiology, 2021, 130, 1001-1014.	2.5	19
7	Nuclei isolation methods fail to accurately assess the subcellular localization and behaviour of proteins in skeletal muscle. Acta Physiologica, 2021, 233, e13730.	3.8	5
8	Muscle mitochondrial catalase expression prevents neuromuscular junction disruption, atrophy, and weakness in a mouse model of accelerated sarcopenia. Journal of Cachexia, Sarcopenia and Muscle, 2021, 12, 1582-1596.	7.3	30
9	Effects of voluntary wheel running on mitochondrial content and dynamics in rat skeletal muscle. Journal of Muscle Research and Cell Motility, 2021, 42, 67-76.	2.0	7
10	Ryanodine receptor leak triggers fiber Ca ²⁺ redistribution to preserve force and elevate basal metabolism in skeletal muscle. Science Advances, 2021, 7, eabi7166.	10.3	20
11	The SarcoEndoplasmic Reticulum Calcium ATPase (SERCA) pump: a potential target for intervention in aging and skeletal muscle pathologies. Skeletal Muscle, 2021, 11, 25.	4.2	35
12	Impact of exercise training status on the fiber type-specific abundance of proteins regulating intramuscular lipid metabolism. Journal of Applied Physiology, 2020, 128, 379-389.	2.5	28
13	Metabolic communication during exercise. Nature Metabolism, 2020, 2, 805-816.	11.9	97
14	Controversies in TWEAK-Fn14 signaling in skeletal muscle atrophy and regeneration. Cellular and Molecular Life Sciences, 2020, 77, 3369-3381.	5.4	22
15	MicroRNA-99b-5p downregulates protein synthesis in human primary myotubes. American Journal of Physiology - Cell Physiology, 2020, 319, C432-C440.	4.6	11
16	Effects of intrauterine growth restriction on Ca2+-activated force and contractile protein expression in the mesenteric artery of 1-year-old Wistar-Kyoto rats. Journal of Physiology and Biochemistry, 2020, 76, 111-121.	3.0	1
17	Elevated MMP2 abundance and activity in mdx mice are alleviated by prenatal taurine supplementation. American Journal of Physiology - Cell Physiology, 2020, 318, C1083-C1091.	4.6	3
18	Distribution and activation of matrix metalloproteinase-2 in skeletal muscle fibers. American Journal of Physiology - Cell Physiology, 2019, 317, C613-C625.	4.6	16

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19	Assessing Membrane Micro-domain Physiology from the Inside-Out Using Confocal Microscopy. Microscopy and Microanalysis, 2019, 25, 1082-1083.	0.4	0
20	A fast, reliable and sample-sparing method to identify fibre types of single muscle fibres. Scientific Reports, 2019, 9, 6473.	3.3	25
21	Dysferlin-deficiency has greater impact on function of slow muscles, compared with fast, in aged BLAJ mice. PLoS ONE, 2019, 14, e0214908.	2.5	13
22	Elevated GLUT4 and glycogenin protein abundance correspond to increased glycogen content in the soleus muscle of <i>mdx</i> mice with no benefit associated with taurine supplementation. Physiological Reports, 2018, 6, e13596.	1.7	0
23	Increased <i>FXYD1</i> and <i>PGCâ€1</i>Î± mRNA after blood flowâ€restricted running is related to fibre typeâ€specific AMPK signalling and oxidative stress in human muscle. Acta Physiologica, 2018, 223, e13045.	3.8	63
24	Effect of androgen deprivation therapy on the contractile properties of type I and type <scp>II</scp> skeletal muscle fibres in men with nonâ€metastatic prostate cancer. Clinical and Experimental Pharmacology and Physiology, 2018, 45, 146-154.	1.9	9
25	No evidence of direct association between GLUT4 and glycogen in human skeletal muscle. Physiological Reports, 2018, 6, e13917.	1.7	3
26	Exercise and GLUT4 in human subcutaneous adipose tissue. Physiological Reports, 2018, 6, e13918.	1.7	11
27	The effect of intrauterine growth restriction on Ca2+-activated force and contractile protein expression in the mesenteric artery of adult (6-month-old) male and female Wistar-Kyoto rats. Physiological Reports, 2018, 6, e13954.	1.7	6
28	Taurine and Methylprednisolone Administration at Close Proximity to the Onset of Muscle Degeneration Is Ineffective at Attenuating Force Loss in the Hind-Limb of 28 Days Mdx Mice. Sports, 2018, 6, 109.	1.7	4
29	Abundance of ClC-1 chloride channel in human skeletal muscle: fiber type specific differences and effect of training. Journal of Applied Physiology, 2018, 125, 470-478.	2.5	20
30	Mitochondrial content is preserved throughout disease progression in the <i>mdx</i> mouse model of Duchenne muscular dystrophy, regardless of taurine supplementation. American Journal of Physiology - Cell Physiology, 2018, 314, C483-C491.	4.6	15
31	Junctional membrane Ca ²⁺ dynamics in human muscle fibers are altered by malignant hyperthermia causative RyR mutation. Proceedings of the National Academy of Sciences of the United States of America, 2018, 115, 8215-8220.	7.1	31
32	Cold-water immersion after training sessions: effects on fiber type-specific adaptations in muscle K⁺transport proteins to sprint-interval training in men. Journal of Applied Physiology, 2018, 125, 429-444.	2.5	18
33	Physiological and biochemical characteristics of skeletal muscles in sedentary and active rats. Journal of Muscle Research and Cell Motility, 2018, 39, 1-16.	2.0	15
34	Preservation of skeletal muscle mitochondrial content in older adults: relationship between mitochondria, fibre type and highâ€intensity exercise training. Journal of Physiology, 2017, 595, 3345-3359.	2.9	60
35	Human skeletal muscle plasmalemma alters its structure to change its Ca2+-handling following heavy-load resistance exercise. Nature Communications, 2017, 8, 14266.	12.8	32
36	<i>S</i>-nitrosylation and<i>S</i>-glutathionylation of Cys134 on troponin I have opposing competitive actions on Ca²⁺sensitivity in rat fast-twitch muscle fibers. American Journal of Physiology - Cell Physiology, 2017, 312, C316-C327.	4.6	39

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37	Intense interval training in healthy older adults increases skeletal muscle [³ H]ouabain-binding site content and elevates Na⁺ ,K⁺ -ATPase Î±₂ isoform abundance in Type II fibers. Physiological Reports, 2017, 5, e13219.	1.7	22
38	Characterization of muscle ankyrin repeat proteins in human skeletal muscle. American Journal of Physiology - Cell Physiology, 2017, 313, C327-C339.	4.6	24
39	Preaged remodeling of myofibrillar cytoarchitecture in skeletal muscle expressing R349P mutant desmin. Neurobiology of Aging, 2017, 58, 77-87.	3.1	13
40	Changes in contractile and metabolic parameters of skeletal muscle as rats age from 3 to 12 months. Journal of Muscle Research and Cell Motility, 2017, 38, 405-420.	2.0	14
41	Reply to â€œLetter to the editor: Comments on Wette et al. (2017): â€˜Characterization of muscle ankyrin repeat proteins in human skeletal muscleâ€™â€• American Journal of Physiology - Cell Physiology, 2017, 313, C471-C472.	4.6	0
42	Superior mitochondrial adaptations in human skeletal muscle after interval compared to continuous singleâ€leg cycling matched for total work. Journal of Physiology, 2017, 595, 2955-2968.	2.9	148
43	Ischaemic exercise enhances mitochondrial and ion transport gene adaptations in trained human skeletal muscle: Role of cellular redox state, AMPK and CaMKII signalling. Japanese Journal of Physical Fitness and Sports Medicine, 2017, 66, 75-75.	0.0	0
44	Benefits of Pre-natal Taurine Supplementation in Preventing the Onset of Acute Damage in the Mdx Mouse. PLOS Currents, 2017, 9, .	1.4	12
45	Insights into the role and regulation of TCTP in skeletal muscle. Oncotarget, 2017, 8, 18754-18772.	1.8	21
46	Store-Operated Ca2+ Entry (SOCE) and Purinergic Receptor-Mediated Ca2+ Homeostasis in Murine bv2 Microglia Cells: Early Cellular Responses to ATP-Mediated Microglia Activation. Frontiers in Molecular Neuroscience, 2016, 9, 111.	2.9	31
47	Perilipin 5 is dispensable for normal substrate metabolism and in the adaptation of skeletal muscle to exercise training. American Journal of Physiology - Endocrinology and Metabolism, 2016, 311, E128-E137.	3.5	15
48	When phosphorylated at Thr¹⁴⁸, the Î²₂-subunit of AMP-activated kinase does not associate with glycogen in skeletal muscle. American Journal of Physiology - Cell Physiology, 2016, 311, C35-C42.	4.6	6
49	A quantitative description of tubular system Ca²⁺ handling in fastâ€and slowâ€twitch muscle fibres. Journal of Physiology, 2016, 594, 2795-2810.	2.9	32
50	The effect of taurine and Î²-alanine supplementation on taurine transporter protein and fatigue resistance in skeletal muscle from mdx mice. Amino Acids, 2016, 48, 2635-2645.	2.7	25
51	Dissociation between short-term unloading and resistance training effects on skeletal muscle Na⁺,K⁺-ATPase, muscle function, and fatigue in humans. Journal of Applied Physiology, 2016, 121, 1074-1086.	2.5	28
52	Cell specific differences in the protein abundances of GAPDH and Na+,K+-ATPase in skeletal muscle from aged individuals. Experimental Gerontology, 2016, 75, 8-15.	2.8	22
53	Ca²⁺ leakage out of the sarcoplasmic reticulum is increased in type I skeletal muscle fibres in aged humans. Journal of Physiology, 2016, 594, 469-481.	2.9	38
54	Maternal Nutrient Restriction Alters Ca2+ Handling Properties and Contractile Function of Isolated Left Ventricle Bundles in Male But Not Female Juvenile Rats. PLoS ONE, 2015, 10, e0138388.	2.5	19

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55	Single-fiber expression and fiber-specific adaptability to short-term intense exercise training of Na⁺-K⁺-ATPase Î±- and Î²-isoforms in human skeletal muscle. Journal of Applied Physiology, 2015, 118, 699-706.	2.5	22
56	Altered Ca2+ Kinetics Associated with Î±-Actinin-3 Deficiency May Explain Positive Selection for ACTN3 Null Allele in Human Evolution. PLoS Genetics, 2015, 11, e1004862.	3.5	39
57	Clarity for 5â€²â€AMPâ€activated protein kinase â€“ dissecting out human skeletal muscle responses to exercise. Journal of Physiology, 2015, 593, 1769-1770.	2.9	1
58	Rat skeletal muscle glycogen degradation pathways reveal differential association of glycogen-related proteins with glycogen granules. Journal of Physiology and Biochemistry, 2015, 71, 267-280.	3.0	8
59	Glucose uptake during contraction in isolated skeletal muscles from neuronal nitric oxide synthase Î¼ knockout mice. Journal of Applied Physiology, 2015, 118, 1113-1121.	2.5	14
60	Contractile properties and sarcoplasmic reticulum calcium content in typeÂ I and typeÂ II skeletal muscle fibres in active aged humans. Journal of Physiology, 2015, 593, 2499-2514.	2.9	79
61	Subcellular fractionation reveals HSP72 does not associate with SERCA in human skeletal muscle following damaging eccentric and concentric exercise. Journal of Applied Physiology, 2014, 116, 1503-1511.	2.5	9
62	Skeletal muscle atrophy in sedentary Zucker obese rats is not caused by calpain-mediated muscle damage or lipid peroxidation induced by oxidative stress. Journal of Negative Results in BioMedicine, 2014, 13, 19.	1.4	15
63	Acute effects of taurine on sarcoplasmic reticulum Ca²⁺ accumulation and contractility in human type I and type II skeletal muscle fibers. Journal of Applied Physiology, 2014, 117, 797-805.	2.5	36
64	Small heat shock proteins translocate to the cytoskeleton in human skeletal muscle following eccentric exercise independently of phosphorylation. Journal of Applied Physiology, 2014, 116, 1463-1472.	2.5	29
65	Sarcoplasmic reticulum Ca²⁺ uptake and leak properties, and SERCA isoform expression, in type I and type II fibres of human skeletal muscle. Journal of Physiology, 2014, 592, 1381-1395.	2.9	48
66	Comparative analysis of caveolins in mouse and tammar wallaby: Role in regulating mammary gland function. Gene, 2014, 552, 51-58.	2.2	0
67	Ca²⁺â€dependent proteolysis of junctophilinâ€1 and junctophilinâ€2 in skeletal and cardiac muscle. Journal of Physiology, 2013, 591, 719-729.	2.9	103
68	Isolation of Sarcolemmal Plasma Membranes by Mechanically Skinning Rat Skeletal Muscle Fibers for Phospholipid Analysis. Lipids, 2013, 48, 421-430.	1.7	8
69	Endogenous and maximal sarcoplasmic reticulum calcium content and calsequestrin expression in type I and type II human skeletal muscle fibres. Journal of Physiology, 2013, 591, 6053-6068.	2.9	53
70	Fibre typeâ€specific change in FXYD1 phosphorylation during acute intense exercise in humans. Journal of Physiology, 2013, 591, 1523-1533.	2.9	34
71	Important considerations for protein analyses using antibody based techniques: downâ€sizing Western blotting upâ€sizes outcomes. Journal of Physiology, 2013, 591, 5823-5831.	2.9	119
72	Changes in plasma membrane Ca-ATPase and stromal interacting molecule 1 expression levels for Ca²⁺ signaling in dystrophic <i>mdx</i> mouse muscle. American Journal of Physiology - Cell Physiology, 2012, 303, C567-C576.	4.6	26

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73	Absolute amounts and diffusibility of HSP72, HSP25, and Î±B-crystallin in fast- and slow-twitch skeletal muscle fibers of rat. American Journal of Physiology - Cell Physiology, 2012, 302, C228-C239.	4.6	27
74	Effects of carnosine on contractile apparatus Ca²⁺sensitivity and sarcoplasmic reticulum Ca²⁺release in human skeletal muscle fibers. Journal of Applied Physiology, 2012, 112, 728-736.	2.5	102
75	Single fiber analyses of glycogen-related proteins reveal their differential association with glycogen in rat skeletal muscle. American Journal of Physiology - Cell Physiology, 2012, 303, C1146-C1155.	4.6	27
76	<i>S</i>â€Glutathionylation of troponin I (fast) increases contractile apparatus Ca²⁺ sensitivity in fastâ€twitch muscle fibres of rats and humans. Journal of Physiology, 2012, 590, 1443-1463.	2.9	90
77	Influences of temperature, oxidative stress, and phosphorylation on binding of heat shock proteins in skeletal muscle fibers. American Journal of Physiology - Cell Physiology, 2012, 303, C654-C665.	4.6	24
78	Enhanced technique to measure proteins in single segments of human skeletal muscle fibers: fiber-type dependence of AMPK-Î±₁ and -Î²₁. Journal of Applied Physiology, 2011, 110, 820-825.	2.5	71
79	Storeâ€operated calcium entry remains fully functional in aged mouse skeletal muscle despite a decline in STIM1 protein expression. Aging Cell, 2011, 10, 675-685.	6.7	23
80	Activation of skeletal muscle calpain-3 by eccentric exercise in humans does not result in its translocation to the nucleus or cytosol. Journal of Applied Physiology, 2011, 111, 1448-1458.	2.5	24
81	On the localization of ClC-1 in skeletal muscle fibers. Journal of General Physiology, 2011, 137, 327-329.	1.9	11
82	Quantification of calsequestrin 2 (CSQ2) in sheep cardiac muscle and Ca²⁺-binding protein changes in CSQ2 knockout mice. American Journal of Physiology - Heart and Circulatory Physiology, 2011, 300, H595-H604.	3.2	38
83	Toward the roles of store-operated Ca2+ entry in skeletal muscle. Pflugers Archiv European Journal of Physiology, 2010, 460, 813-823.	2.8	60
84	Ultra-rapid activation and deactivation of store-operated Ca2+ entry in skeletal muscle. Cell Calcium, 2010, 47, 458-467.	2.4	68
85	Calpains, skeletal muscle function and exercise. Clinical and Experimental Pharmacology and Physiology, 2010, 37, 385-391.	1.9	42
86	Upregulation of store-operated Ca²⁺ entry in dystrophic <i>mdx</i> mouse muscle. American Journal of Physiology - Cell Physiology, 2010, 299, C42-C50.	4.6	80
87	Calpain-3 is activated following eccentric exercise. Journal of Applied Physiology, 2009, 106, 2068-2068.	2.5	6
88	Endogenous Calpain-3 Activation Is Primarily Governed by Small Increases in Resting Cytoplasmic [Ca2+] and Is Not Dependent on Stretch. Journal of Biological Chemistry, 2009, 284, 7811-7819.	3.4	46
89	Taurine supplementation increases skeletal muscle force production and protects muscle function during and after high-frequency in vitro stimulation. Journal of Applied Physiology, 2009, 107, 144-154.	2.5	65
90	Involvement of calpains in Ca²⁺-induced disruption of excitation-contraction coupling in mammalian skeletal muscle fibers. American Journal of Physiology - Cell Physiology, 2009, 296, C1115-C1122.	4.6	37

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91	Plasma membrane removal in rat skeletal muscle fibers reveals caveolin-3 hot-spots at the necks of transverse tubules. Experimental Cell Research, 2009, 315, 1015-1028.	2.6	53
92	Calsequestrin content and SERCA determine normal and maximal Ca²⁺ storage levels in sarcoplasmic reticulum of fastâ€•and slowâ€•twitch fibres of rat. Journal of Physiology, 2009, 587, 443-460.	2.9	130
93	Are genuine changes in protein expression being overlooked? Reassessing Western blotting. Analytical Biochemistry, 2009, 386, 270-275.	2.4	71
94	Chloride conductance in the transverse tubular system of rat skeletal muscle fibres: importance in excitationâ€“contraction coupling and fatigue. Journal of Physiology, 2008, 586, 875-887.	2.9	53
95	Hydroxyl radical and glutathione interactions alter calcium sensitivity and maximum force of the contractile apparatus in rat skeletal muscle fibres. Journal of Physiology, 2008, 586, 2203-2216.	2.9	75
96	Calpain-3 is autolyzed and hence activated in human skeletal muscle 24 h following a single bout of eccentric exercise. Journal of Applied Physiology, 2007, 103, 926-931.	2.5	65
97	CT, Creatine Transporter. , 2007, , 1-15.		0
98	Ca2+activation of diffusible and bound pools of Î¼-calpain in rat skeletal muscle. Journal of Physiology, 2006, 576, 595-612.	2.9	103
99	Î¼-Calpain and calpain-3 are not autolyzed with exhaustive exercise in humans. American Journal of Physiology - Cell Physiology, 2006, 290, C116-C122.	4.6	51
100	Disruption of excitation-contraction coupling and titin by endogenous Ca2+-activated proteases in toad muscle fibres. Journal of Physiology, 2005, 564, 775-790.	2.9	64
101	Effect of carbohydrate ingestion on exercise-induced alterations in metabolic gene expression. Journal of Applied Physiology, 2005, 99, 1359-1363.	2.5	79
102	Effect of creatine on contractile force and sensitivity in mechanically skinned single fibers from rat skeletal muscle. American Journal of Physiology - Cell Physiology, 2004, 287, C1589-C1595.	4.6	24
103	Intense exercise up-regulates Na+,K+-ATPase isoform mRNA, but not protein expression in human skeletal muscle. Journal of Physiology, 2004, 556, 507-519.	2.9	58
104	Creatine transporters: A reappraisal. Molecular and Cellular Biochemistry, 2004, 256, 407-424.	3.1	65
105	Creatine supplementation increases glycogen storage but not GLUT-4 expression in human skeletal muscle. Clinical Science, 2004, 106, 99-106.	4.3	86
106	Title is missing!. Molecular and Cellular Biochemistry, 2003, 244, 151-157.	3.1	14
107	Factors Influencing Creatine Loading into Human Skeletal Muscle. Exercise and Sport Sciences Reviews, 2003, 31, 154-158.	3.0	36
108	Human skeletal muscle creatine transporter mRNA and protein expression in healthy, young males and females. , 2003, , 151-157.		0

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109	Human skeletal muscle creatine transporter mRNA and protein expression in healthy, young males and females. Molecular and Cellular Biochemistry, 2003, 244, 151-7.	3.1	5
110	Creatine and the creatine transporter: a review. , 2001, 224, 169-181.		151