Dawn A Lowe

List of Publications by Year
in descending order

127 papers	6,177 citations	57758 44 h-index	79698 73 g-index
132 all docs	132 docs citations	132 times ranked	5588 citing authors

#	Article	IF	Citations
1	Skeletal muscle wasting: the estrogen side of sexual dimorphism. American Journal of Physiology - Cell Physiology, 2022, 322, C24-C37.	4.6	14
2	In vivo potentiation of post-tetanic twitch across age and sex. Journal of General Physiology, 2022, 154, .	1.9	1
3	Mechanisms of weakness in Mdx muscle following in vivo eccentric contractions. Journal of Muscle Research and Cell Motility, 2022, 43, 63-72.	2.0	2
4	Estradiol deficiency reduces the satellite cell pool by impairing cell cycle progression. American Journal of Physiology - Cell Physiology, 2022, 322, C1123-C1137.	4.6	5
5	Tissue selective effects of bazedoxifene on the musculoskeletal system in female mice. Journal of Endocrinology, 2021, 248, 181-191.	2.6	3
6	Impact of estrogen deficiency on diaphragm and leg muscle contractile function in female mdx mice. PLoS ONE, 2021, 16, e0249472.	2.5	9
7	Tetrahydrobiopterin synthesis and metabolism is impaired in dystrophinâ€deficient mdx mice and humans. Acta Physiologica, 2021, 231, e13627.	3.8	3
8	Some dystrophy phenotypes of dystrophinâ€deficient mdx mice are exacerbated by mild, repetitive daily stress. FASEB Journal, 2021, 35, e21489.	0.5	5
9	Estradiol deficiency and skeletal muscle apoptosis: Possible contribution of microRNAs. Experimental Gerontology, 2021, 147, 111267.	2.8	12
10	Voluntary and magnetically evoked muscle contraction protocol in males with Duchenne muscular dystrophy: Safety, feasibility, reliability, and validity. Muscle and Nerve, 2021, 64, 190-198.	2.2	4
11	Membrane Proteins Increase with the Repeated Bout Effect. Medicine and Science in Sports and Exercise, 2021, Publish Ahead of Print, .	0.4	7
12	Preservation of satellite cell number and regenerative potential with age reveals locomotory muscle bias. Skeletal Muscle, 2021, 11, 22.	4.2	14
13	Contraction-Induced Loss of Plasmalemmal Electrophysiological Function Is Dependent on the Dystrophin Glycoprotein Complex. Frontiers in Physiology, 2021, 12, 757121.	2.8	3
14	Estrogen receptor-Î± in female skeletal muscle is not required for regulation of muscle insulin sensitivity and mitochondrial regulation. Molecular Metabolism, 2020, 34, 1-15.	6.5	21
15	Rapid, redox-mediated mechanical susceptibility of the cortical microtubule lattice in skeletal muscle. Redox Biology, 2020, 37, 101730.	9.0	10
16	Oestradiol affects skeletal muscle mass, strength and satellite cells following repeated injuries. Experimental Physiology, 2020, 105, 1700-1707.	2.0	16
17	rAAV-related therapy fully rescues myonuclear and myofilament function in X-linked myotubular myopathy. Acta Neuropathologica Communications, 2020, 8, 167.	5.2	12
18	Editorial: New Insights into Estrogen/Estrogen Receptor Effects in the Cardiac and Skeletal Muscle. Frontiers in Endocrinology, 2020, 11, 141.	3.5	9

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19	Super-relaxed state of myosin in human skeletal muscle is fiber-type dependent. American Journal of Physiology - Cell Physiology, 2020, 319, C1158-C1162.	4.6	16
20	Transcriptional and cytopathological hallmarks of FSHD in chronic DUX4-expressing mice. Journal of Clinical Investigation, 2020, 130, 2465-2477.	8.2	44
21	Mechanical factors tune the sensitivity of mdx muscle to eccentric strength loss and its protection by antioxidant and calcium modulators. Skeletal Muscle, 2020, 10, 3.	4.2	29
22	Plasmalemma Function Is Rapidly Restored in Mdx Muscle after Eccentric Contractions. Medicine and Science in Sports and Exercise, 2020, 52, 354-361.	0.4	18
23	Estrogen Regulates the Satellite Cell Compartment in Females. Cell Reports, 2019, 28, 368-381.e6.	6.4	79
24	Distinct mechanical properties in homologous spectrin-like repeats of utrophin. Scientific Reports, 2019, 9, 5210.	3.3	6
25	Aging of the musculoskeletal system: How the loss of estrogen impacts muscle strength. Bone, 2019, 123, 137-144.	2.9	98
26	Variable cytoplasmic actin expression impacts the sensitivity of different dystrophinâ€deficient mdx skeletal muscles to eccentric contraction. FEBS Journal, 2019, 286, 2562-2576.	4.7	17
27	Isometric resistance training increases strength and alters histopathology of dystrophin-deficient mouse skeletal muscle. Journal of Applied Physiology, 2019, 126, 363-375.	2.5	22
28	Effects of ovarian hormones and estrogen receptor Î± on physical activity and skeletal muscle fatigue in female mice. Experimental Gerontology, 2019, 115, 155-164.	2.8	35
29	Dystrophinopathy-associated dysfunction of Krebs cycle metabolism. Human Molecular Genetics, 2019, 28, 942-951.	2.9	22
30	Increased Fiber Excitability Does Not Contribute to Postâ€Tetanic Potentiation in Mice. FASEB Journal, 2019, 33, 701.14.	0.5	0
31	Impaired muscle relaxation and mitochondrial fission associated with genetic ablation of cytoplasmic actin isoforms. FEBS Journal, 2018, 285, 481-500.	4.7	7
32	Mouse models of two missense mutations in actin-binding domain 1 of dystrophin associated with Duchenne or Becker muscular dystrophy. Human Molecular Genetics, 2018, 27, 451-462.	2.9	14
33	Variable rescue of microtubule and physiological phenotypes in mdx muscle expressing different miniaturized dystrophins. Human Molecular Genetics, 2018, 27, 2090-2100.	2.9	44
34	17Î²-Estradiol Directly Lowers Mitochondrial Membrane Microviscosity and Improves Bioenergetic Function in Skeletal Muscle. Cell Metabolism, 2018, 27, 167-179.e7.	16.2	122
35	Loss of peroxiredoxin-2 exacerbates eccentric contraction-induced force loss in dystrophin-deficient muscle. Nature Communications, 2018, 9, 5104.	12.8	27
36	Xanthine oxidase is hyper-active in Duchenne muscular dystrophy. Free Radical Biology and Medicine, 2018, 129, 364-371.	2.9	22

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37	Age affects myosin relaxation states in skeletal muscle fibers of female but not male mice. PLoS ONE, 2018, 13, e0199062.	2.5	19
38	Neopterin/7,8â€dihydroneopterin is elevated in Duchenne muscular dystrophy patients and protects <i>mdx</i> skeletal muscle function. Experimental Physiology, 2018, 103, 995-1009.	2.0	17
39	A moderate oestradiol level enhances neutrophil number and activity in muscle after traumatic injury but strength recovery is accelerated. Journal of Physiology, 2018, 596, 4665-4680.	2.9	29
40	Deletion of estrogen receptor Î± in skeletal muscle results in impaired contractility in female mice. Journal of Applied Physiology, 2018, 124, 980-992.	2.5	42
41	Prelamin A causes aberrant myonuclear arrangement and results in muscle fiber weakness. JCI Insight, 2018, 3, .	5.0	19
42	Chemical End Group Modified Diblock Copolymers Elucidate Anchor and Chain Mechanism of Membrane Stabilization. Molecular Pharmaceutics, 2017, 14, 2333-2339.	4.6	28
43	Muscle pathology from stochastic low level DUX4 expression in an FSHD mouse model. Nature Communications, 2017, 8, 550.	12.8	84
44	Feasibility and tolerability of wholeâ€body, lowâ€intensity vibration and its effects on muscle function and bone in patients with dystrophinopathies: a pilot study. Muscle and Nerve, 2017, 55, 875-883.	2.2	16
45	Female reproductive factors are associated with objectively measured physical activity in middle-aged women. PLoS ONE, 2017, 12, e0172054.	2.5	38
46	Progesterone and Estradiol Restore Wheel Running After Ovariectomy in Mice. Medicine and Science in Sports and Exercise, 2016, 48, 140.	0.4	0
47	Activation of GPR30 improves exercise capacity and skeletal muscle strength in senescent female Fischer344ÃÃ—ÂBrown Norway rats. Biochemical and Biophysical Research Communications, 2016, 475, 81-86.	2.1	11
48	Eccentric Contraction-Induced Muscle Injury: Reproducible, Quantitative, Physiological Models to Impair Skeletal Muscleâ€™s Capacity to Generate Force. Methods in Molecular Biology, 2016, 1460, 3-18.	0.9	17
49	Freeze Injury of the Tibialis Anterior Muscle. Methods in Molecular Biology, 2016, 1460, 33-41.	0.9	19
50	Independent variability of microtubule perturbations associated with dystrophinopathy. Human Molecular Genetics, 2016, 25, ddw318.	2.9	48
51	Estradiol modulates myosin regulatory light chain phosphorylation and contractility in skeletal muscle of female mice. American Journal of Physiology - Endocrinology and Metabolism, 2016, 310, E724-E733.	3.5	52
52	The presence of the ovary prevents hepatic mitochondrial oxidative stress in young and aged female mice through glutathione peroxidase 1. Experimental Gerontology, 2016, 73, 14-22.	2.8	17
53	High Frequency Hearing Loss and Hyperactivity in DUX4 Transgenic Mice. PLoS ONE, 2016, 11, e0151467.	2.5	14
54	Skeletal Muscle Specific Knock out of Estrogen Receptor Alpha Results in Low Strength. Medicine and Science in Sports and Exercise, 2016, 48, 15.	0.4	0

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55	Membrane-stabilizing copolymers confer marked protection to dystrophic skeletal muscle in vivo. Molecular Therapy - Methods and Clinical Development, 2015, 2, 15042.	4.1	38
56	Influence of Ovarian Hormones on Strength Loss in Healthy and Dystrophic Female Mice. Medicine and Science in Sports and Exercise, 2015, 47, 1177-1187.	0.4	11
57	The myosin super-relaxed state is disrupted by estradiol deficiency. Biochemical and Biophysical Research Communications, 2015, 456, 151-155.	2.1	23
58	Microtubule binding distinguishes dystrophin from utrophin. Proceedings of the National Academy of Sciences of the United States of America, 2014, 111, 5723-5728.	7.1	132
59	CCR2 Elimination in Mice Results in Larger and Stronger Tibial Bones but Bone Loss is not Attenuated Following Ovariectomy or Muscle Denervation. Calcified Tissue International, 2014, 95, 457-466.	3.1	11
60	Dominant Lethal Pathologies in Male Mice Engineered to Contain an X-Linked DUX4 Transgene. Cell Reports, 2014, 8, 1484-1496.	6.4	65
61	Exercise increases utrophin protein expression in the <i>mdx</i> mouse model of Duchenne muscular dystrophy. Muscle and Nerve, 2014, 49, 915-918.	2.2	24
62	Low Intensity, High Frequency Vibration Training to Improve Musculoskeletal Function in a Mouse Model of Duchenne Muscular Dystrophy. PLoS ONE, 2014, 9, e104339.	2.5	14
63	Estrogen replacement and skeletal muscle: mechanisms and population health. Journal of Applied Physiology, 2013, 115, 569-578.	2.5	68
64	A New Immuno-, Dystrophin-Deficient Model, the <i>NSG-mdx</i> <i>4Cv</i> Mouse, Provides Evidence for Functional Improvement Following Allogeneic Satellite Cell Transplantation. Stem Cells, 2013, 31, 1611-1620.	3.2	90
65	Acute failure of action potential conduction in <i>mdx</i> muscle reveals new mechanism of contractionâ€induced force loss. Journal of Physiology, 2013, 591, 3765-3776.	2.9	41
66	Adaptations of Mouse Skeletal Muscle to Low-Intensity Vibration Training. Medicine and Science in Sports and Exercise, 2013, 45, 1051-1059.	0.4	27
67	Influence of Ovarian Hormones on Skeletal Muscle Contractility. , 2013, , 1-15.		0
68	Regulation of skeletal muscle strength by estradiol: neuronal nitric oxide synthase and myosin regulatory light chain. FASEB Journal, 2013, 27, 939.14.	0.5	3
69	Regulation of Physiological and Metabolic Function of Muscle by Female Sex Steroids. Medicine and Science in Sports and Exercise, 2012, 44, 1653-1662.	0.4	42
70	Exercise Training Improves Plantar Flexor Muscle Function in mdx Mice. Medicine and Science in Sports and Exercise, 2012, 44, 1671-1679.	0.4	62
71	Skeletal muscle contractile function and neuromuscular performance in Zmpste24 âˆ’/âˆ’ mice, a murine model of human progeria. Age, 2012, 34, 805-819.	3.0	28
72	Bone is functionally impaired in dystrophic mice but less so than skeletal muscle. Neuromuscular Disorders, 2011, 21, 183-193.	0.6	43

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73	Estradiol treatment, physical activity, and muscle function in ovarian-senescent mice. Experimental Gerontology, 2011, 46, 685-693.	2.8	44
74	Transgenic overexpression of Î³-cytoplasmic actin protects against eccentric contraction-induced force loss in mdx mice. Skeletal Muscle, 2011, 1, 32.	4.2	28
75	TAT-Î¼Utrophin mitigates the pathophysiology of dystrophin and utrophin double-knockout mice. Journal of Applied Physiology, 2011, 111, 200-205.	2.5	22
76	Estradiol's beneficial effect on murine muscle function is independent of muscle activity. Journal of Applied Physiology, 2011, 110, 109-115.	2.5	55
77	Adaptive strength gains in dystrophic muscle exposed to repeated bouts of eccentric contraction. Journal of Applied Physiology, 2011, 111, 1768-1777.	2.5	40
78	Quadriceps myopathy caused by skeletal muscle-specific ablation of Î²cyto-actin. Journal of Cell Science, 2011, 124, 951-957.	2.0	27
79	Dystrophin is not required for skeletal muscle to adapt to repeated bouts of lengthening contractions. FASEB Journal, 2011, 25, 1105.13.	0.5	0
80	Ada ptations of mouse skeletal muscle to chronic lowâ€level, highâ€frequency vibration. FASEB Journal, 2011, 25, 1107.21.	0.5	0
81	Plantarflexion Contracture in the mdx Mouse. American Journal of Physical Medicine and Rehabilitation, 2010, 89, 976-985.	1.4	18
82	Progressive resistance voluntary wheel running in the <i>mdx</i> mouse. Muscle and Nerve, 2010, 42, 871-880.	2.2	81
83	Flt-1 haploinsufficiency ameliorates muscular dystrophy phenotype by developmentally increased vasculature in mdx mice. Human Molecular Genetics, 2010, 19, 4145-4159.	2.9	49
84	Mechanisms Behind Estrogen's Beneficial Effect on Muscle Strength in Females. Exercise and Sport Sciences Reviews, 2010, 38, 61-67.	3.0	126
85	Estrogen Regulates Estrogen Receptors and Antioxidant Gene Expression in Mouse Skeletal Muscle. PLoS ONE, 2010, 5, e10164.	2.5	145
86	Hormone Therapy and Skeletal Muscle Strength: A Meta-Analysis. Journals of Gerontology - Series A Biological Sciences and Medical Sciences, 2009, 64A, 1071-1081.	3.6	173
87	Comparing Individualized Rehabilitation to a Group Wellness Intervention for Persons with Multiple Sclerosis. American Journal of Health Promotion, 2009, 24, 23-26.	1.7	50
88	Functional Substitution by TAT-Utrophin in Dystrophin-Deficient Mice. PLoS Medicine, 2009, 6, e1000083.	8.4	76
89	Effects of prednisolone on skeletal muscle contractility in <i>mdx</i> mice. Muscle and Nerve, 2009, 40, 443-454.	2.2	61
90	Comments on Point:Counterpoint: Estrogen and sex do/do not influence post-exercise indexes of muscle damage, inflammation, and repair. Journal of Applied Physiology, 2009, 106, 1016-1020.	2.5	11

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91	Adaptive and nonadaptive responses to voluntary wheel running by <i>mdx</i> mice. Muscle and Nerve, 2008, 38, 1290-1293.	2.2	78
92	Functional, structural, and chemical changes in myosin associated with hydrogen peroxide treatment of skeletal muscle fibers. American Journal of Physiology - Cell Physiology, 2008, 294, C613-C626.	4.6	92
93	Effects of Estrogen Replacement on Skeletal Muscle of Aged Mice that Experienced Natural Ovarian-Failure. Medicine and Science in Sports and Exercise, 2008, 40, S350.	0.4	1
94	Skeletal Muscle-Specific Ablation of Î³cyto-Actin Does Not Exacerbate the mdx Phenotype. PLoS ONE, 2008, 3, e2419.	2.5	24
95	Voluntary run training but not estradiol deficiency alters the tibial bone-soleus muscle functional relationship in mice. American Journal of Physiology - Regulatory Integrative and Comparative Physiology, 2007, 293, R2015-R2026.	1.8	24
96	Estradiol replacement reverses ovariectomy-induced muscle contractile and myosin dysfunction in mature female mice. Journal of Applied Physiology, 2007, 102, 1387-1393.	2.5	162
97	Estradiol and Tamoxifen Reverse Ovariectomy-Induced Physical Inactivity in Mice. Medicine and Science in Sports and Exercise, 2007, 39, 248-256.	0.4	88
98	Telomere shortening in diaphragm and tibialis anterior muscles of aged <i>mdx</i> mice. Muscle and Nerve, 2007, 36, 387-390.	2.2	33
99	Effects of hindlimb unweighting and aging on rat semimembranosus muscle and myosin. Journal of Applied Physiology, 2006, 101, 873-880.	2.5	30
100	Removal of ovarian hormones from mature mice detrimentally affects muscle contractile function and myosin structural distribution. Journal of Applied Physiology, 2006, 100, 548-559.	2.5	94
101	Molecular and cellular contractile dysfunction of dystrophic muscle from young mice. Muscle and Nerve, 2006, 34, 92-100.	2.2	27
102	Soleus and EDL muscle contractility across the lifespan of female C57BL/6 mice. Experimental Gerontology, 2005, 40, 966-975.	2.8	72
103	Effects of endurance exercise-training on single-fiber contractile properties of insulin-treated streptozotocin-induced diabetic rats. Journal of Applied Physiology, 2005, 99, 472-478.	2.5	21
104	Muscle activity and aging affect myosin structural distribution and force generation in rat fibers. Journal of Applied Physiology, 2004, 96, 498-506.	2.5	36
105	Myofibrillar myosin ATPase activity in hindlimb muscles from young and aged rats. Mechanisms of Ageing and Development, 2004, 125, 619-627.	4.6	30
106	Animal Models for Inducing Muscle Hypertrophy: Are They Relevant for Clinical Applications in Humans?. Journal of Orthopaedic and Sports Physical Therapy, 2002, 32, 36-43.	3.5	66
107	What Mechanisms Contribute to the Strength Loss That Occurs During and in the Recovery from Skeletal Muscle Injury?. Journal of Orthopaedic and Sports Physical Therapy, 2002, 32, 58-64.	3.5	106
108	Increased myogenic repressor Id mRNA and protein levels in hindlimb muscles of aged rats. American Journal of Physiology - Regulatory Integrative and Comparative Physiology, 2002, 282, R411-R422.	1.8	66

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109	Force generation, but not myosin ATPase activity, declines with age in rat muscle fibers. American Journal of Physiology - Cell Physiology, 2002, 283, C187-C192.	4.6	75
110	Excitation-Contraction Uncoupling: Major Role in Contraction-Induced Muscle Injury. Exercise and Sport Sciences Reviews, 2001, 29, 82-87.	3.0	8
111	Electron paramagnetic resonance reveals age-related myosin structural changes in rat skeletal muscle fibers. American Journal of Physiology - Cell Physiology, 2001, 280, C540-C547.	4.6	123
112	Excitation-Contraction Uncoupling: Major Role in Contraction-Induced Muscle Injury. Exercise and Sport Sciences Reviews, 2001, 29, 82-87.	3.0	190
113	The Effects of Age and Hindlimb Supension on the Levels of Expression of the Myogenic Regulatory Factors Myod and Myogenin in Rat Fast and Slow Skeletal Muscles. Experimental Physiology, 2001, 86, 509-517.	2.0	52
114	Electron Paramagnetic Resonance: A High-Resolution Tool for Muscle Physiology. Exercise and Sport Sciences Reviews, 2001, 29, 3-6.	3.0	17
115	Glyceraldehyde-3-Phosphate Dehydrogenase Varies With Age in Glycolytic Muscles of Rats. Journals of Gerontology - Series A Biological Sciences and Medical Sciences, 2000, 55, B160-B164.	3.6	55
116	Stretch-induced myogenin, MyoD, and MRF4 expression and acute hypertrophy in quail slow-tonic muscle are not dependent upon satellite cell proliferation. Cell and Tissue Research, 1999, 296, 531-539.	2.9	101
117	Measurement Tools Used in the Study of Eccentric Contraction???Induced Injury. Sports Medicine, 1999, 27, 43-59.	6.5	618
118	Hypertrophy-stimulated myogenic regulatory factor mRNA increases are attenuated in fast muscle of aged quails. American Journal of Physiology - Cell Physiology, 1998, 275, C155-C162.	4.6	101
119	Estradiol effect on anterior crural muscles-tibial bone relationship and susceptibility to injury. Journal of Applied Physiology, 1996, 80, 1660-1665.	2.5	46
120	Differential effects of anesthetics on in vivo skeletal muscle contractile function in the mouse. Journal of Applied Physiology, 1996, 80, 332-340.	2.5	48
121	Redistribution of cell membrane probes following contraction-induced injury of mouse soleus muscle. Cell and Tissue Research, 1995, 282, 311-320.	2.9	27
122	Muscle function and protein metabolism after initiation of eccentric contraction-induced injury. Journal of Applied Physiology, 1995, 79, 1260-1270.	2.5	139
123	Eccentric contraction-induced injury in normal and hindlimb-suspended mouse soleus and EDL muscles. Journal of Applied Physiology, 1994, 77, 1421-1430.	2.5	122
124	Eccentric contraction-induced injury of mouse soleus muscle: effect of varying [Ca2+]o. Journal of Applied Physiology, 1994, 76, 1445-1453.	2.5	38
125	Materials fatigue initiates eccentric contractionâ€induced injury in rat soleus muscle.. Journal of Physiology, 1993, 464, 477-489.	2.9	52
126	Excitation failure in eccentric contractionâ€induced injury of mouse soleus muscle.. Journal of Physiology, 1993, 468, 487-499.	2.9	149

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127	Mechanical factors in the initiation of eccentric contractionâ€induced injury in rat soleus muscle.. Journal of Physiology, 1993, 464, 457-475.	2.9	191