Richard M Lovering

List of Publications by Year
in descending order

101 papers	2,933 citations	186265 28 h-index	197818 49 g-index
101 all docs	101 docs citations	101 times ranked	3979 citing authors

#	Article	IF	Citations
1	Fibroadipogenic progenitor cell response peaks prior to progressive fatty infiltration after rotator cuff tendon tear. Journal of Orthopaedic Research, 2022, , .	2.3	0
2	Human pluripotent stem cell-derived myogenic progenitors undergo maturation to quiescent satellite cells upon engraftment. Cell Stem Cell, 2022, 29, 610-619.e5.	11.1	10
3	Myofibers sarcolemma mechanical properties are affected by the isolation method. FASEB Journal, 2022, 36, .	0.5	0
4	Inhibition of YAP signaling improves recovery in injured skeletal muscle. FASEB Journal, 2022, 36, .	0.5	0
5	CaMKII oxidation is a critical performance/disease trade-off acquired at the dawn of vertebrate evolution. Nature Communications, 2021, 12, 3175.	12.8	19
6	The Neuromuscular Junction: Roles in Aging and Neuromuscular Disease. International Journal of Molecular Sciences, 2021, 22, 8058.	4.1	27
7	Age-dependent changes in nuclear-cytoplasmic signaling in skeletal muscle. Experimental Gerontology, 2021, 150, 111338.	2.8	10
8	<i>Mss51</i> deletion increases endurance and ameliorates histopathology in the <i>mdx</i> mouse model of Duchenne muscular dystrophy. FASEB Journal, 2021, 35, e21276.	0.5	4
9	The Nucleoskeleton: Crossroad of Mechanotransduction in Skeletal Muscle. Frontiers in Physiology, 2021, 12, 724010.	2.8	4
10	Keratin 18 is an integral part of the intermediate filament network in murine skeletal muscle. American Journal of Physiology - Cell Physiology, 2020, 318, C215-C224.	4.6	13
11	Alterations of neuromuscular junctions in Duchenne muscular dystrophy. Neuroscience Letters, 2020, 737, 135304.	2.1	18
12	Muscle phenotype of a rat model of Duchenne muscular dystrophy. Muscle and Nerve, 2020, 62, 757-761.	2.2	5
13	Abnormalities in Brain and Muscle Microstructure and Neurochemistry of the DMD Rat Measured by in vivo Diffusion Tensor Imaging and High Resolution Localized 1H MRS. Frontiers in Neuroscience, 2020, 14, 739.	2.8	1
14	Engineering 3D skeletal muscle primed for neuromuscular regeneration following volumetric muscle loss. Biomaterials, 2020, 255, 120154.	11.4	31
15	A comparative assessment of lengthening followed by end-to-end repair and isograft repair of chronically injured peripheral nerves. Experimental Neurology, 2020, 331, 113328.	4.1	6
16	Exosomes Isolated From Platelet-Rich Plasma and Mesenchymal Stem Cells Promote Recovery of Function After Muscle Injury. American Journal of Sports Medicine, 2020, 48, 2277-2286.	4.2	48
17	Duchenne muscular dystrophy hiPSC-derived myoblast drug screen identifies compounds that ameliorate disease in mdx mice. JCI Insight, 2020, 5, .	5.0	22
18	Effects of myofiber isolation technique on sarcolemma biomechanics. BioTechniques, 2020, 69, 388-391.	1.8	3

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19	Age-Dependent Changes in Nuclear Mechanotransduction as a Driver of Sarcopenia. Innovation in Aging, 2020, 4, 129-129.	0.1	0
20	Nerve lengthening and subsequent endâ€toâ€end repair yield more favourable outcomes compared with autograft repair of rat sciatic nerve defects. Journal of Tissue Engineering and Regenerative Medicine, 2019, 13, 2266-2278.	2.7	11
21	Differential YAP nuclear signaling in healthy and dystrophic skeletal muscle. American Journal of Physiology - Cell Physiology, 2019, 317, C48-C57.	4.6	22
22	Non-invasive Assessment of Dorsiflexor Muscle Function in Mice. Journal of Visualized Experiments, 2019, , .	0.3	6
23	Induced in vivo knockdown of the Brca1 gene in skeletal muscle results in skeletal muscle weakness. Journal of Physiology, 2019, 597, 869-887.	2.9	9
24	Mss51 deletion enhances muscle metabolism and glucose homeostasis in mice. JCI Insight, 2019, 4, .	5.0	16
25	Engineering functional and histological regeneration of vascularized skeletal muscle. Biomaterials, 2018, 164, 70-79.	11.4	78
26	Imaging Analysis of the Neuromuscular Junction in Dystrophic Muscle. Methods in Molecular Biology, 2018, 1687, 57-72.	0.9	12
27	Induced Creâ€mediated knockdown of Brca1 in skeletal muscle reduces mitochondrial respiration and prevents glucose intolerance in adult mice on a highâ€fat diet. FASEB Journal, 2018, 32, 3070-3084.	0.5	16
28	Fatty Infiltration Is a Prognostic Marker of Muscle Function After Rotator Cuff Tear. American Journal of Sports Medicine, 2018, 46, 2161-2169.	4.2	53
29	Use of Mesenchymal Stem Cells to Treat Muscle Strain Injuries. Medicine and Science in Sports and Exercise, 2018, 50, 676.	0.4	0
30	Assessment of Muscle Injury Using Diffusion Kurtosis MRI and1 H MRS. Medicine and Science in Sports and Exercise, 2018, 50, 425.	0.4	0
31	Nonâ€invasive assessment of muscle injury in healthy and dystrophic animals with electrical impedance myography. Muscle and Nerve, 2017, 56, E85-E94.	2.2	21
32	Altered nuclear dynamics in MDX myofibers. Journal of Applied Physiology, 2017, 122, 470-481.	2.5	42
33	mTOR regulates peripheral nerve response to tensile strain. Journal of Neurophysiology, 2017, 117, 2075-2084.	1.8	21
34	Superparamagnetic Iron Oxide Nanoparticles in Musculoskeletal Biology. Tissue Engineering - Part B: Reviews, 2017, 23, 373-385.	4.8	25
35	Impaired contractile function of the supraspinatus in the acute period following a rotator cuff tear. BMC Musculoskeletal Disorders, 2017, 18, 436.	1.9	9
36	Rotator Cuff Tear Consequent to Glenohumeral Dislocation. Journal of Orthopaedic and Sports Physical Therapy, 2016, 46, 708-708.	3.5	1

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37	In Vivo Assessment of Muscle Contractility in Animal Studies. Methods in Molecular Biology, 2016, 1460, 293-307.	0.9	21
38	Novel multi-functional fluid flow device for studying cellular mechanotransduction. Journal of Biomechanics, 2016, 49, 4173-4179.	2.1	18
39	NAD ⁺ repletion improves muscle function in muscular dystrophy and counters global PARylation. Science Translational Medicine, 2016, 8, 361ra139.	12.4	208
40	A method to test contractility of the supraspinatus muscle in mouse, rat, and rabbit. Journal of Applied Physiology, 2016, 120, 310-317.	2.5	7
41	Sarcolemmal Biomechanics and Excitability in Malformed Muscle Fibers of Dystrophic Mice. Biophysical Journal, 2015, 108, 590a.	0.5	0
42	Alternating bipolar field stimulation identifies muscle fibers with defective excitability but maintained local Ca2+ signals and contraction. Skeletal Muscle, 2015, 6, 6.	4.2	11
43	Pre- and postsynaptic changes in the neuromuscular junction in dystrophic mice. Frontiers in Physiology, 2015, 6, 252.	2.8	74
44	Disruption of action potential and calcium signaling properties in malformed myofibers from dystrophin-deficient mice. Physiological Reports, 2015, 3, e12366.	1.7	21
45	Site-Specific Targeting of Platelet-Rich Plasma via Superparamagnetic Nanoparticles. Orthopaedic Journal of Sports Medicine, 2015, 3, 232596711456618.	1.7	7
46	Myofiber Damage Precedes Macrophage Infiltration after in Vivo Injury in Dysferlin-Deficient A/J Mouse Skeletal Muscle. American Journal of Pathology, 2015, 185, 1686-1698.	3.8	30
47	Myopathic changes in murine skeletal muscle lacking synemin. American Journal of Physiology - Cell Physiology, 2015, 308, C448-C462.	4.6	36
48	SERCA1 overexpression minimizes skeletal muscle damage in dystrophic mouse models. American Journal of Physiology - Cell Physiology, 2015, 308, C699-C709.	4.6	55
49	Abnormalities in brain structure and biochemistry associated with mdx mice measured by in vivo MRI and high resolution localized 1H MRS. Neuromuscular Disorders, 2015, 25, 764-772.	0.6	15
50	Recovery of altered neuromuscular junction morphology and muscle function in mdx mice after injury. Cellular and Molecular Life Sciences, 2015, 72, 153-164.	5.4	60
51	Critical Role of Intracellular RyR1 Calcium Release Channels in Skeletal Muscle Function and Disease. Frontiers in Physiology, 2015, 6, 420.	2.8	57
52	Reduction of NMJ Occupancy in Dystrophic Muscle. FASEB Journal, 2015, 29, 947.11.	0.5	0
53	Characterization of skeletal muscle in the synemin knock-out mouse. , 2014, , .		1
54	Eccentric exercise in aging and diseased skeletal muscle: good or bad?. Journal of Applied Physiology, 2014, 116, 1439-1445.	2.5	52

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55	Genetic silencing of Nrf2 enhances X-ROS in dysferlin-deficient muscle. Frontiers in Physiology, 2014, 5, 57.	2.8	25
56	Ganglion Cyst in the Tarsal Tunnel. Journal of Orthopaedic and Sports Physical Therapy, 2014, 44, 40-40.	3.5	1
57	Tetanus toxin preserves skeletal muscle contractile force and size during limb immobilization. Muscle and Nerve, 2014, 50, 759-766.	2.2	2
58	A stepwise procedure to test contractility and susceptibility to injury for the rodent quadriceps muscle. Journal of Biological Methods, 2014, 1, e8.	0.6	19
59	Temporal changes in magnetic resonance imaging in the mdx mouse. BMC Research Notes, 2013, 6, 262.	1.4	29
60	Effects of <i>in vivo</i> injury on the neuromuscular junction in healthy and dystrophic muscles. Journal of Physiology, 2013, 591, 559-570.	2.9	94
61	Architecture of healthy and dystrophic muscles detected by optical coherence tomography. Muscle and Nerve, 2013, 47, 588-590.	2.2	23
62	Structural and functional evaluation of branched myofibers lacking intermediate filaments. American Journal of Physiology - Cell Physiology, 2012, 303, C224-C232.	4.6	26
63	Genetic deletion of trkB.T1 increases neuromuscular function. American Journal of Physiology - Cell Physiology, 2012, 302, C141-C153.	4.6	32
64	Influences of Desmin and Keratin 19 on Passive Biomechanical Properties of Mouse Skeletal Muscle. Journal of Biomedicine and Biotechnology, 2012, 2012, 1-12.	3.0	18
65	Early metabolic changes measured by 1H MRS in healthy and dystrophic muscle after injury. Journal of Applied Physiology, 2012, 113, 808-816.	2.5	18
66	An in vivo rodent model of contraction-induced injury in the quadriceps muscle. Injury, 2012, 43, 788-793.	1.7	21
67	Repeated Muscle Injury as a Presumptive Trigger for Chronic Masticatory Muscle Pain. Pain Research and Treatment, 2011, 2011, 1-13.	1.7	16
68	An in vivo Rodent Model of Contraction-induced Injury and Non-invasive Monitoring of Recovery. Journal of Visualized Experiments, 2011, , .	0.3	22
69	Determinants of the Repeated-Bout Effect After Lengthening Contractions. American Journal of Physical Medicine and Rehabilitation, 2011, 90, 816-824.	1.4	12
70	Unmasking Potential Intracellular Roles For Dysferlin through Improved Immunolabeling Methods. Journal of Histochemistry and Cytochemistry, 2011, 59, 964-975.	2.5	27
71	Diffusion Tensor MRI to Assess Damage in Healthy and Dystrophic Skeletal Muscle after Lengthening Contractions. Journal of Biomedicine and Biotechnology, 2011, 2011, 1-10.	3.0	68
72	Physiology, structure, and susceptibility to injury of skeletal muscle in mice lacking keratin 19-based and desmin-based intermediate filaments. American Journal of Physiology - Cell Physiology, 2011, 300, C803-C813.	4.6	44

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73	Extensive mononuclear infiltration and myogenesis characterize recovery of dysferlin-null skeletal muscle from contraction-induced injuries. American Journal of Physiology - Cell Physiology, 2010, 298, C298-C312.	4.6	51
74	Incomplete Activation of the IGF-1 Signaling Pathway after High-frequency Electrically Stimulated Skeletal Muscle Contractions. Medicine and Science in Sports and Exercise, 2010, 42, 374.	0.4	0
75	Highâ€frequency electrically stimulated skeletal muscle contractions increase p70^{s6k} phosphorylation independent of known IGFâ€sensitive signaling pathways. FEBS Letters, 2010, 584, 2891-2895.	2.8	27
76	S100A1 promotes action potential-initiated calcium release flux and force production in skeletal muscle. American Journal of Physiology - Cell Physiology, 2010, 299, C891-C902.	4.6	22
77	Changes in contractionâ€induced phosphorylation of AMPâ€activated protein kinase and mitogenâ€activated protein kinases in skeletal muscle after ovariectomy. Journal of Cellular Biochemistry, 2009, 107, 171-178.	2.6	27
78	Location of myofiber damage in skeletal muscle after lengthening contractions. Muscle and Nerve, 2009, 40, 589-594.	2.2	31
79	Gait analysis of locomotory impairment in rats before and after neuromuscular injury. Journal of Neuroscience Methods, 2009, 181, 249-256.	2.5	11
80	Use of Autologous Platelet-rich Plasma to Treat Muscle Strain Injuries. American Journal of Sports Medicine, 2009, 37, 1135-1142.	4.2	251
81	Deletion Of Triadin Results In Marked Alterations In Tetanic Contraction And Global Calcium Handling. Biophysical Journal, 2009, 96, 237a.	0.5	0
82	Malformed<i>mdx</i>myofibers have normal cytoskeletal architecture yet altered EC coupling and stress-induced Ca²⁺signaling. American Journal of Physiology - Cell Physiology, 2009, 297, C571-C580.	4.6	84
83	Location Of Damage In Skeletal Muscle After Lengthening Contractions. Medicine and Science in Sports and Exercise, 2009, 41, 348.	0.4	0
84	Architecture and fiber type of the pyramidalis muscle. Anatomical Science International, 2008, 83, 294-297.	1.0	31
85	Fiber Type Composition of Cadaveric Human Rotator Cuff Muscles. Journal of Orthopaedic and Sports Physical Therapy, 2008, 38, 674-680.	3.5	35
86	Impaired recovery of dysferlin-null skeletal muscle after contraction-induced injury in vivo. NeuroReport, 2008, 19, 1579-1584.	1.2	55
87	Treatment of Muscle Injury with Autologous Platelet-Rich Plasma. Medicine and Science in Sports and Exercise, 2008, 40, S162.	0.4	0
88	Dysferlin Deficiency Inhibits Sarcolemmal Repair and Delays Functional Recovery of Skeletal Muscle Injured In Vivo. Medicine and Science in Sports and Exercise, 2008, 40, S242.	0.4	0
89	Absence of keratin 19 in mice causes skeletal myopathy with mitochondrial and sarcolemmal reorganization. Journal of Cell Science, 2007, 120, 3999-4008.	2.0	83
90	Intermediate filament-like protein syncoilin in normal and myopathic striated muscle. Neuromuscular Disorders, 2007, 17, 970-979.	0.6	19

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91	Recovery of Function in Skeletal Muscle Following 2 Different Contraction-Induced Injuries. Archives of Physical Medicine and Rehabilitation, 2007, 88, 617-625.	0.9	59
92	Bex1 knock out mice show altered skeletal muscle regeneration. Biochemical and Biophysical Research Communications, 2007, 363, 405-410.	2.1	33
93	Identification of skeletal muscle mutations in tail snips from neonatal mice using immunohistochemistry. BioTechniques, 2007, 42, 702-704.	1.8	1
94	Leptomeningeal plaques, a â€œcommonâ€•finding. Clinical Anatomy, 2006, 19, 696-697.	2.7	0
95	Dexamethasone and Recovery of Contractile Tension after a Muscle Injury. Clinical Orthopaedics and Related Research, 2005, 439, 235-242.	1.5	27
96	The Muscular Dystrophies: From Genes to Therapies. Physical Therapy, 2005, 85, 1372-1388.	2.4	83
97	The contribution of contractile pre-activation to loss of function after a single lengthening contraction. Journal of Biomechanics, 2005, 38, 1501-1507.	2.1	40
98	Effect of testosterone on the female anterior cruciate ligament. American Journal of Physiology - Regulatory Integrative and Comparative Physiology, 2005, 289, R15-R22.	1.8	40
99	The muscular dystrophies: from genes to therapies. Physical Therapy, 2005, 85, 1372-88.	2.4	30
100	Fiber length variability within the flexor carpi ulnaris and flexor carpi radialis muscles: implications for surgical tendon transfer. Journal of Hand Surgery, 2004, 29, 909-914.	1.6	25
101	Contractile function, sarcolemma integrity, and the loss of dystrophin after skeletal muscle eccentric contraction-induced injury. American Journal of Physiology - Cell Physiology, 2004, 286, C230-C238.	4.6	135