Julien Ochala

List of Publications by Year
in descending order

69 papers	2,947 citations	218677 26 h-index	175258 52 g-index
70 all docs	70 docs citations	70 times ranked	3826 citing authors

#	Article	IF	Citations
1	Skeletal Muscle: A Brief Review of Structure and Function. Calcified Tissue International, 2015, 96, 183-195.	3.1	860
2	Congenital myopathies: disorders of excitationâ€“contraction coupling and muscle contraction. Nature Reviews Neurology, 2018, 14, 151-167.	10.1	212
3	Ryanodine receptor fragmentation and sarcoplasmic reticulum Ca ²⁺ leak after one session of high-intensity interval exercise. Proceedings of the National Academy of Sciences of the United States of America, 2015, 112, 15492-15497.	7.1	132
4	Single Skeletal Muscle Fiber Elastic and Contractile Characteristics in Young and Older Men. Journals of Gerontology - Series A Biological Sciences and Medical Sciences, 2007, 62, 375-381.	3.6	114
5	Preferential skeletal muscle myosin loss in response to mechanical silencing in a novel rat intensive care unit model: underlying mechanisms. Journal of Physiology, 2011, 589, 2007-2026.	2.9	112
6	The influence of ageing on the forceâ€“velocityâ€“power characteristics of human elbow flexor muscles. Experimental Gerontology, 2003, 38, 387-395.	2.8	68
7	Changes in mechanical properties of human plantar flexor muscles in ageing. Experimental Gerontology, 2004, 39, 349-358.	2.8	63
8	Thin filament proteins mutations associated with skeletal myopathies: Defective regulation of muscle contraction. Journal of Molecular Medicine, 2008, 86, 1197-1204.	3.9	63
9	Nuclear numbers in syncytial muscle fibers promote size but limit the development of larger myonuclear domains. Nature Communications, 2020, 11, 6287.	12.8	57
10	Disrupted myosin crossâ€bridge cycling kinetics triggers muscle weakness in nebulinâ€related myopathy. FASEB Journal, 2011, 25, 1903-1913.	0.5	51
11	Reducing dynamin 2 (DNM2) rescues DNM2 -related dominant centronuclear myopathy. Proceedings of the National Academy of Sciences of the United States of America, 2018, 115, 11066-11071.	7.1	50
12	Defective regulation of contractile function in muscle fibres carrying an E41K Î²â€tropomyosin mutation. Journal of Physiology, 2008, 586, 2993-3004.	2.9	49
13	Aberrant post-translational modifications compromise human myosin motor function in old age. Aging Cell, 2015, 14, 228-235.	6.7	49
14	Sparing of muscle mass and function by passive loading in an experimental intensive care unit model. Journal of Physiology, 2013, 591, 1385-1402.	2.9	48
15	Effects of a R133W Î²-tropomyosin mutation on regulation of muscle contraction in single human muscle fibres. Journal of Physiology, 2007, 581, 1283-1292.	2.9	46
16	Gene expression and muscle fiber function in a porcine ICU model. Physiological Genomics, 2009, 39, 141-159.	2.3	45
17	Congenital myopathy-causing tropomyosin mutations induce thin filament dysfunction via distinct physiological mechanisms. Human Molecular Genetics, 2012, 21, 4473-4485.	2.9	45
18	Relationship between force and size in human single muscle fibres. Experimental Physiology, 2011, 96, 539-547.	2.0	43

#	Article	IF	Citations
19	A myopathy-linked tropomyosin mutation severely alters thin filament conformational changes during activation. Proceedings of the National Academy of Sciences of the United States of America, 2010, 107, 9807-9812.	7.1	42
20	Diaphragm Muscle Weakness in an Experimental Porcine Intensive Care Unit Model. PLoS ONE, 2011, 6, e20558.	2.5	42
21	Single skeletal muscle fiber behavior after a quick stretch in young and older men: a possible explanation of the relative preservation of eccentric force in old age. Pflugers Archiv European Journal of Physiology, 2006, 452, 464-470.	2.8	39
22	Factors Underlying the Early Limb Muscle Weakness in Acute Quadriplegic Myopathy Using an Experimental ICU Porcine Model. PLoS ONE, 2011, 6, e20876.	2.5	34
23	Effects of a preferential myosin loss on Ca²⁺ activation of force generation in single human skeletal muscle fibres. Experimental Physiology, 2008, 93, 486-495.	2.0	32
24	Mechanisms underlying the sparing of masticatory versus limb muscle function in an experimental critical illness model. Physiological Genomics, 2011, 43, 1334-1350.	2.3	30
25	Distinct Underlying Mechanisms of Limb and Respiratory Muscle Fiber Weaknesses in Nemaline Myopathy. Journal of Neuropathology and Experimental Neurology, 2013, 72, 472-481.	1.7	30
26	Current and future therapeutic approaches to the congenital myopathies. Seminars in Cell and Developmental Biology, 2017, 64, 191-200.	5.0	29
27	Dystrophin restoration therapy improves both the reduced excitability and the force drop induced by lengthening contractions in dystrophic mdx skeletal muscle. Skeletal Muscle, 2016, 6, 23.	4.2	28
28	Nemaline Myopathy-Related Skeletal Muscle Î±-Actin (ACTA1) Mutation, Asp286Gly, Prevents Proper Strong Myosin Binding and Triggers Muscle Weakness. PLoS ONE, 2012, 7, e45923.	2.5	27
29	Myostatin inhibition using mRK35 produces skeletal muscle growth and tubular aggregate formation in wild type and TgACTA1D286G nemaline myopathy mice. Human Molecular Genetics, 2018, 27, 638-648.	2.9	27
30	SIRT1 regulates nuclear number and domain size in skeletal muscle fibers. Journal of Cellular Physiology, 2018, 233, 7157-7163.	4.1	26
31	Impaired Adaptive Response to Mechanical Overloading in Dystrophic Skeletal Muscle. PLoS ONE, 2012, 7, e35346.	2.5	25
32	Tropomodulin1 directly controls thin filament length in both wild-type and tropomodulin4-deficient skeletal muscle. Development (Cambridge), 2015, 142, 4351-62.	2.5	25
33	Impairments in contractility and cytoskeletal organisation cause nuclear defects in nemaline myopathy. Acta Neuropathologica, 2019, 138, 477-495.	7.7	25
34	Modulating myosin restores muscle function in a mouse model of nemaline myopathy. Annals of Neurology, 2016, 79, 717-725.	5.3	22
35	Ca2+ sensitizers: An emerging class of agents for counterbalancing weakness in skeletal muscle diseases?. Neuromuscular Disorders, 2010, 20, 98-101.	0.6	21
36	Effect of strength training on musculotendinous stiffness in elderly individuals. European Journal of Applied Physiology, 2005, 94, 126-133.	2.5	19

#	Article	IF	Citations
37	Prelamin A causes aberrant myonuclear arrangement and results in muscle fiber weakness. JCI Insight, 2018, 3, .	5.0	19
38	Myopathy-inducing mutation H40Y in ACTA1 hampers actin filament structure and function. Biochimica Et Biophysica Acta - Molecular Basis of Disease, 2016, 1862, 1453-1458.	3.8	18
39	Exploring the Role of PGCâ€1Î± in Defining Nuclear Organisation in Skeletal Muscle Fibres. Journal of Cellular Physiology, 2017, 232, 1270-1274.	4.1	18
40	Changes in muscle and joint elasticity following long-term strength training in old age. European Journal of Applied Physiology, 2007, 100, 491-498.	2.5	16
41	EMD 57033 partially reverses ventilator-induced diaphragm muscle fibre calcium desensitisation. Pflugers Archiv European Journal of Physiology, 2010, 459, 475-483.	2.8	16
42	Methodological considerations in measuring specific force in human single skinned muscle fibres. Acta Physiologica, 2021, 233, e13719.	3.8	16
43	Physiological impact and disease reversion for the severe form of centronuclear myopathy linked to dynamin. JCI Insight, 2020, 5, .	5.0	16
44	Myofibrillar myopathy caused by a mutation in the motor domain of mouse MyHC IIb. Human Molecular Genetics, 2012, 21, 1706-1724.	2.9	15
45	A myopathy-related actin mutation increases contractile function. Acta Neuropathologica, 2012, 123, 739-746.	7.7	15
46	Defining the contribution of skeletal muscle pyruvate dehydrogenase Î±1 to exercise performance and insulin action. American Journal of Physiology - Endocrinology and Metabolism, 2018, 315, E1034-E1045.	3.5	15
47	Using nuclear envelope mutations to explore age-related skeletal muscle weakness. Clinical Science, 2020, 134, 2177-2187.	4.3	15
48	Pointedâ€end capping by tropomodulin modulates actomyosin crossbridge formation in skeletal muscle fibers. FASEB Journal, 2014, 28, 408-415.	0.5	14
49	Skeletal and cardiac Î±-actin isoforms differently modulate myosin cross-bridge formation and myofibre force production. Human Molecular Genetics, 2013, 22, 4398-4404.	2.9	13
50	Myofibre Hyper-Contractility in Horses Expressing the Myosin Heavy Chain Myopathy Mutation, MYH1E321G. Cells, 2021, 10, 3428.	4.1	13
51	rAAV-related therapy fully rescues myonuclear and myofilament function in X-linked myotubular myopathy. Acta Neuropathologica Communications, 2020, 8, 167.	5.2	12
52	Novel myosin-based therapies for congenital cardiac and skeletal myopathies. Journal of Medical Genetics, 2016, 53, 651-654.	3.2	11
53	Gender Differences in Human Muscle and Joint Mechanical Properties During Plantar Flexion in Old Age. Journals of Gerontology - Series A Biological Sciences and Medical Sciences, 2004, 59, B441-B448.	3.6	10
54	Maintenance of muscle mass, fiber size, and contractile function in mice lacking the Z-disc protein myotilin. Upsala Journal of Medical Sciences, 2009, 114, 235-241.	0.9	10

#	Article	IF	Citations
55	X-ray recordings reveal how a human disease-linked skeletal muscle Î±-actin mutation leads to contractile dysfunction. Journal of Structural Biology, 2015, 192, 331-335.	2.8	10
56	Nebulin nemaline myopathy recapitulated in a compound heterozygous mouse model with both a missense and a nonsense mutation in Neb. Acta Neuropathologica Communications, 2020, 8, 18.	5.2	7
57	Candidate gene expression and coding sequence variants in Warmblood horses with myofibrillar myopathy. Equine Veterinary Journal, 2021, 53, 306-315.	1.7	7
58	Molecular Consequences of the Myopathy-Related D286G Mutation on Actin Function. Frontiers in Physiology, 2018, 9, 1756.	2.8	6
59	PGCâ€1Î± regulates myonuclear accretion after moderate endurance training. Journal of Cellular Physiology, 2022, 237, 696-705.	4.1	6
60	Thick and Thin Filament Proteins. , 2012, , 1023-1030.		5
61	The fraction of strongly bound cross-bridges is increased in mice that carry the myopathy-linked myosin heavy chain mutation MYH4L342Q. DMM Disease Models and Mechanisms, 2013, 6, 834-40.	2.4	5
62	Myofilament lattice structure in presence of a skeletal myopathy-related tropomyosin mutation. Journal of Muscle Research and Cell Motility, 2013, 34, 171-175.	2.0	4
63	Sexually dimorphic myofilament function in a mouse model of nemaline myopathy. Archives of Biochemistry and Biophysics, 2014, 564, 37-42.	3.0	2
64	Tropomodulin 1 directly controls thin filament length in both wild-type and tropomodulin 4-deficient skeletal muscle. Journal of Cell Science, 2016, 129, e1.2-e1.2.	2.0	2
65	Can we talk about myoblast fusion?. American Journal of Physiology - Cell Physiology, 2021, 321, C504-C506.	4.6	1
66	The Actin F352S Nemaline Myopathy Mutation Disrupts Indirect Flight Muscle Structure and Function in Drosophila. Biophysical Journal, 2016, 110, 128a.	0.5	0
67	Effect of PGC1-beta ablation on myonuclear organisation. Journal of Muscle Research and Cell Motility, 2019, 40, 335-341.	2.0	0
68	Tropomyosin mutations responsible for muscle weakness in inherited skeletal muscle diseases. , 2008, , 20-21.		0
69	Myosin loss and muscle wasting in an experimental ICU model: Underlying mechanisms. FASEB Journal, 2010, 24, 1046.3.	0.5	0