David Allen

List of Publications by Year
in descending order

136	15,525	13854 67	16636 123
papers	citations	h-index	g-index

146	146	146	10468
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Skeletal Muscle Fatigue: Cellular Mechanisms. Physiological Reviews, 2008, 88, 287-332.	13.1	1,740
2	Fibroblasts Can Be Genetically Modified to Produce Excitable Cells Capable of Electrical Coupling. Circulation, 2005, 111, 394-398.	1.6	614
3	The cellular basis of the length-tension relation in cardiac muscle. Journal of Molecular and Cellular Cardiology, 1985, 17, 821-840.	0.9	537
4	The effects of muscle length on intracellular calcium transients in mammalian cardiac muscle.. Journal of Physiology, 1982, 327, 79-94.	1.3	519
5	Myocardial contractile function during ischemia and hypoxia.. Circulation Research, 1987, 60, 153-168.	2.0	500
6	Calcium transients in aequorin-injected frog cardiac muscle. Nature, 1978, 273, 509-513.	13.7	433
7	Skeletal muscle hypertrophy is mediated by a Ca2+-dependent calcineurin signalling pathway. Nature, 1999, 400, 576-581.	13.7	418
8	Effect of hydrogen peroxide and dithiothreitol on contractile function of single skeletal muscle fibres from the mouse. Journal of Physiology, 1998, 509, 565-575.	1.3	347
9	Changes of myoplasmic calcium concentration during fatigue in single mouse muscle fibers.. Journal of General Physiology, 1991, 98, 615-635.	0.9	340
10	Absence of Dystrophin Disrupts Skeletal Muscle Signaling: Roles of Ca²⁺, Reactive Oxygen Species, and Nitric Oxide in the Development of Muscular Dystrophy. Physiological Reviews, 2016, 96, 253-305.	13.1	310
11	Muscle cell function during prolonged activity: cellular mechanisms of fatigue. Experimental Physiology, 1995, 80, 497-527.	0.9	265
12	A nuclear magnetic resonance study of metabolism in the ferret heart during hypoxia and inhibition of glycolysis.. Journal of Physiology, 1985, 361, 185-204.	1.3	256
13	Intracellular calcium concentration during low-frequency fatigue in isolated single fibers of mouse skeletal muscle. Journal of Applied Physiology, 1993, 75, 382-388.	1.2	245
14	Effects of stretch-activated channel blockers on [Ca2+]iand muscle damage in themdxmouse. Journal of Physiology, 2005, 562, 367-380.	1.3	245
15	Early events in stretch-induced muscle damage. Journal of Applied Physiology, 1999, 87, 2007-2015.	1.2	240
16	MUSCLE DAMAGE IN MDX (DYSTROPHIC) MICE: ROLE OF CALCIUM AND REACTIVE OXYGEN SPECIES. Clinical and Experimental Pharmacology and Physiology, 2006, 33, 657-662.	0.9	238
17	Muscle Fatigue: Lactic Acid or Inorganic Phosphate the Major Cause?. Physiology, 2002, 17, 17-21.	1.6	229
18	Role of phosphate and calcium stores in muscle fatigue. Journal of Physiology, 2001, 536, 657-665.	1.3	212

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19	<i>N</i>â€Acetylcysteine ameliorates skeletal muscle pathophysiology in <i>mdx</i> mice. Journal of Physiology, 2008, 586, 2003-2014.	1.3	200
20	Intracellular calcium and tension during fatigue in isolated single muscle fibres from Xenopus laevis.. Journal of Physiology, 1989, 415, 433-458.	1.3	184
21	Impaired calcium release during fatigue. Journal of Applied Physiology, 2008, 104, 296-305.	1.2	175
22	Eccentric muscle damage: mechanisms of early reduction of force. Acta Physiologica Scandinavica, 2001, 171, 311-319.	2.3	170
23	Effects of reduced muscle glycogen concentration on force, Ca2+ release and contractile protein function in intact mouse skeletal muscle.. Journal of Physiology, 1997, 498, 17-29.	1.3	163
24	Intracellular calcium and force in single mouse muscle fibres following repeated contractions with stretch.. Journal of Physiology, 1995, 488, 25-36.	1.3	161
25	Skeletal Muscle NADPH Oxidase Is Increased and Triggers Stretch-Induced Damage in the mdx Mouse. PLoS ONE, 2010, 5, e15354.	1.1	156
26	Mechanisms of stretch-induced muscle damage in normal and dystrophic muscle: role of ionic changes. Journal of Physiology, 2005, 567, 723-735.	1.3	155
27	TRPC1 binds to caveolin-3 and is regulated by Src kinase â€“ role in Duchenne muscular dystrophy. Journal of Cell Science, 2008, 121, 2246-2255.	1.2	153
28	Intracellular calcium handling in ventricular myocytes from mdx mice. American Journal of Physiology - Heart and Circulatory Physiology, 2007, 292, H846-H855.	1.5	151
29	Calcium and the damage pathways in muscular dystrophyThis article is one of a selection of papers published in this special issue on Calcium Signaling.. Canadian Journal of Physiology and Pharmacology, 2010, 88, 83-91.	0.7	151
30	The role of elevations in intracellular [Ca2+] in the development of low frequency fatigue in mouse single muscle fibres.. Journal of Physiology, 1996, 491, 813-824.	1.3	143
31	[31] Practical aspects of the use of aequorin as a calcium indicator: Assay, preparation, microinjection, and interpretation of signals. Methods in Enzymology, 1978, , 292-328.	0.4	141
32	The role of reactive oxygen species in the hearts of dystrophin-deficient mdx mice. American Journal of Physiology - Heart and Circulatory Physiology, 2007, 293, H1969-H1977.	1.5	141
33	Reactive oxygen species reduce myofibrillar Ca2+sensitivity in fatiguing mouse skeletal muscle at 37Â°C. Journal of Physiology, 2005, 564, 189-199.	1.3	134
34	Calcium concentration in the myoplasm of skinned ferret ventricular muscle following changes in muscle length.. Journal of Physiology, 1988, 407, 489-503.	1.3	132
35	C2C12 Co-culture on a fibroblast substratum enables sustained survival of contractile, highly differentiated myotubes with peripheral nuclei and adult fast myosin expression. Cytoskeleton, 2004, 58, 200-211.	4.4	129
36	Myoplasmic free Mg2+ concentration during repetitive stimulation of single fibres from mouse skeletal muscle.. Journal of Physiology, 1992, 453, 413-434.	1.3	126

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37	Intracellular calcium and Na⁺â€Ca²⁺ exchange current in isolated toad pacemaker cells. Journal of Physiology, 1998, 508, 153-166.	1.3	125
38	Functional significance of Ca 2+ in long-lasting fatigue of skeletal muscle. European Journal of Applied Physiology, 2000, 83, 166-174.	1.2	124
39	The effects of caffeine on intracellular calcium, force and the rate of relaxation of mouse skeletal muscle.. Journal of Physiology, 1995, 487, 331-342.	1.3	122
40	Store-Operated Ca2+Influx and Expression of TRPC Genes in Mouse Sinoatrial Node. Circulation Research, 2007, 100, 1605-1614.	2.0	119
41	The contribution of [Ca2+]i to the slowing of relaxation in fatigued single fibres from mouse skeletal muscle.. Journal of Physiology, 1993, 468, 729-740.	1.3	117
42	Effect of nitric oxide on single skeletal muscle fibres from the mouse. Journal of Physiology, 1998, 509, 577-586.	1.3	115
43	SKELETAL MUSCLE FUNCTION: ROLE OF IONIC CHANGES IN FATIGUE, DAMAGE AND DISEASE. Clinical and Experimental Pharmacology and Physiology, 2004, 31, 485-493.	0.9	112
44	Role of the cardiac Na+/H+ exchanger during ischemia and reperfusion. Cardiovascular Research, 2003, 57, 934-941.	1.8	107
45	Spatial gradients of intracellular calcium in skeletal muscle during fatigue. Pflugers Archiv European Journal of Physiology, 1990, 415, 734-740.	1.3	104
46	Duchenne muscular dystrophy â€" What causes the increased membrane permeability in skeletal muscle?. International Journal of Biochemistry and Cell Biology, 2011, 43, 290-294.	1.2	103
47	The relationship between intracellular calcium and contraction in calcium-overloaded ferret papillary muscles.. Journal of Physiology, 1985, 364, 169-182.	1.3	102
48	Stretch-activated channels in the heart: Contributions to length-dependence and to cardiomyopathy. Progress in Biophysics and Molecular Biology, 2008, 97, 232-249.	1.4	102
49	Emerging Roles of ROS/RNS in Muscle Function and Fatigue. Antioxidants and Redox Signaling, 2011, 15, 2487-2499.	2.5	102
50	Role of intracellular calcium and metabolites in low-frequency fatigue of mouse skeletal muscle. American Journal of Physiology - Cell Physiology, 1997, 272, C550-C559.	2.1	100
51	The consequences of simulated ischaemia on intracellular Ca2+ and tension in isolated ferret ventricular muscle.. Journal of Physiology, 1989, 410, 297-323.	1.3	99
52	The role of sarcoplasmic reticulum in relaxation of mouse muscle; effects of 2,5-di(tert-butyl)-1,4-benzohydroquinone.. Journal of Physiology, 1994, 474, 291-301.	1.3	99
53	The contribution of pH-dependent mechanisms to fatigue at different intensities in mammalian single muscle fibres. Journal of Physiology, 1998, 512, 831-840.	1.3	99
54	The effects of low sodium solutions on intracellular calcium concentration and tension in ferret ventricular muscle.. Journal of Physiology, 1983, 345, 391-407.	1.3	96

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55	Streptomycin reduces stretch-induced membrane permeability in muscles from mdx mice. Neuromuscular Disorders, 2006, 16, 845-854.	0.3	91
56	Role of Na ⁺ /H ⁺ Exchanger During Ischemia and Preconditioning in the Isolated Rat Heart. Circulation Research, 1999, 85, 723-730.	2.0	86
57	Recent advances in the understanding of skeletal muscle fatigue. Current Opinion in Rheumatology, 2002, 14, 648-652.	2.0	86
58	Metabolic changes during ischaemia and their role in contractile failure in isolated ferret hearts.. Journal of Physiology, 1992, 454, 467-490.	1.3	83
59	The influence of intracellular pH on contraction, relaxation and [Ca2+]i in intact single fibres from mouse muscle. Journal of Physiology, 1993, 466, 611-28.	1.3	81
60	Caveolae respond to cell stretch and contribute to stretch-induced signaling. Journal of Cell Science, 2011, 124, 3581-3590.	1.2	78
61	Iron injections in mice increase skeletal muscle iron content, induce oxidative stress and reduce exercise performance. Experimental Physiology, 2009, 94, 720-730.	0.9	77
62	Gadolinium reduces short-term stretch-induced muscle damage in isolated mdx mouse muscle fibres. Journal of Physiology, 2003, 552, 449-458.	1.3	76
63	Slowed Relaxation in Fatigued Skeletal Muscle Fibers of Xenopus and Mouse. Journal of General Physiology, 1997, 109, 385-399.	0.9	74
64	Cellular Mechanisms of Skeletal Muscle Fatigue. Advances in Experimental Medicine and Biology, 2003, 538, 563-571.	0.8	74
65	Changes of intracellular pH due to repetitive stimulation of single fibres from mouse skeletal muscle.. Journal of Physiology, 1992, 449, 49-71.	1.3	73
66	The effects of intracellular injections of phosphate on intracellular calcium and force in single fibres of mouse skeletal muscle. Pflugers Archiv European Journal of Physiology, 1996, 431, 964-970.	1.3	70
67	The effects of changes in muscle length during diastole on the calcium transient in ferret ventricular muscle.. Journal of Physiology, 1988, 406, 359-370.	1.3	67
68	Activity of the Na+/H+ exchanger is critical to reperfusion damage and preconditioning in the isolated rat heart. Cardiovascular Research, 2000, 48, 244-253.	1.8	67
69	The use of the indicator fluoâ€5N to measure sarcoplasmic reticulum calcium in single muscle fibres of the cane toad. Journal of Physiology, 2001, 534, 87-97.	1.3	67
70	Why did the NHE inhibitor clinical trials fail?. Journal of Molecular and Cellular Cardiology, 2009, 46, 137-141.	0.9	67
71	Changes in intracellular free calcium concentration during long exposures to simulated ischemia in isolated mammalian ventricular muscle.. Circulation Research, 1992, 71, 58-69.	2.0	65
72	Evidence for Na⁺/Ca²⁺exchange in intact single skeletal muscle fibers from the mouse. American Journal of Physiology - Cell Physiology, 1998, 274, C940-C946.	2.1	64

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73	How does Î²-adrenergic stimulation increase the heart rate? The role of intracellular Ca2+release in amphibian pacemaker cells. Journal of Physiology, 1999, 516, 793-804.	1.3	62
74	Role of the calcium-calpain pathway in cytoskeletal damage after eccentric contractions. Journal of Applied Physiology, 2008, 105, 352-357.	1.2	61
75	Distribution of sarcomere length and intracellular calcium in mouse skeletal muscle following stretch-induced injury. Journal of Physiology, 1997, 502, 649-659.	1.3	58
76	Changes in intracellular Na+and pH in rat heart during ischemia: role of Na+/H+exchanger. American Journal of Physiology - Heart and Circulatory Physiology, 1999, 276, H1581-H1590.	1.5	56
77	Muscle Fatigue: The Role of Intracellular Calcium Stores. Applied Physiology, Nutrition, and Metabolism, 2002, 27, 83-96.	1.7	55
78	Development of Tâ€tubular vacuoles in eccentrically damaged mouse muscle fibres. Journal of Physiology, 2002, 540, 581-592.	1.3	55
79	The activity-induced reduction of myofibrillar Ca2+sensitivity in mouse skeletal muscle is reversed by dithiothreitol. Journal of Physiology, 2006, 571, 191-200.	1.3	54
80	Role of Excitation-Contraction Coupling in Muscle Fatigue*. Sports Medicine, 1992, 13, 116-126.	3.1	53
81	Pathways of Ca²⁺ entry and cytoskeletal damage following eccentric contractions in mouse skeletal muscle. Journal of Applied Physiology, 2012, 112, 2077-2086.	1.2	53
82	The role of calcium stores in fatigue of isolated single muscle fibres from the cane toad. Journal of Physiology, 1999, 519, 169-176.	1.3	52
83	Changes in myoplasmic pH and calcium concentration during exposure to lactate in isolated rat ventricular myocytes.. Journal of Physiology, 1993, 464, 561-574.	1.3	51
84	Regulation of murine cardiac contractility by activation of Î±1A-adrenergic receptor-operated Ca2+ entry. Cardiovascular Research, 2011, 91, 310-319.	1.8	47
85	Distribution and Functional Role of Inositol 1,4,5- <i>tris</i> phosphate Receptors in Mouse Sinoatrial Node. Circulation Research, 2011, 109, 848-857.	2.0	45
86	Changes of tension and [Ca2+]i during ?-adrenoceptor activation of single, intact fibres from mouse skeletal muscle. Pflugers Archiv European Journal of Physiology, 1993, 425, 150-155.	1.3	43
87	The multiple roles of phosphate in muscle fatigue. Frontiers in Physiology, 2012, 3, 463.	1.3	42
88	RNA Binding Protein QKI Inhibits the Ischemia/reperfusion-induced Apoptosis in Neonatal Cardiomyocytes. Cellular Physiology and Biochemistry, 2011, 28, 593-602.	1.1	41
89	P2X7 Receptors Mediate Innate Phagocytosis by Human Neural Precursor Cells and Neuroblasts. Stem Cells, 2015, 33, 526-541.	1.4	40
90	The effects of hypertonicity on tension and intracellular calcium concentration in ferret ventricular muscle.. Journal of Physiology, 1987, 383, 425-439.	1.3	39

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91	Intracellular sodium in mammalian muscle fibers after eccentric contractions. Journal of Applied Physiology, 2003, 94, 2475-2482.	1.2	39
92	Fibroblasts modulate cardiomyocyte excitability: implications for cardiac gene therapy. Gene Therapy, 2006, 13, 1611-1615.	2.3	37
93	The metabolic consequences of an increase in the frequency of stimulation in isolated ferret hearts.. Journal of Physiology, 1994, 474, 147-159.	1.3	36
94	Interactions between intracellular calcium and phosphate in intact mouse muscle during fatigue. Journal of Applied Physiology, 2011, 111, 358-366.	1.2	36
95	Calmodulin kinase modulates Ca2+ release in mouse skeletal muscle. Journal of Physiology, 2003, 551, 5-12.	1.3	34
96	Molecular insights from a novel cardiac troponin I mouse model of familial hypertrophic cardiomyopathy. Journal of Molecular and Cellular Cardiology, 2006, 41, 623-632.	0.9	33
97	The Role of Intracellular Acidosis in Muscle Fatigue. Advances in Experimental Medicine and Biology, 1995, 384, 57-68.	0.8	33
98	Store-Operated Ca2+ Entry and TRPC Expression; Possible Roles in Cardiac Pacemaker Tissue. Heart Lung and Circulation, 2007, 16, 349-355.	0.2	31
99	Fatigue in working muscles. Journal of Applied Physiology, 2009, 106, 358-359.	1.2	30
100	Measurement of sarcoplasmic reticulum Ca2+content in intact amphibian skeletal muscle fibres with 4-chloro-m-cresol. Cell Calcium, 1999, 25, 227-235.	1.1	28
101	Stretch-Induced Membrane Damage in Muscle: Comparison of Wild-Type and mdx Mice. Advances in Experimental Medicine and Biology, 2010, 682, 297-313.	0.8	28
102	Effect of eccentric contraction-induced injury on force and intracellular pH in rat skeletal muscles. Journal of Applied Physiology, 2002, 92, 93-99.	1.2	27
103	The rise of [Na+]i during ischemia and reperfusion in the rat heartâ€"underlying mechanisms. Pflugers Archiv European Journal of Physiology, 2007, 454, 903-912.	1.3	27
104	Intracellular ATP measured with luciferin/luciferase in isolated single mouse skeletal muscle fibres. Pflugers Archiv European Journal of Physiology, 2002, 443, 836-842.	1.3	25
105	Intracellular calcium during fatigue of cane toad skeletal muscle in the absence of glucose. Journal of Muscle Research and Cell Motility, 2000, 21, 481-489.	0.9	24
106	Store-operated calcium entry and the localization of STIM1 and Orai1 proteins in isolated mouse sinoatrial node cells. Frontiers in Physiology, 2015, 6, 69.	1.3	23
107	Inositol 1,4,5-trisphosphate receptors and pacemaker rhythms. Journal of Molecular and Cellular Cardiology, 2012, 53, 375-381.	0.9	22
108	Time to fatigue is increased in mouse muscle at 37Â°C; the role of iron and reactive oxygen species. Journal of Physiology, 2009, 587, 4705-4716.	1.3	20

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109	The involvement of TRPC3 channels in sinoatrial arrhythmias. Frontiers in Physiology, 2015, 6, 86.	1.3	20
110	Changes in myoplasmic sodium concentration during exposure to lactate in perfused rat heart. Cardiovascular Research, 1994, 28, 987-993.	1.8	19
111	The role of endogenous angiotensin II in ischaemia, reperfusion and preconditioning of the isolated rat heart. Pflugers Archiv European Journal of Physiology, 2003, 445, 643-650.	1.3	19
112	The distribution of calcium in toad cardiac pacemaker cells during spontaneous firing. Pflugers Archiv European Journal of Physiology, 2000, 441, 219-227.	1.3	18
113	IGF-1 enhances a store-operated Ca2+ channel in skeletal muscle myoblasts: Involvement of a CD20-like protein. Journal of Cellular Physiology, 2003, 197, 53-60.	2.0	18
114	ATP modulates intracellular Ca 2+ and firing rate through a P2Y 1 purinoceptor in cane toad pacemaker cells. Journal of Physiology, 2003, 552, 777-787.	1.3	18
115	The mechanisms of sarcoplasmic reticulum Ca²⁺ release in toad pacemaker cells. Journal of Physiology, 2000, 525, 695-705.	1.3	17
116	Activation of Ca2+-dependent protein kinase II during repeated contractions in single muscle fibres from mouse is dependent on the frequency of sarcoplasmic reticulum Ca2+release. Acta Physiologica, 2007, 191, 131-137.	1.8	15
117	Resettlement Outcomes for People with Severe Challenging Behaviour Moving from Institutional to Community Living. Journal of Applied Research in Intellectual Disabilities, 2011, 24, 1-17.	1.3	15
118	RhoA/ROCK Signaling and Pleiotropic Î±1A-Adrenergic Receptor Regulation of Cardiac Contractility. PLoS ONE, 2014, 9, e99024.	1.1	14
119	Conserved Role of the Large Conductance Calcium-Activated Potassium Channel, K _{Ca} 1.1, in Sinus Node Function and Arrhythmia Risk. Circulation Genomic and Precision Medicine, 2021, 14, e003144.	1.6	14
120	AICAR inhibits the Na+/H+ exchanger in rat heartsâ€"possible contribution to cardioprotection. Pflugers Archiv European Journal of Physiology, 2006, 453, 147-156.	1.3	13
121	The cardioprotective effects of Na + /H + exchange inhibition and mitochondrial K ATP channel activation are additive in the isolated rat heart. Pflugers Archiv European Journal of Physiology, 2003, 447, 272-279.	1.3	12
122	Muscle specific kinase protects dystrophic <i>mdx</i> mouse muscles from eccentric contractionâ€induced loss of forceâ€producing capacity. Journal of Physiology, 2019, 597, 4831-4850.	1.3	11
123	Early effects of metabolic inhibition on intracellular Ca²⁺in toad pacemaker cells: involvement of Ca²⁺stores. American Journal of Physiology - Heart and Circulatory Physiology, 2003, 284, H1087-H1094.	1.5	10
124	The use of caged adenine nucleotides and caged phosphate in intact skeletal muscle fibres of the mouse. Acta Physiologica Scandinavica, 1999, 166, 341-347.	2.3	10
125	Cyanide inhibits the Na+/Ca2+ exchanger in isolated cardiac pacemaker cells of the cane toad. Pflugers Archiv European Journal of Physiology, 2005, 449, 442-448.	1.3	8
126	The effects of intracellular injections of phosphate on intracellular calcium and force in single fibres of mouse skeletal muscle. Pflugers Archiv European Journal of Physiology, 1996, 431, 964-970.	1.3	5

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127	Understanding muscle from its length. Journal of Physiology, 2007, 583, 3-4.	1.3	5
128	Stretch-Activated Channels in the Heart: Contribution to Cardiac Performance. , 2010, , 141-167.		4
129	Section Review: Cardiovascular & Renal: Calcium sensitisers and heart failure. Expert Opinion on Investigational Drugs, 1995, 4, 1057-1065.	1.9	3
130	Why stretched muscles hurt - is there a role for half-sarcomere dynamics?. Journal of Physiology, 2006, 573, 4-4.	1.3	3
131	Dynamic changes in the contractile apparatus during exercise. Acta Physiologica, 2013, 208, 220-221.	1.8	1
132	Cooling muscles following exercise. Journal of Physiology, 2017, 595, 7269-7269.	1.3	0
133	Why do older humans fatigue more quickly?. Journal of Physiology, 2018, 596, 3815-3815.	1.3	0
134	Calcium sensitivity and muscle disease. Journal of Physiology, 2019, 597, 4435-4436.	1.3	0
135	Human muscle performance. Journal of Physiology, 2020, 598, 613-614.	1.3	0
136	How to perform well in the heat. , 2005, , 28-29.		0