Michael J Mckenna

List of Publications by Year
in descending order

106 papers	4,729 citations	66336 42 h-index	110368 64 g-index
108 all docs	108 docs citations	108 times ranked	4541 citing authors

#	Article	IF	Citations
1	N-acetylcysteine attenuates the decline in muscle Na+,K+-pump activity and delays fatigue during prolonged exercise in humans. Journal of Physiology, 2006, 576, 279-288.	2.9	216
2	Muscle K⁺, Na⁺, and Cl^{âˆ’} disturbances and Na⁺-K⁺ pump inactivation: implications for fatigue. Journal of Applied Physiology, 2008, 104, 288-295.	2.5	206
3	N-acetylcysteine enhances muscle cysteine and glutathione availability and attenuates fatigue during prolonged exercise in endurance-trained individuals. Journal of Applied Physiology, 2004, 97, 1477-1485.	2.5	193
4	Design and Interpretation of Anthropometric and Fitness Testing of Basketball Players. Sports Medicine, 2008, 38, 565-578.	6.5	159
5	Skeletal muscle metabolic and ionic adaptations during intense exercise following sprint training in humans. Journal of Applied Physiology, 2000, 89, 1793-1803.	2.5	147
6	Muscle metabolites and performance during high-intensity, intermittent exercise. Journal of Applied Physiology, 1998, 84, 1687-1691.	2.5	125
7	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
8	Creatine supplementation increases muscle total creatine but not maximal intermittent exercise performance. Journal of Applied Physiology, 1999, 87, 2244-2252.	2.5	94
9	Impaired calcium pump function does not slow relaxation in human skeletal muscle after prolonged exercise. Journal of Applied Physiology, 1997, 83, 511-521.	2.5	92
10	<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
11	Increased inflammatory cytokine expression in the vastus lateralis of patients with knee osteoarthritis. Arthritis and Rheumatism, 2011, 63, 1343-1348.	6.7	85
12	Training Leading to Repetition Failure Enhances Bench Press Strength Gains in Elite Junior Athletes. Journal of Strength and Conditioning Research, 2005, 19, 382.	2.1	85
13	Effects of intravenous N-acetylcysteine infusion on time to fatigue and potassium regulation during prolonged cycling exercise. Journal of Applied Physiology, 2004, 96, 211-217.	2.5	83
14	Sprint training enhances ionic regulation during intense exercise in men. Journal of Physiology, 1997, 501, 687-702.	2.9	82
15	Prolonged exercise to fatigue in humans impairs skeletal muscle Na+-K+-ATPase activity, sarcoplasmic reticulum Ca2+ release, and Ca2+ uptake. Journal of Applied Physiology, 2004, 97, 1414-1423.	2.5	82
16	Infusion with the antioxidant <i>N</i>â€acetylcysteine attenuates early adaptive responses to exercise in human skeletal muscle. Acta Physiologica, 2012, 204, 382-392.	3.8	82
17	Effects of fatigue and sprint training on electromechanical delay of knee extensor muscles. European Journal of Applied Physiology and Occupational Physiology, 1996, 72-72, 410-416.	1.2	81
18	Contractile properties and sarcoplasmic reticulum calcium content in typeÂI and typeÂII skeletal muscle fibres in active aged humans. Journal of Physiology, 2015, 593, 2499-2514.	2.9	79

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19	Effects of fatigue and training on sarcoplasmic reticulum Ca²⁺regulation in human skeletal muscle. Journal of Applied Physiology, 2002, 92, 912-922.	2.5	74
20	Exercise Performance Falls over Time in Patients with Chronic Kidney Disease Despite Maintenance of Hemoglobin Concentration. Clinical Journal of the American Society of Nephrology: CJASN, 2006, 1, 488-495.	4.5	72
21	Alkalosis increases muscle K+release, but lowers plasma [K+] and delays fatigue during dynamic forearm exercise. Journal of Physiology, 2006, 570, 185-205.	2.9	70
22	Fatigue depresses maximal in vitro skeletal muscle Na⁺-K⁺-ATPase activity in untrained and trained individuals. Journal of Applied Physiology, 2002, 93, 1650-1659.	2.5	69
23	Living high-training low increases hypoxic ventilatory response of well-trained endurance athletes. Journal of Applied Physiology, 2002, 93, 1498-1505.	2.5	69
24	Performance and physiological responses to repeated-sprint exercise: a novel multiple-set approach. European Journal of Applied Physiology, 2011, 111, 669-678.	2.5	67
25	Validation of an Optical Encoder During Free Weight Resistance Movements and Analysis of Bench Press Sticking Point Power During Fatigue. Journal of Strength and Conditioning Research, 2007, 21, 510.	2.1	66
26	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
27	Measurement of Na+,K+-ATPase Activity in Human Skeletal Muscle. Analytical Biochemistry, 1998, 258, 63-67.	2.4	62
28	Modelling age and secular differences in fitness between basketball players. Journal of Sports Sciences, 2007, 25, 869-878.	2.0	62
29	Exercise Limitation Following Transplantation. , 2012, 2, 1937-1979.		60
30	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
31	Greater chance of high core temperatures with modified pacing strategy during team sport in the heat. Journal of Science and Medicine in Sport, 2014, 17, 113-118.	1.3	59
32	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
33	High-Intensity Training Improves Plasma Glucose and Acid-Base Regulation During Intermittent Maximal Exercise in Type 1 Diabetes. Diabetes Care, 2007, 30, 1269-1271.	8.6	58
34	Effects of live high, train low hypoxic exposure on lactate metabolism in trained humans. Journal of Applied Physiology, 2004, 96, 517-525.	2.5	54
35	Effect of sodium bicarbonate on muscle metabolism during intense endurance cycling. Medicine and Science in Sports and Exercise, 2002, 34, 614-621.	0.4	53
36	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

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37	Sprint Training Increases Muscle Oxidative Metabolism During High-Intensity Exercise in Patients With Type 1 Diabetes. Diabetes Care, 2008, 31, 2097-2102.	8.6	51
38	The Roles of Ionic Processes in Muscular Fatigue During Intense Exercise1. Sports Medicine, 1992, 13, 134-145.	6.5	48
39	Enhanced pulmonary and active skeletal muscle gas exchange during intense exercise after sprint training in men. Journal of Physiology, 1997, 501, 703-716.	2.9	48
40	Effects of Electrical Stimulation and Insulin on Na + â€“K + â€ATPase ([3 H]Ouabain Binding) in Rat Skeletal Muscle. Journal of Physiology, 2003, 547, 567-580.	2.9	48
41	Intensified exercise training does not alter AMPK signaling in human skeletal muscle. American Journal of Physiology - Endocrinology and Metabolism, 2004, 286, E737-E743.	3.5	48
42	Muscle Na+-K+-ATPase activity and isoform adaptations to intense interval exercise and training in well-trained athletes. Journal of Applied Physiology, 2007, 103, 39-47.	2.5	48
43	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
44	Chronic intermittent hypoxia and incremental cycling exercise independently depress muscle in vitro maximal Na+-K+-ATPase activity in well-trained athletes. Journal of Applied Physiology, 2005, 98, 186-192.	2.5	42
45	Resolving fatigue mechanisms determining exercise performance: integrative physiology at its finest!. Journal of Applied Physiology, 2008, 104, 286-287.	2.5	41
46	Altering the rest interval during highâ€intensity interval training does not affect muscle or performance adaptations. Experimental Physiology, 2013, 98, 481-490.	2.0	40
47	Depressed Na+-K+-ATPase activity in skeletal muscle at fatigue is correlated with increased Na+-K+-ATPase mRNA expression following intense exercise. American Journal of Physiology - Regulatory Integrative and Comparative Physiology, 2005, 289, R266-R274.	1.8	39
48	Effects of type 1 diabetes, sprint training and sex on skeletal muscle sarcoplasmic reticulum Ca²⁺ uptake and Ca²⁺â€ATPase activity. Journal of Physiology, 2014, 592, 523-535.	2.9	38
49	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
50	International Society of Sports Nutrition position stand: sodium bicarbonate and exercise performance. Journal of the International Society of Sports Nutrition, 2021, 18, 61.	3.9	38
51	Repeated Sprints Alter Signaling Related to Mitochondrial Biogenesis in Humans. Medicine and Science in Sports and Exercise, 2012, 44, 827-834.	0.4	37
52	Effects of Water Immersion on Posttraining Recovery in Australian Footballers. International Journal of Sports Physiology and Performance, 2012, 7, 357-366.	2.3	35
53	Pharmacokinetics of intravenous N-acetylcysteine in men at rest and during exercise. European Journal of Clinical Pharmacology, 2004, 60, 717-723.	1.9	34
54	Sleep in athletes undertaking protocols of exposure to nocturnal simulated altitude at 2650 m. Journal of Science and Medicine in Sport, 2005, 8, 222-232.	1.3	34

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55	Effectiveness of Water Immersion on Postmatch Recovery in Elite Professional Footballers. International Journal of Sports Physiology and Performance, 2013, 8, 243-253.	2.3	34
56	Effects of sprint training on extrarenal potassium regulation with intense exercise in Type 1 diabetes. Journal of Applied Physiology, 2006, 100, 26-34.	2.5	31
57	Dexamethasone up-regulates skeletal muscle maximal Na+,K+pump activity by muscle group specific mechanisms in humans. Journal of Physiology, 2005, 567, 583-589.	2.9	29
58	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
59	Impaired K+ regulation contributes to exercise limitation in end-stage renal failure. Kidney International, 2003, 63, 283-290.	5.2	27
60	Prolonged submaximal exercise induces isoform-specific Na+-K+-ATPase mRNA and protein responses in human skeletal muscle. American Journal of Physiology - Regulatory Integrative and Comparative Physiology, 2006, 290, R414-R424.	1.8	27
61	Impaired muscle Ca2+ and K+ regulation contribute to poor exercise performance post-lung transplantation. Journal of Applied Physiology, 2003, 95, 1606-1616.	2.5	25
62	Hypoxic ventilatory response is correlated with increased submaximal exercise ventilation after live high, train low. European Journal of Applied Physiology, 2005, 94, 207-215.	2.5	24
63	Ionic mechanisms of excitation-induced regulation of Na+-K+-ATPase mRNA expression in isolated rat EDL muscle. American Journal of Physiology - Regulatory Integrative and Comparative Physiology, 2006, 290, R1397-R1406.	1.8	24
64	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
65	Increased Number of Forced Repetitions Does Not Enhance Strength Development With Resistance Training. Journal of Strength and Conditioning Research, 2007, 21, 841.	2.1	24
66	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
67	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
68	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
69	Interspersed normoxia during live high, train low interventions reverses an early reduction in muscle Na+, K+ATPase activity in well-trained athletes. European Journal of Applied Physiology, 2006, 98, 299-309.	2.5	20
70	Effects of endurance training status and sex differences on Na+,K+-pump mRNA expression, content and maximal activity in human skeletal muscle. Acta Physiologica, 2007, 189, 259-269.	3.8	20
71	The effects of osteoarthritis and age on skeletal muscle strength, Na⁺-K⁺-ATPase content, gene and isoform expression. Journal of Applied Physiology, 2013, 115, 1443-1449.	2.5	20
72	Plasma K⁺ dynamics and implications during and following intense rowing exercise. Journal of Applied Physiology, 2014, 117, 60-68.	2.5	20

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73	Antioxidant treatment with <i>N</i>â€acetylcysteine regulates mammalian skeletal muscle Na⁺â€“K⁺â€ATPase Î± gene expression during repeated contractions. Experimental Physiology, 2008, 93, 1239-1248.	2.0	19
74	The effects of knee injury on skeletal muscle function, Na+ , K+ -ATPase content, and isoform abundance. Physiological Reports, 2015, 3, e12294.	1.7	19
75	Impaired exercise performance and muscle Na+,K+-pump activity in renal transplantation and haemodialysis patients. Nephrology Dialysis Transplantation, 2012, 27, 2036-2043.	0.7	18
76	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
77	Inflammatory markers in skeletal muscle of older adults. European Journal of Applied Physiology, 2013, 113, 509-517.	2.5	17
78	Sleep disturbance at simulated altitude indicated by stratified respiratory disturbance index but not hypoxic ventilatory response. European Journal of Applied Physiology, 2005, 94, 569-575.	2.5	16
79	Association between skeletal muscle inflammatory markers and walking pattern in people with knee osteoarthritis. Arthritis Care and Research, 2011, 63, 1715-1721.	3.4	15
80	Effects of Age on Na+,K+-ATPase Expression in Human and Rodent Skeletal Muscle. Frontiers in Physiology, 2016, 7, 316.	2.8	15
81	Protection against severe hypokalemia but impaired cardiac repolarization after intense rowing exercise in healthy humans receiving salbutamol. Journal of Applied Physiology, 2018, 125, 624-633.	2.5	15
82	Title is missing!. Molecular and Cellular Biochemistry, 2003, 244, 151-157.	3.1	14
83	Characterizing changes in fitness of basketball players within and between seasons. International Journal of Performance Analysis in Sport, 2005, 5, 107-125.	1.1	14
84	Effect of 23-day muscle disuse on sarcoplasmic reticulum Ca2+ properties and contractility in human type I and type II skeletal muscle fibers. Journal of Applied Physiology, 2016, 121, 483-492.	2.5	14
85	Inactivity and exercise training differentially regulate abundance of Na⁺-K⁺-ATPase in human skeletal muscle. Journal of Applied Physiology, 2019, 127, 905-920.	2.5	14
86	Effects of high-intensity intermittent exercise on the contractile properties of human type I and type II skeletal muscle fibers. Journal of Applied Physiology, 2020, 128, 1207-1216.	2.5	14
87	Effects of endurance training on extrarenal potassium regulation and exercise performance in patients on haemodialysis. Nephrology Dialysis Transplantation, 2009, 24, 2882-2888.	0.7	13
88	Unchanged [³H]ouabain binding site content but reduced Na⁺-K⁺ pump Î±₂-protein abundance in skeletal muscle in older adults. Journal of Applied Physiology, 2012, 113, 1505-1511.	2.5	12
89	Salbutamol effects on systemic potassium dynamics during and following intense continuous and intermittent exercise. European Journal of Applied Physiology, 2016, 116, 2389-2399.	2.5	10
90	Evaluation of an automated scoring system in a modified form of competitive boxing. Procedia Engineering, 2011, 13, 445-450.	1.2	8

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91	Kinematic effects of a short-term fatigue protocol on punt-kicking performance. Journal of Sports Sciences, 2015, 33, 1596-1605.	2.0	7
92	Plasma potassium concentration and cardiac repolarisation markers, Tpeakâ€“Tend and Tpeakâ€“Tend/QT, during and after exercise in healthy participants and in end-stage renal disease. European Journal of Applied Physiology, 2022, 122, 691-702.	2.5	6
93	Futsal and Continuous Exercise Induce Similar Changes in Specific Skeletal Muscle Signalling Proteins. International Journal of Sports Medicine, 2014, 35, 863-870.	1.7	5
94	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
95	Dissociation between force and maximal Na+, K+-ATPase activity in rat fast-twitch skeletal muscle with fatiguing in vitro stimulation. European Journal of Applied Physiology, 2009, 105, 575-583.	2.5	4
96	Resistance training upregulates skeletal muscle Na+, K+-ATPase content, with elevations in both Î±1 and Î±2, but not Î² isoforms. European Journal of Applied Physiology, 2020, 120, 1777-1785.	2.5	4
97	Unaccustomed Eccentric Contractions Impair Plasma K+ Regulation in the Absence of Changes in Muscle Na+,K+-ATPase Content. PLoS ONE, 2014, 9, e101039.	2.5	3
98	Oral digoxin effects on exercise performance, K⁺ regulation and skeletal muscle Na⁺,K⁺â€ATPase in healthy humans. Journal of Physiology, 2022, 600, 3749-3774.	2.9	3
99	VALIDATION OF AN OPTICAL ENCODER DURING FREE WEIGHT RESISTANCE MOVEMENTS AND ANALYSIS OF BENCH PRESS STICKING POINT POWER DURING FATIGUE. Journal of Strength and Conditioning Research, 2007, 21, 510-517.	2.1	2
100	Commentaries on Viewpoint: Maximal Na⁺-K⁺-ATPase activity is upregulated in association with muscle activity. Journal of Applied Physiology, 2012, 112, 2124-2126.	2.5	2
101	Effects of testosterone suppression, hindlimb immobilization, and recovery on [3H]ouabain binding site content and Na+, K+-ATPase isoforms in rat soleus muscle. Journal of Applied Physiology, 2020, 128, 501-513.	2.5	2
102	A single oral glucose load decreases arterial plasma [K ⁺] during exercise and recovery. Physiological Reports, 2021, 9, e14889.	1.7	2
103	Effects of Mild Electro-Stimulation Treatment on Healthy Humans Following Exercise Induced Muscle Damage. Medicine and Science in Sports and Exercise, 2008, 40, S76.	0.4	2
104	INCREASED NUMBER OF FORCED REPETITIONS DOES NOT ENHANCE STRENGTH DEVELOPMENT WITH RESISTANCE TRAINING. Journal of Strength and Conditioning Research, 2007, 21, 841-847.	2.1	1
105	Human skeletal muscle creatine transporter mRNA and protein expression in healthy, young males and females. , 2003, , 151-157.		0
106	PL - 039 Heat Shock Proteins in human single skeletal muscle fibres resist age associated alterations and differentially respond to high-intensity exercise training. Exercise Biochemistry Review, 2018, 1, .	0.0	0