Donald H Paterson

List of Publications by Year
in descending order

119 papers	6,870 citations	61984 43 h-index	62596 80 g-index
120 all docs	120 docs citations	120 times ranked	6006 citing authors

#	Article	IF	Citations
1	New Canadian Physical Activity Guidelines. Applied Physiology, Nutrition and Metabolism, 2011, 36, 36-46.	1.9	871
2	Physical activity and functional limitations in older adults: a systematic review related to Canada's Physical Activity Guidelines. International Journal of Behavioral Nutrition and Physical Activity, 2010, 7, 38.	4.6	621
3	Age-related changes in speed of walking. Medicine and Science in Sports and Exercise, 1988, 20, 161-166.	0.4	432
4	Relationship between pulmonary O₂ uptake kinetics and muscle deoxygenation during moderate-intensity exercise. Journal of Applied Physiology, 2003, 95, 113-120.	2.5	314
5	Aerobic fitness in a population of independently living men and women aged 55???86 years. Medicine and Science in Sports and Exercise, 1999, 31, 1813.	0.4	165
6	Can primary care doctors prescribe exercise to improve fitness?. American Journal of Preventive Medicine, 2003, 24, 316-322.	3.0	156
7	Exercise Intensity Thresholds. Medicine and Science in Sports and Exercise, 2015, 47, 1932-1940.	0.4	151
8	Effect of short-term high-intensity interval training vs. continuous training on O₂ uptake kinetics, muscle deoxygenation, and exercise performance. Journal of Applied Physiology, 2009, 107, 128-138.	2.5	129
9	Longitudinal Study of Determinants of Dependence in an Elderly Population. Journal of the American Geriatrics Society, 2004, 52, 1632-1638.	2.6	126
10	Speeding of VÌ‡<scp>o</scp>₂ kinetics with endurance training in old and young men is associated with improved matching of local O₂ delivery to muscle O₂ utilization. Journal of Applied Physiology, 2010, 108, 913-922.	2.5	116
11	Longitudinal changes in aerobic power in older men and women. Journal of Applied Physiology, 2004, 97, 781-789.	2.5	112
12	Ageing and physical activity: evidence to develop exercise recommendations for older adultsThis article is part of a supplement entitled <i>Advancing physical activity measurement and guidelines in Canada: a scientific review and evidence-based foundation for the future of Canadian physical activity guidelines</i> co-published by <i>Applied Physiology, Nutrition, and Metabolism</i> and the <i>Canadian Journal of Public Health</i>. It may be cited as Appl. Physiol. Nutr. Metab. 32(Suppl. 2E) or as Can. J. Pu. Applied Physiology, Nutrition and Metabolism, 2007, 32, S69-S108.	1.9	112
13	Effects of prior heavy-intensity exercise on pulmonary O2 uptake and muscle deoxygenation kinetics in young and older adult humans. Journal of Applied Physiology, 2004, 97, 998-1005.	2.5	111
14	Time course and mechanisms of adaptations in cardiorespiratory fitness with endurance training in older and young men. Journal of Applied Physiology, 2010, 108, 621-627.	2.5	101
15	Effect of age on O2 uptake kinetics and the adaptation of muscle deoxygenation at the onset of moderate-intensity cycling exercise. Journal of Applied Physiology, 2004, 97, 165-172.	2.5	95
16	A Self-Paced Step Test to Predict Aerobic Fitness in Older Adults in the Primary Care Clinic. Journal of the American Geriatrics Society, 2001, 49, 632-638.	2.6	94
17	Exercise on-transient gas exchange kinetics are slowed as a function of age. Medicine and Science in Sports and Exercise, 1994, 26, 440???446.	0.4	85
18	Oxygen uptake kinetics for moderate exercise are speeded in older humans by prior heavy exercise. Journal of Applied Physiology, 2002, 92, 609-616.	2.5	85

#	Article	IF	Citations
19	Prior heavy-intensity exercise speeds Vì‡o2 kinetics during moderate-intensity exercise in young adults. Journal of Applied Physiology, 2005, 98, 1371-1378.	2.5	84
20	The Influence of Age and Cardiorespiratory Fitness on Kinetics of Oxygen Uptake. Applied Physiology, Nutrition, and Metabolism, 1996, 21, 185-196.	1.7	83
21	Vascular responsiveness determined by nearâ€infrared spectroscopy measures of oxygen saturation. Experimental Physiology, 2016, 101, 34-40.	2.0	80
22	Influence of phase I duration on phase II Vì‡<scp>o</scp>₂ kinetics parameter estimates in older and young adults. American Journal of Physiology - Regulatory Integrative and Comparative Physiology, 2011, 301, R218-R224.	1.8	78
23	Determinants of Independence in the Elderly. Applied Physiology, Nutrition, and Metabolism, 1993, 18, 243-254.	1.7	76
24	Kinetics of O2 uptake, leg blood flow, and muscle deoxygenation are slowed in the upper compared with lower region of the moderate-intensity exercise domain. Journal of Applied Physiology, 2005, 99, 1822-1834.	2.5	74
25	Flexibility of Older Adults Aged 55â€“86 Years and the Influence of Physical Activity. Journal of Aging Research, 2013, 2013, 1-8.	0.9	73
26	Adaptation of pulmonary O2 uptake kinetics and muscle deoxygenation at the onset of heavy-intensity exercise in young and older adults. Journal of Applied Physiology, 2005, 98, 1697-1704.	2.5	70
27	Characterizing the profile of muscle deoxygenation during ramp incremental exercise in young men. European Journal of Applied Physiology, 2012, 112, 3349-3360.	2.5	69
28	Repeatability of vascular responsiveness measures derived from near-infrared spectroscopy. Physiological Reports, 2016, 4, e12772.	1.7	68
29	Effects of aerobic endurance training on gas exchange kinetics of older men. Medicine and Science in Sports and Exercise, 1994, 26, 447???452.	0.4	67
30	Breathâ€byâ€breath pulmonary O₂ uptake kinetics: effect of data processing on confidence in estimating model parameters. Experimental Physiology, 2014, 99, 1511-1522.	2.0	65
31	Using ramp-incremental <i>Vì‡</i>O₂ responses for constant-intensity exercise selection. Applied Physiology, Nutrition and Metabolism, 2018, 43, 882-892.	1.9	64
32	A Comparison of Modelling Techniques used to Characterise Oxygen Uptake Kinetics During the on-Transient of Exercise. Experimental Physiology, 2001, 86, 667-676.	2.0	63
33	Speeding of VO2 kinetics in response to endurance-training in older and young women. European Journal of Applied Physiology, 2011, 111, 235-243.	2.5	60
34	The effect of hypoxia on pulmonary O2uptake, leg blood flow and muscle deoxygenation during single-leg knee-extension exercise. Experimental Physiology, 2004, 89, 293-302.	2.0	59
35	Prior exercise speeds pulmonary O2 uptake kinetics by increases in both local muscle O2 availability and O2 utilization. Journal of Applied Physiology, 2007, 103, 771-778.	2.5	56
36	Are the parameters of VO2, heart rate and muscle deoxygenation kinetics affected by serial moderate-intensity exercise transitions in a single day?. European Journal of Applied Physiology, 2011, 111, 591-600.	2.5	56

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37	Muscle deoxygenation to VO2 relationship differs in young subjects with varying Ï„VO2. European Journal of Applied Physiology, 2011, 111, 3107-3118.	2.5	55
38	Determinants of Oxygen Uptake Kinetics in Older Humans Following Single-Limb Endurance Exercise Training. Experimental Physiology, 2001, 86, 659-665.	2.0	54
39	Effects of ageing on muscle O2 utilization and muscle oxygenation during the transition to moderate-intensity exercise. Applied Physiology, Nutrition and Metabolism, 2007, 32, 1251-1262.	1.9	52
40	Systemic and vastus lateralis muscle blood flow and O₂ extraction during ramp incremental cycle exercise. American Journal of Physiology - Regulatory Integrative and Comparative Physiology, 2013, 304, R720-R725.	1.8	52
41	Nouvelles Directives canadiennes en matiÃ¨re dâ€™activitÃ© physique. Applied Physiology, Nutrition and Metabolism, 2011, 36, 47-58.	1.9	50
42	The Critical Role of O2 Provision in the Dynamic Adjustment of Oxidative Phosphorylation. Exercise and Sport Sciences Reviews, 2014, 42, 4-11.	3.0	49
43	Kinetics of VO2 limb blood flow and regional muscle deoxygenation in young adults during moderate intensity, knee-extension exercise. European Journal of Applied Physiology, 2010, 108, 607-617.	2.5	48
44	Speeding of VÌ‡<scp>o</scp>₂ kinetics during moderate-intensity exercise subsequent to heavy-intensity exercise is associated with improved local O₂ distribution. Journal of Applied Physiology, 2011, 111, 1410-1415.	2.5	46
45	Vascular responsiveness measured by tissue oxygen saturation reperfusion slope is sensitive to different occlusion durations and training status. Experimental Physiology, 2016, 101, 1309-1318.	2.0	45
46	Sex-related differences in muscle deoxygenation during ramp incremental exercise. Respiratory Physiology and Neurobiology, 2013, 189, 530-536.	1.6	44
47	Measurement of a True VË™O2max during a Ramp Incremental Test Is Not Confirmed by a Verification Phase. Frontiers in Physiology, 2018, 9, 143.	2.8	44
48	Adaptations in Capillarization and Citrate Synthase Activity in Response to Endurance Training in Older and Young Men. Journals of Gerontology - Series A Biological Sciences and Medical Sciences, 2011, 66A, 957-964.	3.6	41
49	Hyperventilation-induced hypocapnic alkalosis slows the adaptation of pulmonary O2uptake during the transition to moderate-intensity exercise. Journal of Physiology, 2007, 583, 351-364.	2.9	40
50	Regulation of VÌ‡<scp>o</scp>₂ kinetics by O₂ delivery: insights from acute hypoxia and heavy-intensity priming exercise in young men. Journal of Applied Physiology, 2012, 112, 1023-1032.	2.5	38
51	Influence of ageing on aerobic parameters determined from a ramp test. European Journal of Applied Physiology and Occupational Physiology, 1992, 65, 138-143.	1.2	36
52	Cerebral and muscle deoxygenation, hypoxic ventilatory chemosensitivity and cerebrovascular responsiveness during incremental exercise. Respiratory Physiology and Neurobiology, 2009, 169, 24-35.	1.6	36
53	Gas exchange dynamics with sinusoidal work in young and elderly women. Respiration Physiology, 1993, 91, 43-56.	2.7	35
54	Mechanisms for Increases in VË™O2max with Endurance Training in Older and Young Women. Medicine and Science in Sports and Exercise, 2010, 42, 1891-1898.	0.4	35

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55	Effects of Age and Long-Term Endurance Training on VÂ·O2 Kinetics. Medicine and Science in Sports and Exercise, 2015, 47, 289-298.	0.4	35
56	Cerebral and muscle tissue oxygenation in acute hypoxic ventilatory response test. Respiratory Physiology and Neurobiology, 2007, 155, 71-81.	1.6	34
57	A raised metabolic rate slows pulmonary O₂uptake kinetics on transition to moderate-intensity exercise in humans independently of work rate. Experimental Physiology, 2011, 96, 1049-1061.	2.0	33
58	Cerebral blood flow responses to changes in oxygen and carbon dioxide in humans. Canadian Journal of Physiology and Pharmacology, 2002, 80, 819-827.	1.4	32
59	Effects of prior heavy-intensity exercise during single-leg knee extension on vÌ‡o2 kinetics and limb blood flow. Journal of Applied Physiology, 2005, 99, 1462-1470.	2.5	32
60	Prior heavy exercise elevates pyruvate dehydrogenase activity and muscle oxygenation and speeds O₂uptake kinetics during moderate exercise in older adults. American Journal of Physiology - Regulatory Integrative and Comparative Physiology, 2009, 297, R877-R884.	1.8	32
61	Cardiac output and left ventricular function in response to exercise in older men. Canadian Journal of Physiology and Pharmacology, 1993, 71, 136-144.	1.4	28
62	Noninvasive estimation of microvascular O₂ provision during exercise on-transients in healthy young males. American Journal of Physiology - Regulatory Integrative and Comparative Physiology, 2012, 303, R815-R823.	1.8	27
63	Pulmonary O2 uptake and muscle deoxygenation kinetics are slowed in the upper compared with lower region of the moderate-intensity exercise domain in older men. European Journal of Applied Physiology, 2011, 111, 2139-2148.	2.5	26
64	Cardiorespiratory adaptation with short term training in older men. European Journal of Applied Physiology and Occupational Physiology, 1992, 65, 203-208.	1.2	24
65	A Model of Oxygen Transport Capacity Changes for Independently Living Older Men and Women. Applied Physiology, Nutrition, and Metabolism, 1997, 22, 439-453.	1.7	24
66	High-intensity interval training speeds the adjustment of pulmonary O₂uptake, but not muscle deoxygenation, during moderate-intensity exercise transitions initiated from low and elevated baseline metabolic rates. Journal of Applied Physiology, 2013, 114, 1550-1562.	2.5	23
67	Evaluating the Accuracy of Using Fixed Ranges of METs to Categorize Exertional Intensity in a Heterogeneous Group of Healthy Individuals: Implications for Cardiorespiratory Fitness and Health Outcomes. Sports Medicine, 2021, 51, 2411-2421.	6.5	23
68	Differences in exercise limb blood flow and muscle deoxygenation with age: contributions to O2 uptake kinetics. European Journal of Applied Physiology, 2010, 110, 739-751.	2.5	22
69	O2 uptake kinetics after acetazolamide administration during moderate- and heavy-intensity exercise. Journal of Applied Physiology, 1998, 85, 1384-1393.	2.5	21
70	Forearm muscle metabolism studied using 31P-MRS during progressive exercise to fatigue after Acz administration. Journal of Applied Physiology, 2000, 89, 200-209.	2.5	21
71	Effect of moderate-intensity work rate increment on phase II Ï„VO2, functional gain and Î”[HHb]. European Journal of Applied Physiology, 2013, 113, 545-557.	2.5	21
72	VË™co 2 andVË™e kinetics during moderate- and heavyintensity exercise after acetazolamide administration. Journal of Applied Physiology, 1999, 86, 1534-1543.	2.5	20

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73	Adjustments of pulmonary O₂ uptake and muscle deoxygenation during ramp incremental exercise and constant-load moderate-intensity exercise in young and older adults. Journal of Applied Physiology, 2012, 113, 1466-1475.	2.5	20
74	Pulmonary O₂ uptake and leg blood flow kinetics during moderate exercise are slowed by hyperventilation-induced hypocapnic alkalosis. Journal of Applied Physiology, 2010, 108, 1641-1650.	2.5	19
75	Slower VË™O2 Kinetics in Older Individuals. Medicine and Science in Sports and Exercise, 2015, 47, 2308-2318.	0.4	19
76	Carbonic anhydrase inhibition delays plasma lactate appearance with no effect on ventilatory threshold. Journal of Applied Physiology, 2000, 88, 713-721.	2.5	18
77	Kinetics of VÌ‡o2 and femoral artery blood flow during heavy-intensity, knee-extension exercise. Journal of Applied Physiology, 2005, 99, 683-690.	2.5	18
78	Muscle metabolic status and acid-base balance during 10-s work:5-s recovery intermittent and continuous exercise. Journal of Applied Physiology, 2012, 113, 410-417.	2.5	18
79	Modelling the Influence of Fat-Free Mass and Physical Activity on the Decline in Maximal Oxygen Uptake with Age in Older Humans. Experimental Physiology, 2000, 85, 877-885.	2.0	17
80	The effects of short recovery duration on VO2 and muscle deoxygenation during intermittent exercise. European Journal of Applied Physiology, 2012, 112, 1907-1915.	2.5	17
81	Effect of voluntary hyperventilation with supplemental CO₂ on pulmonary O₂ uptake and leg blood flow kinetics during moderateâ€intensity exercise. Experimental Physiology, 2013, 98, 1668-1682.	2.0	17
82	Effect of hyperventilation and prior heavy exercise on O2 uptake and muscle deoxygenation kinetics during transitions to moderate exercise. European Journal of Applied Physiology, 2010, 108, 913-925.	2.5	16
83	Metabolic Adaptations to Endurance Training in Older Individuals. Applied Physiology, Nutrition, and Metabolism, 1993, 18, 366-378.	1.7	15
84	Allometric scaling of strength in an independently living population age 55-86 years. American Journal of Human Biology, 2003, 15, 48-60.	1.6	14
85	Peripheral chemoreceptor control of ventilation following sustained hypoxia in young and older adult humans. Experimental Physiology, 2004, 89, 647-656.	2.0	14
86	â€œTailoredâ€• Submaximal Step Test for VO2max Prediction in Healthy Older Adults. Journal of Aging and Physical Activity, 2014, 22, 261-268.	1.0	14
87	Peripheral chemoreceptor function after carbonic anhydrase inhibition during moderate-intensity exercise. Journal of Applied Physiology, 1999, 86, 1544-1551.	2.5	13
88	Body Position and Cardiac Dynamic and Chronotropic Responses to Steady-State Isocapnic Hypoxaemia in Humans. Experimental Physiology, 2000, 85, 227-237.	2.0	13
89	Oxygen uptake kinetics in endurance-trained and untrained postmenopausal women. Applied Physiology, Nutrition and Metabolism, 2013, 38, 154-160.	1.9	13
90	Dynamics of the Ventilatory Response to Step Changes in End-Tidal PCO2 in Older Humans. Applied Physiology, Nutrition, and Metabolism, 1997, 22, 368-383.	1.7	10

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91	The Gas Transporting Systems: Limits and Modifications With Age and Training. Applied Physiology, Nutrition, and Metabolism, 1999, 24, 28-40.	1.7	10
92	Similar pattern of change in VÌ‡<scp>o</scp>₂kinetics, vascular function, and tissue oxygen provision following an endurance training stimulus in older and young adults. American Journal of Physiology - Regulatory Integrative and Comparative Physiology, 2017, 312, R467-R476.	1.8	10
93	Changes in Chemoreflex Characteristics Following Acute Carbonic Anhydrase Inhibition in Humans a Rest. Experimental Physiology, 2000, 85, 847-856.	2.0	9
94	Blunted Cardiac Autonomic Responsiveness to Hypoxemic Stress in Healthy Older Adults. Applied Physiology, Nutrition, and Metabolism, 2003, 28, 518-535.	1.7	9
95	Pulmonary O2 uptake kinetics during moderate-intensity exercise transitions initiated from low versus elevated metabolic rates: insights from manipulations in cadence. European Journal of Applied Physiology, 2014, 114, 2655-2665.	2.5	9
96	Muscle metabolism during heavy-intensity exercise after acute acetazolamide administration. Journal of Applied Physiology, 2000, 88, 722-729.	2.5	8
97	Moderate and heavy oxygen uptake kinetics in postmenopausal women. Applied Physiology, Nutrition and Metabolism, 2009, 34, 1065-1072.	1.9	7
98	Peripheral Chemoreflex Drive in Moderate-Intensity Exercise. Applied Physiology, Nutrition, and Metabolism, 1996, 21, 285-300.	1.7	6
99	Left Ventricular Diastolic Filling and Cardiovascular Functional Capacity in Older Men. Experimental Physiology, 2000, 85, 547-555.	2.0	6
100	Changes in chemoreflex characteristics following acute carbonic anhydrase inhibition in humans at rest. Experimental Physiology, 2000, 85, 847-856.	2.0	6
101	Short-term Training Effects on Left Ventricular Diastolic Function and Oxygen Uptake in Older and Younger Men. Clinical Journal of Sport Medicine, 2003, 13, 245-251.	1.8	6
102	Duration of â€œPhase Iâ€•VÌ‡o2p: a comparison of methods used in its estimation and the effects of varying moderate-intensity work rate. American Journal of Physiology - Regulatory Integrative and Comparative Physiology, 2013, 304, R238-R247.	1.8	6
103	Slow<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" altimg="si6.gif" overflow="scroll"><mml:mrow><mml:mover accent="true"><mml:mi mathvariant="normal">V</mml:mi><mml:mo>Ë™</mml:mo></mml:mover><mml:msub><mml:mi mathvariant="normal">O</mml:mi><mml:mrow><mml:mn>2</mml:mn></mml:mrow></mml:msub></mml:mrow></mml:math>kinetics in acute hypoxia are not related to a hyperventilation-induced hypocapnia. Respiratory Physiology and Neurobiology, 2018, 251, 41-49.	1.6	6
104	Prolonged moderate-intensity exercise oxygen uptake response following heavy-intensity priming exercise with short- and longer-term recovery. Applied Physiology, Nutrition and Metabolism, 2013, 38, 566-573.	1.9	5
105	Higher Cardiorespiratory Fitness in Older Trained Women is Due to Preserved Stroke Volume. Journal of Sports Science and Medicine, 2012, 11, 745-50.	1.6	5
106	Maximal and submaximal aerobic fitness in postmenopausal women: influence of hormone-replacement therapy. Applied Physiology, Nutrition and Metabolism, 2008, 33, 922-928.	1.9	4
107	Effect of acute hypoxia on muscle blood flow, VO2p, and [HHb] kinetics during leg extension exercise in older men. European Journal of Applied Physiology, 2013, 113, 1685-1694.	2.5	4
108	Influence of hormone replacement therapy and aerobic exercise training on oxygen uptake kinetics in postmenopausal women. Applied Physiology, Nutrition and Metabolism, 2013, 38, 657-665.	1.9	4

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109	Faster $$dot{V}{ext{O}}_{ 2}$$ V Ë™ O 2 kinetics after eccentric contractions is explained by better matching of O2 delivery to O2 utilization. European Journal of Applied Physiology, 2014, 114, 2169-2181.	2.5	4
110	Response. Medicine and Science in Sports and Exercise, 2015, 47, 1998-1999.	0.4	4
111	Control of VË™O2 Kinetics. Medicine and Science in Sports and Exercise, 2015, 47, 2480.	0.4	4
112	Body position and cardiac dynamic and chronotropic responses to steady-state isocapnic hypoxaemia in humans. Experimental Physiology, 2000, 85, 227-237.	2.0	4
113	Physician Contact with Older Community Patients: Is There an Association with Physical Fitness?. Preventive Medicine, 1999, 29, 571-576.	3.4	3
114	Response to Letter from Tremblay & King: Nearâ€infrared spectroscopy: can it measure conduit artery endothelial function?. Experimental Physiology, 2017, 102, 128-129.	2.0	3
115	Left ventricular diastolic filling and cardiovascular functional capacity in older men. Experimental Physiology, 2000, 85, 547-555.	2.0	3
116	Modelling the influence of fat-free mass and physical activity on the decline in maximal oxygen uptake with age in older humans. Experimental Physiology, 2000, 85, 877-885.	2.0	3
117	Sex-related differences in muscle deoxygenation during ramp incremental exercise: Response to Peltonen et al.. Respiratory Physiology and Neurobiology, 2014, 195, 61-62.	1.6	2
118	Oxygen Kinetics in the Elderly. , 1989, , 171-178.		2
119	Reply. Experimental Physiology, 2015, 100, 476-476.	2.0	0