Daniel M Hirai

List of Publications by Year
in descending order

71 papers	1,786 citations	279487 23 h-index	288905 40 g-index
71 all docs	71 docs citations	71 times ranked	1897 citing authors

#	Article	IF	Citations
1	Regulation of capillary hemodynamics by K ATP channels in resting skeletal muscle. Physiological Reports, 2021, 9, e14803.	0.7	3
2	Effects of inorganic nitrate supplementation on cardiovascular function and exercise tolerance in heart failure. Journal of Applied Physiology, 2021, 130, 914-922.	1.2	12
3	Exercise training decreases intercostal and transversus abdominis muscle blood flows in heart failure rats during submaximal exercise. Respiratory Physiology and Neurobiology, 2021, 292, 103710.	0.7	2
4	Acute effects of leg heat therapy on walking performance and cardiovascular and inflammatory responses to exercise in patients with peripheral artery disease. Physiological Reports, 2021, 8, e14650.	0.7	4
5	Commentaries on Viewpoint: The interaction between SARS-CoV-2 and ACE2 may have consequences for skeletal muscle viral susceptibility and myopathies. Journal of Applied Physiology, 2020, 129, 868-871.	1.2	2
6	The effect of dietary nitrate supplementation on the speed-duration relationship in mice with sickle cell disease. Journal of Applied Physiology, 2020, 129, 474-482.	1.2	9
7	Systemic NOS inhibition reduces contracting muscle oxygenation more in intact female than male rats. Nitric Oxide - Biology and Chemistry, 2020, 100-101, 38-44.	1.2	3
8	ATP-sensitive K+ channel inhibition in rats decreases kidney and skeletal muscle blood flow without increasing sympathetic nerve discharge. Respiratory Physiology and Neurobiology, 2020, 278, 103444.	0.7	8
9	Transcapillary PO 2 gradients in contracting muscles across the fibre type and oxidative continuum. Journal of Physiology, 2020, 598, 3187-3202.	1.3	15
10	Skeletal muscle interstitial O₂ pressures: bridging the gap between the capillary and myocyte. Microcirculation, 2019, 26, e12497.	1.0	29
11	Skeletal muscle interstitial Po2 kinetics during recovery from contractions. Journal of Applied Physiology, 2019, 127, 930-939.	1.2	8
12	Central and peripheral factors mechanistically linked to exercise intolerance in heart failure with reduced ejection fraction. American Journal of Physiology - Heart and Circulatory Physiology, 2019, 317, H434-H444.	1.5	24
13	Submaximal exercise cardiac output is increased by 4 weeks of sprint interval training in young healthy males with low initial Q̇‡-V̇‡O2: Importance of cardiac response phenotype. PLoS ONE, 2019, 14, e0195458.	1.1	4
14	Sexual dimorphism in the control of skeletal muscle interstitial P<scp>o</scp>₂ of heart failure rats: effects of dietary nitrate supplementation. Journal of Applied Physiology, 2019, 126, 1184-1192.	1.2	13
15	Commentaries on Viewpoint: Managing the power grid: How myoglobin can regulate Po2 and energy distribution in skeletal muscle. Journal of Applied Physiology, 2019, 126, 791-794.	1.2	2
16	Systemic vascular dysfunction is associated with emphysema burden in mild COPD. Respiratory Medicine, 2018, 136, 29-36.	1.3	12
17	Neuronal nitric oxide synthase regulation of skeletal muscle functional hyperemia: exercise training and moderate compensated heart failure. Nitric Oxide - Biology and Chemistry, 2018, 74, 1-9.	1.2	12
18	Skeletal muscle microvascular and interstitial from rest to contractions. Journal of Physiology, 2018, 596, 869-883.	1.3	42

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19	Exercise limitations in heart failure with reduced and preserved ejection fraction. Journal of Applied Physiology, 2018, 124, 208-224.	1.2	72
20	Do interindividual differences in cardiac output during submaximal exercise explain differences in exercising muscle oxygenation and ratings of perceived exertion?. Physiological Reports, 2018, 6, e13570.	0.7	5
21	Sex and nitric oxide bioavailability interact to modulate interstitial Po2 in healthy rat skeletal muscle. Journal of Applied Physiology, 2018, 124, 1558-1566.	1.2	10
22	Regulation of Capillary Hemodynamics by K ATP Channels in Resting Skeletal Muscle. FASEB Journal, 2018, 32, 581.8.	0.2	2
23	Central Cardiac Determinants of the Speedâ€duration Relationship in Heart Failure Rats. FASEB Journal, 2018, 32, 853.15.	0.2	0
24	Vascular KATP channels mitigate severe muscle O2 delivery-utilization mismatch during contractions in chronic heart failure rats. Respiratory Physiology and Neurobiology, 2017, 238, 33-40.	0.7	9
25	Dietary nitrate supplementation and exercise tolerance in patients with heart failure with reduced ejection fraction. American Journal of Physiology - Regulatory Integrative and Comparative Physiology, 2017, 312, R13-R22.	0.9	54
26	Oral N-acetylcysteine and exercise tolerance in mild chronic obstructive pulmonary disease. Journal of Applied Physiology, 2017, 122, 1351-1361.	1.2	12
27	Emphysema on Thoracic CT and Exercise Ventilatory Inefficiency in Mild-to-Moderate COPD. COPD: Journal of Chronic Obstructive Pulmonary Disease, 2017, 14, 210-218.	0.7	39
28	A 56-Year-Old, Otherwise Healthy Woman Presenting With Light-headedness and Progressive Shortness of Breath. Chest, 2016, 150, e23-e27.	0.4	6
29	Insights into ventilationâ€“gas exchange coupling in chronic thromboembolic pulmonary hypertension. European Respiratory Journal, 2016, 48, 252-254.	3.1	6
30	Exercise Ventilatory Inefficiency Adds to Lung Function in Predicting Mortality in COPD. COPD: Journal of Chronic Obstructive Pulmonary Disease, 2016, 13, 416-424.	0.7	40
31	Exercise Ventilation in COPD: Influence of Systolic Heart Failure. COPD: Journal of Chronic Obstructive Pulmonary Disease, 2016, 13, 693-699.	0.7	29
32	Physiological and sensory consequences of exercise oscillatory ventilation in heart failure-COPD. International Journal of Cardiology, 2016, 224, 447-453.	0.8	21
33	Heart Failure Impairs Muscle Blood Flow and Endurance Exercise Tolerance in COPD. COPD: Journal of Chronic Obstructive Pulmonary Disease, 2016, 13, 407-415.	0.7	26
34	Pulmonary artery wedge pressure and exercise oscillatory ventilation in pre-capillary pulmonary hypertension. International Journal of Cardiology, 2016, 206, 164-166.	0.8	3
35	Effects of heart failure on cerebral blood flow in COPD: Rest and exercise. Respiratory Physiology and Neurobiology, 2016, 221, 41-48.	0.7	25
36	Exercise training in chronic heart failure: improving skeletal muscle O₂transport and utilization. American Journal of Physiology - Heart and Circulatory Physiology, 2015, 309, H1419-H1439.	1.5	124

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37	Oxygen delivery-utilization mismatch in contracting locomotor muscle in COPD: peripheral factors. American Journal of Physiology - Regulatory Integrative and Comparative Physiology, 2015, 308, R105-R111.	0.9	21
38	Exercise Intolerance in Pulmonary Arterial Hypertension. The Role of Cardiopulmonary Exercise Testing. Annals of the American Thoracic Society, 2015, 12, 604-612.	1.5	27
39	Commentaries on Viewpoint: A paradigm shift for local blood flow regulation. Journal of Applied Physiology, 2014, 116, 706-707.	1.2	3
40	Sildenafil improves skeletal muscle oxygenation during exercise in men with intermittent claudication. American Journal of Physiology - Regulatory Integrative and Comparative Physiology, 2014, 307, R396-R404.	0.9	21
41	The effects of dietary fish oil on exercising skeletal muscle vascular and metabolic control in chronic heart failure rats. Applied Physiology, Nutrition and Metabolism, 2014, 39, 299-307.	0.9	5
42	Skeletal muscle microvascular oxygenation dynamics in heart failure: exercise training and nitric oxide-mediated function. American Journal of Physiology - Heart and Circulatory Physiology, 2014, 306, H690-H698.	1.5	32
43	Dose dependent effects of nitrate supplementation on cardiovascular control and microvascular oxygenation dynamics in healthy rats. Nitric Oxide - Biology and Chemistry, 2014, 39, 51-58.	1.2	23
44	Does impaired O2 delivery during exercise accentuate central and peripheral fatigue in patients with coexistent COPD-CHF?. Frontiers in Physiology, 2014, 5, 514.	1.3	23
45	Effects of nitrate supplementation via beetroot juice on contracting rat skeletal muscle microvascular oxygen pressure dynamics. Respiratory Physiology and Neurobiology, 2013, 187, 250-255.	0.7	56
46	Neuronal nitric oxide synthase inhibition and regional sympathetic nerve discharge: Implications for peripheral vascular control. Respiratory Physiology and Neurobiology, 2013, 186, 285-289.	0.7	8
47	Impact of dietary nitrate supplementation via beetroot juice on exercising muscle vascular control in rats. Journal of Physiology, 2013, 591, 547-557.	1.3	249
48	The NO donor sodium nitroprusside: Evaluation of skeletal muscle vascular and metabolic dysfunction. Microvascular Research, 2013, 85, 104-111.	1.1	18
49	(â˜')-Epicatechin administration and exercising skeletal muscle vascular control and microvascular oxygenation in healthy rats. American Journal of Physiology - Heart and Circulatory Physiology, 2013, 304, H206-H214.	1.5	8
50	Muscle fibreâ€type dependence of neuronal nitric oxide synthaseâ€mediated vascular control in the rat during high speed treadmill running. Journal of Physiology, 2013, 591, 2885-2896.	1.3	42
51	Neuronal nitric oxide synthase (nNOS) inhibition and regional sympathetic nerve discharge: implications for peripheral vascular control. FASEB Journal, 2013, 27, 901.15.	0.2	0
52	Effects of neuronal nitric oxide synthase inhibition on microvascular and contractile function in skeletal muscle of aged rats. American Journal of Physiology - Heart and Circulatory Physiology, 2012, 303, H1076-H1084.	1.5	8
53	Muscle oxygen transport and utilization in heart failure: implications for exercise (in)tolerance. American Journal of Physiology - Heart and Circulatory Physiology, 2012, 302, H1050-H1063.	1.5	227
54	Exercise training and muscle microvascular oxygenation: functional role of nitric oxide. Journal of Applied Physiology, 2012, 113, 557-565.	1.2	39

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55	Acute ascorbic acid and hindlimb skeletal muscle blood flow distribution in old rats: rest and exercise. Canadian Journal of Physiology and Pharmacology, 2012, 90, 1498-1505.	0.7	3
56	Effects of chronic heart failure on neuronal nitric oxide synthaseâ€mediated control of microvascular O₂ pressure in contracting rat skeletal muscle. Journal of Physiology, 2012, 590, 3585-3596.	1.3	12
57	Exercise training and muscle microvascular oxygenation: role of nitric oxide bioavailability. FASEB Journal, 2012, 26, 860.18.	0.2	0
58	Chronic heart failure (CHF) alters nNOSâ€mediated control of skeletal muscle contractile function. FASEB Journal, 2012, 26, 860.19.	0.2	0
59	Acute effects of hydrogen peroxide on skeletal muscle microvascular oxygenation from rest to contractions. Journal of Applied Physiology, 2011, 110, 1290-1298.	1.2	14
60	Aging alters the contribution of nitric oxide to regional muscle hemodynamic control at rest and during exercise in rats. Journal of Applied Physiology, 2011, 111, 989-998.	1.2	25
61	Role of Neuronal Nitric Oxide Synthase in Modulating Microvascular and Contractile Function in Rat Skeletal Muscle. Microcirculation, 2011, 18, 501-511.	1.0	22
62	Acute antioxidant supplementation and skeletal muscle vascular conductance in aged rats: role of exercise and fiber type. American Journal of Physiology - Heart and Circulatory Physiology, 2011, 300, H1536-H1544.	1.5	5
63	Effects of neuronal nitric oxide synthase inhibition on resting and exercising hindlimb muscle blood flow in the rat. Journal of Physiology, 2010, 588, 1321-1331.	1.3	32
64	Critical speed in the rat: implications for hindlimb muscle blood flow distribution and fibre recruitment. Journal of Physiology, 2010, 588, 5077-5087.	1.3	86
65	Nitric oxide synthase inhibition during treadmill exercise reveals fiber-type specific vascular control in the rat hindlimb. American Journal of Physiology - Regulatory Integrative and Comparative Physiology, 2010, 298, R478-R485.	0.9	19
66	Progressive chronic heart failure slows the recovery of microvascular O2 pressures after contractions in the rat spinotrapezius muscle. American Journal of Physiology - Heart and Circulatory Physiology, 2010, 299, H1755-H1761.	1.5	27
67	Aging impacts microvascular oxygen pressures during recovery from contractions in rat skeletal muscle. Respiratory Physiology and Neurobiology, 2009, 169, 315-322.	0.7	21
68	The effects of antioxidants on microvascular oxygenation and blood flow in skeletal muscle of young rats. Experimental Physiology, 2009, 94, 961-971.	0.9	21
69	Nitric Oxide (NO) Bioavailability Underlies Muscle Microvascular O 2 Delivery/Utilization Imbalance in Chronic Heart Failure (CHF) Rats. FASEB Journal, 2009, 23, 948.12.	0.2	0
70	Acute Antioxidant (AOX) Treatment Increases Muscle Microvascular O 2 Extraction in Young Rats. FASEB Journal, 2009, 23, 948.3.	0.2	0
71	Microvascular Oxygenation During the On-transient and Recovery from Contractions in Aged Muscle. Medicine and Science in Sports and Exercise, 2009, 41, 8.	0.2	2