Anni Vanhatalo

List of Publications by Year
in descending order

88 papers	8,618 citations	50566 48 h-index	58552 86 g-index
88 all docs	88 docs citations	88 times ranked	3787 citing authors

#	Article	IF	Citations
1	Skeletal Muscle Nitrate as a Regulator of Systemic Nitric Oxide Homeostasis. Exercise and Sport Sciences Reviews, 2022, 50, 2-13.	1.6	18
2	Highly Cushioned Shoes Improve Running Performance in Both the Absence and Presence of Muscle Damage. Medicine and Science in Sports and Exercise, 2022, 54, 633-645.	0.2	8
3	Time course of human skeletal muscle nitrate and nitrite concentration changes following dietary nitrate ingestion. Nitric Oxide - Biology and Chemistry, 2022, 121, 1-10.	1.2	20
4	Effects of dietary nitrate on the O₂ cost of submaximal exercise: Accounting for â€œnoiseâ€• in pulmonary gas exchange measurements. Journal of Sports Sciences, 2022, 40, 1149-1157.	1.0	6
5	Dietary Inorganic Nitrate as an Ergogenic Aid: An Expert Consensus Derived via the Modified Delphi Technique. Sports Medicine, 2022, 52, 2537-2558.	3.1	26
6	Physiological demands of running at 2-hour marathon race pace. Journal of Applied Physiology, 2021, 130, 369-379.	1.2	88
7	Dietary Nitrate and Nitric Oxide Metabolism: Mouth, Circulation, Skeletal Muscle, and Exercise Performance. Medicine and Science in Sports and Exercise, 2021, 53, 280-294.	0.2	58
8	Network analysis of nitrate-sensitive oral microbiome reveals interactions with cognitive function and cardiovascular health across dietary interventions. Redox Biology, 2021, 41, 101933.	3.9	24
9	Preparation of Rat Skeletal Muscle Homogenates for Nitrate and Nitrite Measurements. Journal of Visualized Experiments, 2021, , .	0.2	3
10	S-nitrosothiols, and other products of nitrate metabolism, are increased in multiple human blood compartments following ingestion of beetroot juice. Redox Biology, 2021, 43, 101974.	3.9	13
11	Steady-state $$dot{V}{ext{O}}_{2}$$ above MLSS: evidence that critical speed better represents maximal metabolic steady state in well-trained runners. European Journal of Applied Physiology, 2021, 121, 3133-3144.	1.2	17
12	Acute ibuprofen ingestion does not attenuate fatigue during maximal intermittent knee extensor or all-out cycling exercise. Applied Physiology, Nutrition and Metabolism, 2019, 44, 208-215.	0.9	5
13	Dynamics of the power-duration relationship during prolonged endurance exercise and influence of carbohydrate ingestion. Journal of Applied Physiology, 2019, 127, 726-736.	1.2	35
14	Human skeletal muscle nitrate store: influence of dietary nitrate supplementation and exercise. Journal of Physiology, 2019, 597, 5565-5576.	1.3	74
15	The maximal metabolic steady state: redefining the â€˜gold standardâ€™. Physiological Reports, 2019, 7, e14098.	0.7	160
16	Contralateral fatigue during severe-intensity single-leg exercise: influence of acute acetaminophen ingestion. American Journal of Physiology - Regulatory Integrative and Comparative Physiology, 2019, 317, R346-R354.	0.9	9
17	Changes in the power-duration relationship following prolonged exercise: estimation using conventional and all-out protocols and relationship with muscle glycogen. American Journal of Physiology - Regulatory Integrative and Comparative Physiology, 2019, 317, R59-R67.	0.9	21
18	Response to considerations regarding Maximal Lactate Steady State determination before redefining the goldâ€standard. Physiological Reports, 2019, 7, e14292.	0.7	11

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19	Critical Power. , 2019, , 159-181.		11
20	Time-trial performance is not impaired in either competitive athletes or untrained individuals following a prolonged cognitive task. European Journal of Applied Physiology, 2019, 119, 149-161.	1.2	16
21	Road cycle TT performance: Relationship to the power-duration model and association with FTP. Journal of Sports Sciences, 2019, 37, 902-910.	1.0	29
22	Acetaminophen ingestion improves muscle activation and performance during a 3-min all-out cycling test. Applied Physiology, Nutrition and Metabolism, 2019, 44, 434-442.	0.9	15
23	Potential benefits of dietary nitrate ingestion in healthy and clinical populations: A brief review. European Journal of Sport Science, 2019, 19, 15-29.	1.4	25
24	Effects of Two Hours of Heavy-Intensity Exercise on the Powerâ€"Duration Relationship. Medicine and Science in Sports and Exercise, 2018, 50, 1658-1668.	0.2	39
25	Acute acetaminophen ingestion improves performance and muscle activation during maximal intermittent knee extensor exercise. European Journal of Applied Physiology, 2018, 118, 595-605.	1.2	20
26	Influence of dietary nitrate food forms on nitrate metabolism and blood pressure in healthy normotensive adults. Nitric Oxide - Biology and Chemistry, 2018, 72, 66-74.	1.2	37
27	Nitrate-responsive oral microbiome modulates nitric oxide homeostasis and blood pressure in humans. Free Radical Biology and Medicine, 2018, 124, 21-30.	1.3	133
28	Discrete physiological effects of beetroot juice and potassium nitrate supplementation following 4-wk sprint interval training. Journal of Applied Physiology, 2018, 124, 1519-1528.	1.2	22
29	The Effects of Î²-Alanine Supplementation on Muscle pH and the Power-Duration Relationship during High-Intensity Exercise. Frontiers in Physiology, 2018, 9, 111.	1.3	14
30	Beetroot juice ingestion during prolonged moderate-intensity exercise attenuates progressive rise in O₂ uptake. Journal of Applied Physiology, 2018, 124, 1254-1263.	1.2	24
31	A randomised controlled trial exploring the effects of different beverages consumed alongside a nitrate-rich meal on systemic blood pressure. Nutrition and Health, 2018, 24, 183-192.	0.6	5
32	Dietary Nitrate and Physical Performance. Annual Review of Nutrition, 2018, 38, 303-328.	4.3	125
33	Nitrate and Exercise Performance. , 2017, , 293-310.		1
34	Influence of dietary nitrate supplementation on physiological and muscle metabolic adaptations to sprint interval training. Journal of Applied Physiology, 2017, 122, 642-652.	1.2	40
35	The â€˜Critical Powerâ€™ Concept: Applications to Sports Performance with a Focus on Intermittent High-Intensity Exercise. Sports Medicine, 2017, 47, 65-78.	3.1	160
36	Muscle metabolic and neuromuscular determinants of fatigue during cycling in different exercise intensity domains. Journal of Applied Physiology, 2017, 122, 446-459.	1.2	180

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37	The mechanistic bases of the powerâ€“time relationship: muscle metabolic responses and relationships to muscle fibre type. Journal of Physiology, 2016, 594, 4407-4423.	1.3	127
38	Two weeks of watermelon juice supplementation improves nitric oxide bioavailability but not endurance exercise performance in humans. Nitric Oxide - Biology and Chemistry, 2016, 59, 10-20.	1.2	67
39	Fiber Type-Specific Effects of Dietary Nitrate. Exercise and Sport Sciences Reviews, 2016, 44, 53-60.	1.6	107
40	Critical Power. Medicine and Science in Sports and Exercise, 2016, 48, 2320-2334.	0.2	335
41	Dose-dependent effects of dietary nitrate on the oxygen cost of moderate-intensity exercise: Acute vs. chronic supplementation. Nitric Oxide - Biology and Chemistry, 2016, 57, 30-39.	1.2	55
42	Dietary nitrate supplementation attenuates the reduction in exercise tolerance following blood donation. American Journal of Physiology - Heart and Circulatory Physiology, 2016, 311, H1520-H1529.	1.5	12
43	The constant work rate critical power protocol overestimates ramp incremental exercise performance. European Journal of Applied Physiology, 2016, 116, 2415-2422.	1.2	13
44	Dietary nitrate supplementation improves sprint and high-intensity intermittent running performance. Nitric Oxide - Biology and Chemistry, 2016, 61, 55-61.	1.2	87
45	Dietary Nitrate Reduces Blood Pressure And Improves Walking Economy And Cognitive Function In Older People. Medicine and Science in Sports and Exercise, 2016, 48, 257.	0.2	4
46	Reliability of arterial spin labelling measurements of perfusion within the quadriceps during steadyâ€state exercise. European Journal of Sport Science, 2016, 16, 80-87.	1.4	4
47	Influence of beetroot juice supplementation on intermittent exercise performance. European Journal of Applied Physiology, 2016, 116, 415-425.	1.2	86
48	Self-pacing increases critical power and improves performance during severe-intensity exercise. Applied Physiology, Nutrition and Metabolism, 2015, 40, 662-670.	0.9	68
49	Dietary nitrate improves sprint performance and cognitive function during prolonged intermittent exercise. European Journal of Applied Physiology, 2015, 115, 1825-1834.	1.2	113
50	High-nitrate vegetable diet increases plasma nitrate and nitrite concentrations and reduces blood pressure in healthy women. Public Health Nutrition, 2015, 18, 2669-2678.	1.1	83
51	<scp>l</scp>-Citrulline supplementation improves O₂ uptake kinetics and high-intensity exercise performance in humans. Journal of Applied Physiology, 2015, 119, 385-395.	1.2	94
52	Intramuscular determinants of the ability to recover work capacity above critical power. European Journal of Applied Physiology, 2015, 115, 703-713.	1.2	48
53	Dietary nitrate supplementation: effects on plasma nitrite and pulmonary O₂ uptake dynamics during exercise in hypoxia and normoxia. American Journal of Physiology - Regulatory Integrative and Comparative Physiology, 2014, 307, R920-R930.	0.9	92
54	Dietary nitrate accelerates postexercise muscle metabolic recovery and O₂delivery in hypoxia. Journal of Applied Physiology, 2014, 117, 1460-1470.	1.2	31

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55	Critical power derived from a 3â€min allâ€out test predicts 16.1â€km road timeâ€trial performance. European Journal of Sport Science, 2014, 14, 217-223.	1.4	40
56	Dietary nitrate supplementation improves team sport-specific intense intermittent exercise performance. European Journal of Applied Physiology, 2013, 113, 1673-1684.	1.2	178
57	No effect of acute l-arginine supplementation on O2 cost or exercise tolerance. European Journal of Applied Physiology, 2013, 113, 1805-1819.	1.2	31
58	Influence of dietary nitrate supplementation on human skeletal muscle metabolism and force production during maximum voluntary contractions. Pflugers Archiv European Journal of Physiology, 2013, 465, 517-528.	1.3	88
59	Muscle metabolic determinants of exercise tolerance following exhaustion: relationship to the â€œcritical powerâ€ Journal of Applied Physiology, 2013, 115, 243-250.	1.2	57
60	Influence of intermittent hypoxic training on muscle energetics and exercise tolerance. Journal of Applied Physiology, 2013, 114, 611-619.	1.2	29
61	Effects of Nitrate on the Powerâ€“Duration Relationship for Severe-Intensity Exercise. Medicine and Science in Sports and Exercise, 2013, 45, 1798-1806.	0.2	66
62	Beetroot juice and exercise: pharmacodynamic and dose-response relationships. Journal of Applied Physiology, 2013, 115, 325-336.	1.2	363
63	Effects of short-term dietary nitrate supplementation on blood pressure, O₂uptake kinetics, and muscle and cognitive function in older adults. American Journal of Physiology - Regulatory Integrative and Comparative Physiology, 2013, 304, R73-R83.	0.9	184
64	Effects of Pacing Strategy on Work Done above Critical Power during High-Intensity Exercise. Medicine and Science in Sports and Exercise, 2013, 45, 1377-1385.	0.2	47
65	Modeling the Expenditure and Reconstitution of Work Capacity above Critical Power. Medicine and Science in Sports and Exercise, 2012, 44, 1526-1532.	0.2	107
66	Exercise Tolerance in Intermittent Cycling. Medicine and Science in Sports and Exercise, 2012, 44, 966-976.	0.2	60
67	Influence of acute dietary nitrate supplementation on 50 mile time trial performance in well-trained cyclists. European Journal of Applied Physiology, 2012, 112, 4127-4134.	1.2	179
68	The nitrateâ€nitriteâ€nitric oxide pathway: Its role in human exercise physiology. European Journal of Sport Science, 2012, 12, 309-320.	1.4	75
69	Distinct profiles of neuromuscular fatigue during muscle contractions below and above the critical torque in humans. Journal of Applied Physiology, 2012, 113, 215-223.	1.2	157
70	Dietary nitrate supplementation reduces the O₂cost of walking and running: a placebo-controlled study. Journal of Applied Physiology, 2011, 110, 591-600.	1.2	335
71	Fast-Start Strategy Improves VË™O2 Kinetics and High-Intensity Exercise Performance. Medicine and Science in Sports and Exercise, 2011, 43, 457-467.	0.2	61
72	Application of Critical Power in Sport. International Journal of Sports Physiology and Performance, 2011, 6, 128-136.	1.1	138

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73	Dietary nitrate reduces muscle metabolic perturbation and improves exercise tolerance in hypoxia. Journal of Physiology, 2011, 589, 5517-5528.	1.3	170
74	Muscle fiber recruitment and the slow component of O₂uptake: constant work rate vs. all-out sprint exercise. American Journal of Physiology - Regulatory Integrative and Comparative Physiology, 2011, 300, R700-R707.	0.9	141
75	Acute Dietary Nitrate Supplementation Improves Cycling Time Trial Performance. Medicine and Science in Sports and Exercise, 2011, 43, 1125-1131.	0.2	292
76	Critical Power: Implications for Determination of VË™O2max and Exercise Tolerance. Medicine and Science in Sports and Exercise, 2010, 42, 1876-1890.	0.2	417
77	Influence of hyperoxia on muscle metabolic responses and the powerâ€“duration relationship during severeâ€intensity exercise in humans: a³¹P magnetic resonance spectroscopy study. Experimental Physiology, 2010, 95, 528-540.	0.9	198
78	Similar metabolic perturbations during allâ€out and constant force exhaustive exercise in humans: a ³¹P magnetic resonance spectroscopy study. Experimental Physiology, 2010, 95, 798-807.	0.9	56
79	Effect of Induced Alkalosis on the Power-Duration Relationship of "All-out" Exercise. Medicine and Science in Sports and Exercise, 2010, 42, 563-570.	0.2	48
80	Dietary nitrate supplementation enhances muscle contractile efficiency during knee-extensor exercise in humans. Journal of Applied Physiology, 2010, 109, 135-148.	1.2	484
81	Acute and chronic effects of dietary nitrate supplementation on blood pressure and the physiological responses to moderate-intensity and incremental exercise. American Journal of Physiology - Regulatory Integrative and Comparative Physiology, 2010, 299, R1121-R1131.	0.9	403
82	Dietary nitrate supplementation reduces the O₂cost of low-intensity exercise and enhances tolerance to high-intensity exercise in humans. Journal of Applied Physiology, 2009, 107, 1144-1155.	1.2	603
83	Influence of prior sprint exercise on the parameters of the â€˜allâ€out critical power testâ€™ in men. Experimental Physiology, 2009, 94, 255-263.	0.9	55
84	Influence of Creatine Supplementation on the Parameters of the â€œAll-Out Critical Power Testâ€. Journal of Exercise Science and Fitness, 2009, 7, 9-17.	0.8	23
85	Robustness of a 3 min allâ€out cycling test to manipulations of power profile and cadence in humans. Experimental Physiology, 2008, 93, 383-390.	0.9	57
86	A 3-min All-out Cycling Test Is Sensitive to a Change in Critical Power. Medicine and Science in Sports and Exercise, 2008, 40, 1693-1699.	0.2	113
87	Determination of Critical Power Using a 3-min All-out Cycling Test. Medicine and Science in Sports and Exercise, 2007, 39, 548-555.	0.2	254
88	A 3-min All-Out Test to Determine Peak Oxygen Uptake and the Maximal Steady State. Medicine and Science in Sports and Exercise, 2006, 38, 1995-2003.	0.2	191