

# Bruno Grassi

## List of Publications by Year in descending order

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78  
papers

3,874  
citations

126907

33  
h-index

123424

61  
g-index

80  
all docs

80  
docs citations

80  
times ranked

3485  
citing authors

#	ARTICLE	IF	CITATIONS
1	Muscle oxygenation and pulmonary gas exchange kinetics during cycling exercise on-transitions in humans. <i>Journal of Applied Physiology</i> , 2003, 95, 149-158.	2.5	353
2	Impact of sedentarism due to the COVID-19 home confinement on neuromuscular, cardiovascular and metabolic health: Physiological and pathophysiological implications and recommendations for physical and nutritional countermeasures. <i>European Journal of Sport Science</i> , 2021, 21, 614-635.	2.7	287
3	Slow Component of $\dot{V}E^{TM}O_2$ Kinetics. <i>Medicine and Science in Sports and Exercise</i> , 2011, 43, 2046-2062.	0.4	260
4	Near-infrared spectroscopy and skeletal muscle oxidative function <i>in vivo</i> in health and disease: a review from an exercise physiology perspective. <i>Journal of Biomedical Optics</i> , 2016, 21, 091313.	2.6	247
5	Faster adjustment of $O_2$ delivery does not affect $\dot{V}E^{TM}O_2$ on-kinetics in isolated in situ canine muscle. <i>Journal of Applied Physiology</i> , 1998, 85, 1394-1403.	2.5	220
6	Skeletal Muscle Fatigue and Decreased Efficiency. <i>Exercise and Sport Sciences Reviews</i> , 2015, 43, 75-83.	3.0	178
7	The role of alterations in mitochondrial dynamics and PGC-1 $\alpha$ overexpression in fast muscle atrophy following hindlimb unloading. <i>Journal of Physiology</i> , 2015, 593, 1981-1995.	2.9	166
8	Peripheral $O_2$ diffusion does not affect $\dot{V}E^{TM}O_2$ on-kinetics in isolated in situ canine muscle. <i>Journal of Applied Physiology</i> , 1998, 85, 1404-1412.	2.5	145
9	Progressive recruitment of muscle fibers is not necessary for the slow component of $\dot{V}E^{TM}O_2$ kinetics. <i>Journal of Applied Physiology</i> , 2008, 105, 575-580.	2.5	118
10	Greater loss in muscle mass and function but smaller metabolic alterations in older compared with younger men following 2 wk of bed rest and recovery. <i>Journal of Applied Physiology</i> , 2016, 120, 922-929.	2.5	114
11	Oxygen uptake on-kinetics in dog gastrocnemius in situ following activation of pyruvate dehydrogenase by dichloroacetate. <i>Journal of Physiology</i> , 2002, 538, 195-207.	2.9	105
12	Role of convective $O_2$ delivery in determining $\dot{V}E^{TM}O_2$ on-kinetics in canine muscle contracting at peak $\dot{V}E^{TM}O_2$ . <i>Journal of Applied Physiology</i> , 2000, 89, 1293-1301.	2.5	104
13	Impaired oxygen extraction in metabolic myopathies: Detection and quantification by near-infrared spectroscopy. <i>Muscle and Nerve</i> , 2007, 35, 510-520.	2.2	96
14	Delayed Metabolic Activation of Oxidative Phosphorylation in Skeletal Muscle at Exercise Onset. <i>Medicine and Science in Sports and Exercise</i> , 2005, 37, 1567-1573.	0.4	70
15	Early effects of exercise training on $\dot{V}E^{TM}O_2$ on- and off-kinetics in 50-year-old subjects. <i>Pflügers Archiv European Journal of Physiology</i> , 2002, 443, 690-697.	2.8	64
16	Role of skeletal muscles impairment and brain oxygenation in limiting oxidative metabolism during exercise after bed rest. <i>Journal of Applied Physiology</i> , 2010, 109, 101-111.	2.5	61
17	Kinetic control of oxygen consumption during contractions in self-perfused skeletal muscle. <i>Journal of Physiology</i> , 2011, 589, 3995-4009.	2.9	56
18	Skeletal muscle oxidative function in vivo and ex vivo in athletes with marked hypertrophy from resistance training. <i>Journal of Applied Physiology</i> , 2013, 114, 1527-1535.	2.5	56

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19	Slow $\dot{V}_{O_2}$ kinetics during moderate-intensity exercise as markers of lower metabolic stability and lower exercise tolerance. <i>European Journal of Applied Physiology</i> , 2011, 111, 345-355.	2.5	54
20	Gas exchange kinetics in obese adolescents. Inferences on exercise tolerance and prescription. <i>American Journal of Physiology - Regulatory Integrative and Comparative Physiology</i> , 2010, 299, R1298-R1305.	1.8	51
21	Speeding of pulmonary $VO_2$ on-kinetics by light-to-moderate-intensity aerobic exercise training in chronic heart failure: Clinical and pathophysiological correlates. <i>International Journal of Cardiology</i> , 2013, 167, 2189-2195.	1.7	51
22	Metabolic Myopathies. <i>Medicine and Science in Sports and Exercise</i> , 2009, 41, 2120-2127.	0.4	49
23	Training-induced acceleration of $O_2$ uptake on-kinetics precedes muscle mitochondrial biogenesis in humans. <i>Experimental Physiology</i> , 2013, 98, 883-898.	2.0	48
24	Home-based aerobic exercise training improves skeletal muscle oxidative metabolism in patients with metabolic myopathies. <i>Journal of Applied Physiology</i> , 2016, 121, 699-708.	2.5	47
25	Comparison between Slow Components of HR and $\dot{V}E^{TM}O_2$ Kinetics: Functional Significance. <i>Medicine and Science in Sports and Exercise</i> , 2018, 50, 1649-1657.	0.4	44
26	A simple method for assessing the energy cost of running during incremental tests. <i>Journal of Applied Physiology</i> , 2009, 107, 1068-1075.	2.5	42
27	Effects of nitric oxide synthase inhibition by L-NAME on oxygen uptake kinetics in isolated canine muscle in situ. <i>Journal of Physiology</i> , 2005, 568, 1021-1033.	2.9	40
28	Noninvasive Evaluation of Skeletal Muscle Oxidative Metabolism after Heart Transplant. <i>Medicine and Science in Sports and Exercise</i> , 2006, 38, 1374-1383.	0.4	40
29	Bioenergetics of contracting skeletal muscle after partial reduction of blood flow. <i>Journal of Applied Physiology</i> , 1998, 84, 1882-1888.	2.5	39
30	Mechanisms responsible for the acceleration of pulmonary $\dot{V}_{O_2}$ on-kinetics in humans after prolonged endurance training. <i>American Journal of Physiology - Regulatory Integrative and Comparative Physiology</i> , 2014, 307, R1101-R1114.	1.8	39
31	Separate and combined effects of a 10-d exposure to hypoxia and inactivity on oxidative function in vivo and mitochondrial respiration ex vivo in humans. <i>Journal of Applied Physiology</i> , 2016, 121, 154-163.	2.5	37
32	PlanHab <sup>*</sup> : hypoxia does not worsen the impairment of skeletal muscle oxidative function induced by bed rest alone. <i>Journal of Physiology</i> , 2018, 596, 3341-3355.	2.9	36
33	Functional impairment of skeletal muscle oxidative metabolism during knee extension exercise after bed rest. <i>Journal of Applied Physiology</i> , 2011, 111, 1719-1726.	2.5	35
34	Mitochondrial Adaptations in Elderly and Young Men Skeletal Muscle Following 2 Weeks of Bed Rest and Rehabilitation. <i>Frontiers in Physiology</i> , 2019, 10, 474.	2.8	35
35	Faster $O_2$ uptake kinetics in canine skeletal muscle <i>in situ</i> after acute creatine kinase inhibition. <i>Journal of Physiology</i> , 2011, 589, 221-233.	2.9	31
36	Anabolic resistance assessed by oral stable isotope ingestion following bed rest in young and older adult volunteers: Relationships with changes in muscle mass. <i>Clinical Nutrition</i> , 2017, 36, 1420-1426.	5.0	31

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37	Factors affecting energy cost of running during an ultra-endurance race. <i>Journal of Experimental Biology</i> , 2014, 217, 787-95.	1.7	28
38	Aging effects on prefrontal cortex oxygenation in a posture-cognition dual-task: an fNIRS pilot study. <i>European Review of Aging and Physical Activity</i> , 2019, 16, 2.	2.9	28
39	Serial Assessment of Peak $\dot{V}O_2$ and $\dot{V}O_2$ Kinetics Early after Heart Transplantation. <i>Medicine and Science in Sports and Exercise</i> , 2003, 35, 1798-1804.	0.4	24
40	Peripheral impairments of oxidative metabolism after a 10-day bed rest are upstream of mitochondrial respiration. <i>Journal of Physiology</i> , 2021, 599, 4813-4829.	2.9	22
41	The "second wind" in McArdle's disease patients during a second bout of constant work rate submaximal exercise. <i>Journal of Applied Physiology</i> , 2014, 116, 1230-1237.	2.5	20
42	Translational Medicine: Exercise Physiology Applied to Metabolic Myopathies. <i>Medicine and Science in Sports and Exercise</i> , 2019, 51, 2183-2192.	0.4	19
43	Acute respiratory muscle unloading by normoxic helium-O <sub>2</sub> breathing reduces the O <sub>2</sub> cost of cycling and perceived exertion in obese adolescents. <i>European Journal of Applied Physiology</i> , 2015, 115, 99-109.	2.5	18
44	Effects of 3-month high-intensity interval training vs. moderate endurance training and 4-month follow-up on fat metabolism, cardiorespiratory function and mitochondrial respiration in obese adults. <i>European Journal of Applied Physiology</i> , 2020, 120, 1787-1803.	2.5	17
45	Lack of functional effects of neuromuscular electrical stimulation on skeletal muscle oxidative metabolism in healthy humans. <i>Journal of Applied Physiology</i> , 2012, 113, 1101-1109.	2.5	16
46	Skeletal muscle $\dot{V}O_2$ kinetics by the NIRS repeated occlusions method during the recovery from cycle ergometer exercise. <i>Journal of Applied Physiology</i> , 2020, 128, 534-544.	2.5	16
47	Exercise training alone or in combination with high-protein diet in patients with late onset Pompe disease: results of a cross over study. <i>Orphanet Journal of Rare Diseases</i> , 2020, 15, 143.	2.7	15
48	Effects of a multidisciplinary body weight reduction program on static and dynamic thoraco-abdominal volumes in obese adolescents. <i>Applied Physiology, Nutrition and Metabolism</i> , 2016, 41, 649-658.	1.9	14
49	Respiratory muscle endurance training reduces the O <sub>2</sub> cost of cycling and perceived exertion in obese adolescents. <i>American Journal of Physiology - Regulatory Integrative and Comparative Physiology</i> , 2017, 313, R487-R495.	1.8	13
50	Isometric strength training lowers the O <sub>2</sub> cost of cycling during moderate-intensity exercise. <i>European Journal of Applied Physiology</i> , 2012, 112, 4151-4161.	2.5	12
51	Exercise training in Tg $\beta$ <sup>q</sup> *44 mice during the progression of chronic heart failure: cardiac vs. peripheral (soleus muscle) impairments to oxidative metabolism. <i>Journal of Applied Physiology</i> , 2017, 123, 326-336.	2.5	12
52	Three weeks of respiratory muscle endurance training improve the O <sub>2</sub> cost of walking and exercise tolerance in obese adolescents. <i>Physiological Reports</i> , 2018, 6, e13888.	1.7	12
53	Improved Exercise Tolerance after Enzyme Replacement Therapy in Pompe Disease. <i>Medicine and Science in Sports and Exercise</i> , 2012, 44, 771-775.	0.4	11
54	Reduced exercise capacity in early-stage amyotrophic lateral sclerosis: Role of skeletal muscle. <i>Amyotrophic Lateral Sclerosis and Other Motor Neuron Disorders</i> , 2012, 13, 87-94.	2.1	11

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55	Ergogenic effects of beetroot juice supplementation during severe-intensity exercise in obese adolescents. <i>American Journal of Physiology - Regulatory Integrative and Comparative Physiology</i> , 2018, 315, R453-R460.	1.8	11
56	Mechanisms of Attenuation of Pulmonary V̇O <sub>2</sub> Slow Component in Humans after Prolonged Endurance Training. <i>PLoS ONE</i> , 2016, 11, e0154135.	2.5	10
57	Exercise intolerance in patients with mitochondrial myopathies: perfusive and diffusive limitations in the O <sub>2</sub> pathway. <i>Current Opinion in Physiology</i> , 2019, 10, 202-209.	1.8	9
58	Distinguishing the effects of convective and diffusive O <sub>2</sub> delivery on V̇O <sub>2</sub> on-kinetics in skeletal muscle contracting at moderate intensity. <i>American Journal of Physiology - Regulatory Integrative and Comparative Physiology</i> , 2013, 305, R512-R521.	1.8	8
59	Voluntary physical activity counteracts Chronic Heart Failure progression affecting both cardiac function and skeletal muscle in the transgenic Tg1±q*44 mouse model. <i>Physiological Reports</i> , 2019, 7, e14161.	1.7	8
60	Changes in Skeletal Muscle Oxidative Capacity After a Trail-Running Race. <i>International Journal of Sports Physiology and Performance</i> , 2020, 15, 278-284.	2.3	8
61	Microvascular O <sub>2</sub> delivery and O <sub>2</sub> utilization during metabolic transitions in skeletal muscle. One-hundred years after the pioneering work by August Krogh. <i>Comparative Biochemistry and Physiology Part A, Molecular &amp; Integrative Physiology</i> , 2021, 252, 110842.	1.8	8
62	Skeletal muscle oxygen uptake in obese patients: functional evaluation by knee-extension exercise. <i>European Journal of Applied Physiology</i> , 2013, 113, 2125-2132.	2.5	7
63	Metabolic Transitions and Muscle Metabolic Stability: Effects of Exercise Training. , 2019, , 391-422.		5
64	Effect of acute nitrite infusion on contractile economy and metabolism in isolated skeletal muscle in situ during hypoxia. <i>Journal of Physiology</i> , 2020, 598, 2371-2384.	2.9	5
65	Changes in VO <sub>2</sub> Kinetics After Elevated Baseline Do Not Necessarily Reflect Alterations in Muscle Force Production in Both Sexes. <i>Frontiers in Physiology</i> , 2019, 10, 471.	2.8	4
66	Obese Patients Decrease Work Rate in Order to Keep a Constant Target Heart Rate. <i>Medicine and Science in Sports and Exercise</i> , 2021, 53, 986-993.	0.4	4
67	Investigation on acute effects of enzyme replacement therapy and influence of clinical severity on physiological variables related to exercise tolerance in patients with late onset Pompe disease. <i>Neuromuscular Disorders</i> , 2017, 27, 542-549.	0.6	3
68	New data and well-established concepts. <i>Journal of Applied Physiology</i> , 2018, 125, 1354-1355.	2.5	3
69	A "fatigue threshold" during incremental exercise was identified (and then forgotten) 100 years ago. <i>Journal of Physiology</i> , 2020, 598, 2531-2532.	2.9	3
70	Decrease in work rate in order to keep a constant heart rate: biomarker of exercise intolerance following a 10-day bed rest. <i>Journal of Applied Physiology</i> , 2022, 132, 1569-1579.	2.5	3
71	Implications of rapid early oxygen consumption in exercising skeletal muscle: The empirical, the theoretical and the rational. <i>Journal of Physiology</i> , 2011, 589, 6245-6246.	2.9	2
72	Bed Rest Studies as Analogs of Conditions Encountered in Space and in Diseases. <i>Medicine and Science in Sports and Exercise</i> , 2018, 50, 1907-1908.	0.4	2

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73	Mathematical modeling versus experimental data: how to interpret conflicting evidence?. Journal of Applied Physiology, 2022, 132, 220-221.	2.5	2
74	Acute respiratory muscle unloading improves time-to-exhaustion during moderate- and heavy-intensity cycling in obese adolescent males. Scientific Reports, 2020, 10, 17036.	3.3	1
75	Metabolic Myopathies: "Human Knockout" Models and Translational Medicine. Frontiers in Physiology, 2020, 11, 350.	2.8	1
76	Modeling the depletion and reconstitution of W <sup>AT</sup> : Effects of prior exercise on cycling tolerance. Respiratory Physiology and Neurobiology, 2021, 285, 103590.	1.6	1
77	Heterogeneity of human adaptations to bed rest and hypoxia: a retrospective analysis within the skeletal muscle oxidative function. American Journal of Physiology - Regulatory Integrative and Comparative Physiology, 2021, 321, R813-R822.	1.8	1
78	Irisin Attenuates Muscle Impairment during Bed Rest through Muscle-Adipose Tissue Crosstalk. Biology, 2022, 11, 999.	2.8	1