

# Gwenael Layec

## List of Publications by Year in descending order

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Version: 2024-02-01

49  
papers

1,236  
citations

331670

21  
h-index

377865

34  
g-index

49  
all docs

49  
docs citations

49  
times ranked

1544  
citing authors

#	ARTICLE	IF	CITATIONS
1	From heart to muscle: pathophysiological mechanisms underlying long-term physical sequelae from SARS-CoV-2 infection. <i>Journal of Applied Physiology</i> , 2022, 132, 581-592.	2.5	26
2	Effects of passive and active leg movements to interrupt sitting in mild hypercapnia on cardiovascular function in healthy adults. <i>Journal of Applied Physiology</i> , 2022, 132, 874-887.	2.5	8
3	On the role of skeletal muscle acidosis and inorganic phosphates as determinants of central and peripheral fatigue: A <sup>31</sup> P-MRS study. <i>Journal of Physiology</i> , 2022, 600, 3069-3081.	2.9	23
4	Combined anthocyanins and bromelain supplement improves endothelial function and skeletal muscle oxygenation status in adults: a double-blind placebo-controlled randomised crossover clinical trial. <i>British Journal of Nutrition</i> , 2021, 125, 161-171.	2.3	9
5	Skeletal muscle mitochondrial adaptations induced by long-term cigarette smoke exposure. <i>American Journal of Physiology - Endocrinology and Metabolism</i> , 2021, 321, E80-E89.	3.5	15
6	Acute high-intensity exercise and skeletal muscle mitochondrial respiratory function: role of metabolic perturbation. <i>American Journal of Physiology - Regulatory Integrative and Comparative Physiology</i> , 2021, 321, R687-R698.	1.8	3
7	<sup>31</sup> P magnetic resonance spectroscopy in skeletal muscle: Experts' consensus recommendations. <i>NMR in Biomedicine</i> , 2021, 34, e4246.	2.8	81
8	Impacts of prolonged sitting with mild hypercapnia on vascular and autonomic function in healthy recreationally active adults. <i>American Journal of Physiology - Heart and Circulatory Physiology</i> , 2020, 319, H468-H480.	3.2	19
9	Acute mitochondrial antioxidant intake improves endothelial function, antioxidant enzyme activity, and exercise tolerance in patients with peripheral artery disease. <i>American Journal of Physiology - Heart and Circulatory Physiology</i> , 2020, 319, H456-H467.	3.2	57
10	Response: Commentary: Neuromuscular and Muscle Metabolic Functions in MELAS Before and After Resistance Training: A Case Study. <i>Frontiers in Physiology</i> , 2020, 11, 337.	2.8	1
11	Skeletal Muscle Mitochondrial Adaptations to Maximal Strength Training in Older Adults. <i>Journals of Gerontology - Series A Biological Sciences and Medical Sciences</i> , 2020, 75, 2269-2277.	3.6	10
12	Commentaries on Viewpoint: Physiology and fast marathons. <i>Journal of Applied Physiology</i> , 2020, 128, 1069-1085.	2.5	12
13	Exercise-induced calf muscle hyperemia: Rapid mapping of magnetic resonance imaging using deep learning approach. <i>Physiological Reports</i> , 2020, 8, e14563.	1.7	4
14	Neuromuscular and Muscle Metabolic Functions in MELAS Before and After Resistance Training: A Case Study. <i>Frontiers in Physiology</i> , 2019, 10, 503.	2.8	5
15	Exercise-induced calf muscle hyperemia: quantitative mapping with low-dose dynamic contrast enhanced magnetic resonance imaging. <i>American Journal of Physiology - Heart and Circulatory Physiology</i> , 2019, 316, H201-H211.	3.2	11
16	Influence of group III/IV muscle afferents on small muscle mass exercise performance: a bioenergetics perspective. <i>Journal of Physiology</i> , 2018, 596, 2301-2314.	2.9	36
17	Impaired Muscle Efficiency but Preserved Peripheral Hemodynamics and Mitochondrial Function With Advancing Age: Evidence From Exercise in the Young, Old, and Oldest-Old. <i>Journals of Gerontology - Series A Biological Sciences and Medical Sciences</i> , 2018, 73, 1303-1312.	3.6	16
18	Sex-specific impact of aging on the blood pressure response to exercise. <i>American Journal of Physiology - Heart and Circulatory Physiology</i> , 2018, 314, H95-H104.	3.2	27

#	ARTICLE	IF	CITATIONS
19	Acute High-Intensity Exercise Impairs Skeletal Muscle Respiratory Capacity. <i>Medicine and Science in Sports and Exercise</i> , 2018, 50, 2409-2417.	0.4	34
20	Maximal strength training increases muscle force generating capacity and the anaerobic ATP synthesis flux without altering the cost of contraction in elderly. <i>Experimental Gerontology</i> , 2018, 111, 154-161.	2.8	20
21	Altered skeletal muscle mitochondrial phenotype in COPD: disease vs. disuse. <i>Journal of Applied Physiology</i> , 2018, 124, 1045-1053.	2.5	24
22	The Impact of Acute Tetrahydrobiopterin Administration on Plasma Adropin Concentration in Patients with Systemic Sclerosis. <i>FASEB Journal</i> , 2018, 32, 902.20.	0.5	0
23	Skeletal muscle bioenergetics during all-out exercise: mechanistic insight into the oxygen uptake slow component and neuromuscular fatigue. <i>Journal of Applied Physiology</i> , 2017, 122, 1208-1217.	2.5	50
24	Oxygen delivery and the restoration of the muscle energetic balance following exercise: implications for delayed muscle recovery in patients with COPD. <i>American Journal of Physiology - Endocrinology and Metabolism</i> , 2017, 313, E94-E104.	3.5	9
25	Bioenergetics and ATP Synthesis during Exercise. <i>Medicine and Science in Sports and Exercise</i> , 2017, 49, 2404-2413.	0.4	23
26	Single passive leg movement-induced hyperemia: a simple vascular function assessment without a chronotropic response. <i>Journal of Applied Physiology</i> , 2017, 122, 28-37.	2.5	28
27	Mitochondrial Coupling and Contractile Efficiency in Humans with High and Low $\dot{V}\dot{E}^{\text{TM}}\text{O}_2$ peaks. <i>Medicine and Science in Sports and Exercise</i> , 2016, 48, 811-821.	0.4	2
28	Accuracy and precision of quantitative $^{31}\text{P}$ -MRS measurements of human skeletal muscle mitochondrial function. <i>American Journal of Physiology - Endocrinology and Metabolism</i> , 2016, 311, E358-E366.	3.5	23
29	Impact of age on the vasodilatory function of human skeletal muscle feed arteries. <i>American Journal of Physiology - Heart and Circulatory Physiology</i> , 2016, 310, H217-H225.	3.2	32
30	Ascorbic acid improves brachial artery vasodilation during progressive handgrip exercise in the elderly through a nitric oxide-mediated mechanism. <i>American Journal of Physiology - Heart and Circulatory Physiology</i> , 2016, 310, H765-H774.	3.2	24
31	Evidence of a metabolic reserve in the skeletal muscle of elderly people. <i>Aging</i> , 2016, 9, 52-67.	3.1	9
32	Passive leg movement-induced vasodilation in women: the impact of age. <i>American Journal of Physiology - Heart and Circulatory Physiology</i> , 2015, 309, H995-H1002.	3.2	15
33	MRS Evidence of Adequate O <sub>2</sub> Supply in Human Skeletal Muscle at the Onset of Exercise. <i>Medicine and Science in Sports and Exercise</i> , 2015, 47, 2299-2307.	0.4	32
34	Passive leg movement and nitric oxide-mediated vascular function: the impact of age. <i>American Journal of Physiology - Heart and Circulatory Physiology</i> , 2015, 308, H672-H679.	3.2	61
35	Opposite effects of hyperoxia on mitochondrial and contractile efficiency in human quadriceps muscles. <i>American Journal of Physiology - Regulatory Integrative and Comparative Physiology</i> , 2015, 308, R724-R733.	1.8	8
36	Quadriceps exercise intolerance in patients with chronic obstructive pulmonary disease: the potential role of altered skeletal muscle mitochondrial respiration. <i>Journal of Applied Physiology</i> , 2015, 119, 882-888.	2.5	33

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37	Impact of age on exercise-induced ATP supply during supramaximal plantar flexion in humans. American Journal of Physiology - Regulatory Integrative and Comparative Physiology, 2015, 309, R378-R388.	1.8	13
38	The validity of anthropometric leg muscle volume estimation across a wide spectrum: From able-bodied adults to individuals with a spinal cord injury. Journal of Applied Physiology, 2014, 116, 1142-1147.	2.5	44
39	Altered mitochondrial function in epididymal adipose tissue with advancing age (960.6). FASEB Journal, 2014, 28, 960.6.	0.5	0
40	Reduced muscle oxidative capacity is independent of O <sub>2</sub> availability in elderly people. Age, 2013, 35, 1183-1192.	3.0	25
41	Effects of exercise-induced intracellular acidosis on the phosphocreatine recovery kinetics: a <sup>31</sup> P MRS study in three muscle groups in humans. NMR in Biomedicine, 2013, 26, 1403-1411.	2.8	42
42	Peripheral fatigue limits endurance exercise via a sensory feedback-mediated reduction in spinal motoneuronal output. Journal of Applied Physiology, 2013, 115, 355-364.	2.5	159
43	Mitochondrial function and increased convective O <sub>2</sub> transport: implications for the assessment of mitochondrial respiration in vivo. Journal of Applied Physiology, 2013, 115, 803-811.	2.5	21
44	Exercise-induced PCr recovery kinetics and tissue oxygenation: The role of free radicals and aging. FASEB Journal, 2013, 27, 1202.17.	0.5	0
45	Nitric oxide-mediated vascular function in response to limb movement: the impact of age. FASEB Journal, 2013, 27, 1136.4.	0.5	0
46	Short-term training alters the control of mitochondrial respiration rate before maximal oxidative ATP synthesis. FASEB Journal, 2013, 27, 1202.1.	0.5	0
47	The effect of higher ATP cost of contraction on the metabolic response to graded exercise in patients with chronic obstructive pulmonary disease. Journal of Applied Physiology, 2012, 112, 1041-1048.	2.5	18
48	Nitric oxide and passive limb movement: a new approach to assess vascular function. Journal of Physiology, 2012, 590, 1413-1425.	2.9	86
49	Accurate work-rate measurements during in vivo MRS studies of exercising human quadriceps. Magnetic Resonance Materials in Physics, Biology, and Medicine, 2008, 21, 227-235.	2.0	38