

Michael M Tymko

List of Publications by Year in descending order

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Version: 2024-02-01

76
papers

1,266
citations

394421

19
h-index

434195

31
g-index

76
all docs

76
docs citations

76
times ranked

1079
citing authors

#	ARTICLE	IF	CITATIONS
1	Sympathetic control of the brain circulation: Appreciating the complexities to better understand the controversy. <i>Autonomic Neuroscience: Basic and Clinical</i> , 2017, 207, 37-47.	2.8	100
2	Differential cerebrovascular CO ₂ reactivity in anterior and posterior cerebral circulations. <i>Respiratory Physiology and Neurobiology</i> , 2013, 189, 76-86.	1.6	70
3	End tidal-to-arterial CO ₂ and O ₂ gas gradients at low- and high-altitude during dynamic end-tidal forcing. <i>American Journal of Physiology - Regulatory Integrative and Comparative Physiology</i> , 2015, 308, R895-R906.	1.8	63
4	Measuring the human ventilatory and cerebral blood flow response to CO ₂ : a technical consideration for the end-tidal-to-arterial gas gradient. <i>Journal of Applied Physiology</i> , 2016, 120, 282-296.	2.5	61
5	Influence of high altitude on cerebral blood flow and fuel utilization during exercise and recovery. <i>Journal of Physiology</i> , 2014, 592, 5507-5527.	2.9	59
6	Shear-mediated dilation of the internal carotid artery occurs independent of hypercapnia. <i>American Journal of Physiology - Heart and Circulatory Physiology</i> , 2017, 313, H24-H31.	3.2	56
7	Global REACH 2018. <i>Hypertension</i> , 2019, 73, 1327-1335.	2.7	44
8	Impaired myocardial function does not explain reduced left ventricular filling and stroke volume at rest or during exercise at high altitude. <i>Journal of Applied Physiology</i> , 2015, 119, 1219-1227.	2.5	37
9	The independent effects of hypovolaemia and pulmonary vasoconstriction on ventricular function and exercise capacity during acclimatisation to 3800m. <i>Journal of Physiology</i> , 2019, 597, 1059-1072.	2.9	37
10	Carbon dioxide-mediated vasomotion of extracranial cerebral arteries in humans: a role for prostaglandins?. <i>Journal of Physiology</i> , 2016, 594, 3463-3481.	2.9	35
11	Intermittent hypoxia and arterial blood pressure control in humans: role of the peripheral vasculature and carotid baroreflex. <i>American Journal of Physiology - Heart and Circulatory Physiology</i> , 2016, 311, H699-H706.	3.2	31
12	Comparing and characterizing transient and steady-state tests of the peripheral chemoreflex in humans. <i>Experimental Physiology</i> , 2016, 101, 432-447.	2.0	29
13	The impact of hypoxaemia on vascular function in lowlanders and high altitude indigenous populations. <i>Journal of Physiology</i> , 2019, 597, 5759-5776.	2.9	27
14	Evaluating the methods used for measuring cerebral blood flow at rest and during exercise in humans. <i>European Journal of Applied Physiology</i> , 2018, 118, 1527-1538.	2.5	25
15	Global REACH 2018: The influence of acute and chronic hypoxia on cerebral haemodynamics and related functional outcomes during cold and heat stress. <i>Journal of Physiology</i> , 2020, 598, 265-284.	2.9	24
16	The 2018 Global Research Expedition on Altitude Related Chronic Health (Global REACH) to Cerro de Pasco, Peru: an Experimental Overview. <i>Experimental Physiology</i> , 2021, 106, 86-103.	2.0	24
17	The effect of β_1 -adrenergic blockade on post-exercise brachial artery flow-mediated dilatation at sea level and high altitude. <i>Journal of Physiology</i> , 2017, 595, 1671-1686.	2.9	23
18	Adenosine receptor-dependent signaling is not obligatory for normobaric and hypobaric hypoxia-induced cerebral vasodilation in humans. <i>Journal of Applied Physiology</i> , 2017, 122, 795-808.	2.5	22

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19	Global Reach 2018 Heightened β -Adrenergic Signaling Impairs Endothelial Function During Chronic Exposure to Hypobaric Hypoxia. <i>Circulation Research</i> , 2020, 127, e1-e13.	4.5	21
20	Nitric oxide contributes to cerebrovascular shear-mediated dilatation but not steady-state cerebrovascular reactivity to carbon dioxide. <i>Journal of Physiology</i> , 2022, 600, 1385-1403.	2.9	21
21	Highs and lows of sympathetic neurocardiovascular transduction: influence of altitude acclimatization and adaptation. <i>American Journal of Physiology - Heart and Circulatory Physiology</i> , 2020, 319, H1240-H1252.	3.2	20
22	UBC-Nepal Expedition: An experimental overview of the 2016 University of British Columbia Scientific Expedition to Nepal Himalaya. <i>PLoS ONE</i> , 2018, 13, e0204660.	2.5	19
23	The effects of superimposed tilt and lower body negative pressure on anterior and posterior cerebral circulations. <i>Physiological Reports</i> , 2016, 4, e12957.	1.7	18
24	Evidence for a physiological role of pulmonary arterial baroreceptors in sympathetic neural activation in healthy humans. <i>Journal of Physiology</i> , 2020, 598, 955-965.	2.9	18
25	Is the Cushing mechanism a dynamic blood pressure-stabilizing system? Insights from Granger causality analysis of spontaneous blood pressure and cerebral blood flow. <i>American Journal of Physiology - Regulatory Integrative and Comparative Physiology</i> , 2018, 315, R484-R495.	1.8	17
26	Influence of iron manipulation on hypoxic pulmonary vasoconstriction and pulmonary reactivity during ascent and acclimatization to 5050Am. <i>Journal of Physiology</i> , 2021, 599, 1685-1708.	2.9	17
27	Central respiratory chemosensitivity and cerebrovascular CO ₂ reactivity: a rebreathing demonstration illustrating integrative human physiology. <i>American Journal of Physiology - Advances in Physiology Education</i> , 2016, 40, 79-92.	1.6	16
28	Increasing cerebral blood flow reduces the severity of central sleep apnea at high altitude. <i>Journal of Applied Physiology</i> , 2018, 124, 1341-1348.	2.5	16
29	Acute reductions in haematocrit increase flow-mediated dilatation independent of resting nitric oxide bioavailability in humans. <i>Journal of Physiology</i> , 2020, 598, 4225-4236.	2.9	15
30	Influence of prior hyperventilation duration on respiratory chemosensitivity and cerebrovascular reactivity during modified hyperoxic rebreathing. <i>Experimental Physiology</i> , 2016, 101, 821-835.	2.0	14
31	Severity-dependent influence of isocapnic hypoxia on reaction time is independent of neurovascular coupling. <i>Physiology and Behavior</i> , 2018, 188, 262-269.	2.1	14
32	Cerebral metabolism, oxidation and inflammation in severe passive hyperthermia with and without respiratory alkalosis. <i>Journal of Physiology</i> , 2020, 598, 943-954.	2.9	14
33	UBC-Nepal Expedition: acute alterations in sympathetic nervous activity do not influence brachial artery endothelial function at sea level and high altitude. <i>Journal of Applied Physiology</i> , 2017, 123, 1386-1396.	2.5	13
34	Global REACH 2018: the adaptive phenotype to life with chronic mountain sickness and polycythaemia. <i>Journal of Physiology</i> , 2021, 599, 4021-4044.	2.9	13
35	The effects of head-up and head-down tilt on central respiratory chemoreflex loop gain tested by hyperoxic rebreathing. <i>Progress in Brain Research</i> , 2014, 212, 149-172.	1.4	12
36	Global Reach 2018: reduced flow-mediated dilation stimulated by sustained increases in shear stress in high-altitude excessive erythrocytosis. <i>American Journal of Physiology - Heart and Circulatory Physiology</i> , 2019, 317, H991-H1001.	3.2	12

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37	Mechanisms of sympathetic restraint in human skeletal muscle during exercise: role of $\hat{1}\pm$ -adrenergic and nonadrenergic mechanisms. <i>American Journal of Physiology - Heart and Circulatory Physiology</i> , 2020, 319, H192-H202.	3.2	12
38	Global REACH 2018: Andean highlanders, chronic mountain sickness and the integrative regulation of resting blood pressure. <i>Experimental Physiology</i> , 2021, 106, 104-116.	2.0	12
39	Cerebrovascular response to the cold pressor test – the critical role of carbon dioxide. <i>Experimental Physiology</i> , 2017, 102, 1647-1660.	2.0	11
40	Similarity between carotid and coronary artery responses to sympathetic stimulation and the role of $\hat{1}\pm$ -1-receptors in humans. <i>Journal of Applied Physiology</i> , 2018, 125, 409-418.	2.5	10
41	Global REACH 2018: dysfunctional extracellular microvesicles in Andean highlander males with excessive erythrocytosis. <i>American Journal of Physiology - Heart and Circulatory Physiology</i> , 2021, 320, H1851-H1861.	3.2	10
42	Changes in cardiac autonomic activity during intracranial pressure plateau waves in patients with traumatic brain injury. <i>Clinical Autonomic Research</i> , 2019, 29, 123-126.	2.5	9
43	The stability of cerebrovascular CO_2 reactivity following attainment of physiological steady-state. <i>Experimental Physiology</i> , 2021, 106, 2542-2555.	2.0	9
44	Intra-individual variability in cerebrovascular and respiratory chemosensitivity: Can we characterize a chemoreflex –reactivity profile?. <i>Respiratory Physiology and Neurobiology</i> , 2017, 242, 30-39.	1.6	8
45	Global REACH 2018: volume regulation in high-altitude Andeans with and without chronic mountain sickness. <i>American Journal of Physiology - Regulatory Integrative and Comparative Physiology</i> , 2021, 321, R504-R512.	1.8	8
46	Global Research Expedition on Altitude-related Chronic Health 2018 Iron Infusion at High Altitude Reduces Hypoxic Pulmonary Vasoconstriction Equally in Both Lowlanders and Healthy Andean Highlanders. <i>Chest</i> , 2022, 161, 1022-1035.	0.8	8
47	Global REACH 2018: renal oxygen delivery is maintained during early acclimatization to 4,330 m. <i>American Journal of Physiology - Renal Physiology</i> , 2020, 319, F1081-F1089.	2.7	8
48	The effects of graded changes in oxygen and carbon dioxide tension on coronary blood velocity independent of myocardial energy demand. <i>American Journal of Physiology - Heart and Circulatory Physiology</i> , 2016, 311, H326-H336.	3.2	7
49	UBC –Nepal Expedition: Haemoconcentration underlies the reductions in cerebral blood flow observed during acclimatization to high altitude. <i>Experimental Physiology</i> , 2019, 104, 1963-1972.	2.0	7
50	UBC –Nepal expedition: The use of oral antioxidants does not alter cerebrovascular function at sea level or high altitude. <i>Experimental Physiology</i> , 2018, 103, 523-534.	2.0	6
51	The Effect of an Expiratory Resistance Mask with Dead Space on Sleep, Acute Mountain Sickness, Cognition, and Ventilatory Acclimatization in Normobaric Hypoxia. <i>High Altitude Medicine and Biology</i> , 2019, 20, 61-70.	0.9	6
52	Assessing static and dynamic sympathetic transduction using microneurography. <i>Journal of Applied Physiology</i> , 2021, 130, 1626-1634.	2.5	6
53	The influence of hemoconcentration on hypoxic pulmonary vasoconstriction in acute, prolonged, and lifelong hypoxemia. <i>American Journal of Physiology - Heart and Circulatory Physiology</i> , 2021, 321, H738-H747.	3.2	6
54	Trans-cerebral HCO_3^- and PCO_2 exchange during acute respiratory acidosis and exercise-induced metabolic acidosis in humans. <i>Journal of Cerebral Blood Flow and Metabolism</i> , 2022, 42, 559-571.	4.3	6

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55	GLOBAL REACH 2018: intra-arterial vitamin C improves endothelial-dependent vasodilatory function in humans at high altitude. <i>Journal of Physiology</i> , 2022, 600, 1373-1383.	2.9	5
56	Acid-base balance at high altitude in lowlanders and indigenous highlanders. <i>Journal of Applied Physiology</i> , 2022, 132, 575-580.	2.5	5
57	Global REACH 2018: increased adrenergic restraint of blood flow preserves coupling of oxygen delivery and demand during exercise at high altitude. <i>Journal of Physiology</i> , 0, , .	2.9	5
58	The effect of steady-state CO ₂ on regional brain blood flow responses to increases in blood pressure via the cold pressor test. <i>Autonomic Neuroscience: Basic and Clinical</i> , 2019, 222, 102581.	2.8	4
59	Sex differences in the circulatory responses to an isocapnic cold pressor test. <i>Experimental Physiology</i> , 2019, 104, 295-305.	2.0	4
60	Determining whether sympathetic nervous activity influences cerebral blood velocity at rest: a novel approach. <i>Clinical Autonomic Research</i> , 2020, 30, 357-359.	2.5	4
61	UBC-Nepal expedition: dynamic cerebral autoregulation is attenuated in lowlanders upon ascent to 5050 m. <i>European Journal of Applied Physiology</i> , 2020, 120, 675-686.	2.5	4
62	Cardiorespiratory plasticity in humans following two patterns of acute intermittent hypoxia. <i>Experimental Physiology</i> , 2021, 106, 1524-1534.	2.0	4
63	How to build a lower-body differential pressure chamber integrated on a tilt-table: A pedagogy tool to demonstrate the cardiovascular baroreflex. <i>Facets</i> , 2017, 1, 225-244.	2.4	4
64	To regulate, or not to regulate? The devious history of cerebral blood flow control. <i>Journal of Physiology</i> , 2017, 595, 5407-5408.	2.9	3
65	Global REACH 2018: The Effect of an Expiratory Resistance Mask with Dead Space on Sleep and Acute Mountain Sickness During Acute Exposure to Hypobaric Hypoxia. <i>High Altitude Medicine and Biology</i> , 2020, 21, 297-302.	0.9	3
66	The effect of hypercapnia on regional cerebral blood flow regulation during progressive lower-body negative pressure. <i>European Journal of Applied Physiology</i> , 2021, 121, 339-349.	2.5	3
67	Global Reach 2018: Nitric oxide-mediated cutaneous vasodilation is reduced in chronic, but not acute, hypoxia independently of enzymatic superoxide formation. <i>Free Radical Biology and Medicine</i> , 2021, 172, 451-458.	2.9	3
68	Global REACH 2018: The carotid artery diameter response to the cold pressor test is governed by arterial blood pressure during normoxic but not hypoxic conditions in healthy lowlanders and Andean highlanders. <i>Experimental Physiology</i> , 2020, 105, 1742-1757.	2.0	2
69	Regional differences in cerebrovascular reactivity in response to acute isocapnic hypoxia in healthy humans: Methodological considerations. <i>Respiratory Physiology and Neurobiology</i> , 2021, 294, 103770.	1.6	2
70	Global REACH 2018: Characterizing Acid-Base Balance Over 21 Days at 4,300 m in Lowlanders. <i>High Altitude Medicine and Biology</i> , 2022, 23, 185-191.	0.9	2
71	Standardizing the cerebrovascular response to hypercapnia – increasing the flow of data!. <i>Experimental Physiology</i> , 2020, 105, 769-770.	2.0	1
72	Global REACH 2018: Influence of excessive erythrocytosis on coagulation and fibrinolytic factors in Andean highlanders. <i>Experimental Physiology</i> , 2021, 106, 1335-1342.	2.0	1

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73	Global Reach 2018: Sympathetic neural and hemodynamic responses to submaximal exercise in Andeans with and without chronic mountain sickness. <i>American Journal of Physiology - Heart and Circulatory Physiology</i> , 2022, , .	3.2	1
74	Intracranial pressure and visual acuity: The final frontier?. <i>Journal of Physiology</i> , 2020, 598, 4447-4449.	2.9	0
75	Global REACH 2018: Regional differences in cerebral blood velocity control during normoxic and hypoxic cold pressor tests. <i>Autonomic Neuroscience: Basic and Clinical</i> , 2020, 229, 102740.	2.8	0
76	Global REACH 2018: heightened $\hat{\alpha}$ -adrenergic signaling restrains blood flow to precisely match oxygen delivery and demand during handgrip exercise in Andeans with polycythemia. <i>FASEB Journal</i> , 2021, 35, .	0.5	0