James Duffin

List of Publications by Year in descending order

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263 papers	8,543 citations	41258 49 h-index	71532 76 g-index
429 all docs	429 docs citations	429 times ranked	4512 citing authors

#	Article	IF	Citations
1	Integration of cerebrovascular CO₂reactivity and chemoreflex control of breathing: mechanisms of regulation, measurement, and interpretation. American Journal of Physiology - Regulatory Integrative and Comparative Physiology, 2009, 296, R1473-R1495.	0.9	462
2	Prospective targeting and control of end-tidal CO2and O2concentrations. Journal of Physiology, 2007, 581, 1207-1219.	1.3	268
3	Measuring cerebrovascular reactivity: what stimulus to use?. Journal of Physiology, 2013, 591, 5809-5821.	1.3	248
4	The cerebrovascular response to carbon dioxide in humans. Journal of Physiology, 2011, 589, 3039-3048.	1.3	233
5	A model of the chemoreflex control of breathing in humans: model parameters measurement. Respiration Physiology, 2000, 120, 13-26.	2.8	177
6	The entrainment of breathing frequency by exercise rhythm.. Journal of Physiology, 1977, 272, 553-561.	1.3	167
7	The effect of hypoxia on the ventilatory response to carbon dioxide in man. Respiration Physiology, 1997, 108, 101-115.	2.8	137
8	Critical dependence of respiratory rhythmicity on metabolic CO2 load. Journal of Applied Physiology, 1981, 50, 45-54.	1.2	133
9	Nonâ€invasive prospective targeting of arterial P in subjects at rest. Journal of Physiology, 2008, 586, 3675-3682.	1.3	131
10	A conceptual model for CO2-induced redistribution of cerebral blood flow with experimental confirmation using BOLD MRI. NeuroImage, 2014, 92, 56-68.	2.1	126
11	The neuronal determinants of respiratory rhythm. Progress in Neurobiology, 1986, 27, 101-182.	2.8	119
12	Enhanced chemo-responsiveness in patients with sleep apnoea and end-stage renal disease. European Respiratory Journal, 2006, 28, 151-158.	3.1	115
13	A review of the control of breathing during exercise. European Journal of Applied Physiology and Occupational Physiology, 1995, 71, 1-27.	1.2	106
14	Measuring the respiratory chemoreflexes in humans. Respiratory Physiology and Neurobiology, 2011, 177, 71-79.	0.7	96
15	An electrophysiological investigation of propriospinal inspiratory neurons in the upper cervical cord of the cat. Experimental Brain Research, 1986, 61, 625-37.	0.7	95
16	Measuring the ventilatory response to hypoxia. Journal of Physiology, 2007, 584, 285-293.	1.3	95
17	Role of acid-base balance in the chemoreflex control of breathing. Journal of Applied Physiology, 2005, 99, 2255-2265.	1.2	93
18	Effects of concurrent inspiratory and expiratory muscle training on respiratory and exercise performance in competitive swimmers. European Journal of Applied Physiology, 2005, 94, 527-540.	1.2	91

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19	Measuring Cerebrovascular Reactivity: The Dynamic Response to a Step Hypercapnic Stimulus. Journal of Cerebral Blood Flow and Metabolism, 2015, 35, 1746-1756.	2.4	88
20	Development of White Matter Hyperintensity Is Preceded by Reduced Cerebrovascular Reactivity. Annals of Neurology, 2016, 80, 277-285.	2.8	87
21	Bilaterally independent respiratory rhythms in the decerebrate rat. Neuroscience Letters, 1998, 247, 41-44.	1.0	84
22	The peripheralâ€chemoreceptor threshold to carbon dioxide in man.. Journal of Physiology, 1988, 406, 15-26.	1.3	83
23	Assessing Cerebrovascular Reactivity Abnormality by Comparison to a Reference Atlas. Journal of Cerebral Blood Flow and Metabolism, 2015, 35, 213-220.	2.4	79
24	Respiratory pre-motor control of hypoglossal motoneurons in the rat. Neuroscience, 2002, 110, 711-722.	1.1	76
25	Neuroimaging Assessment of Cerebrovascular Reactivity in Concussion: Current Concepts, Methodological Considerations, and Review of the Literature. Frontiers in Neurology, 2016, 7, 61.	1.1	76
26	Upper cervical inspiratory neurons in the rat: an electrophysiological and morphological study. Experimental Brain Research, 1993, 95, 477-87.	0.7	74
27	Measuring central-chemoreflex sensitivity in man: rebreathing and steady-state methods compared. Respiration Physiology, 1999, 115, 23-33.	2.8	73
28	The dynamics of cerebrovascular reactivity shown with transfer function analysis. NeuroImage, 2015, 114, 207-216.	2.1	73
29	Cross correlation of medullary expiratory neurons in the cat. Experimental Neurology, 1981, 73, 451-464.	2.0	71
30	Repeated hypoxic exposures change respiratory chemoreflex control in humans. Journal of Physiology, 2001, 534, 595-603.	1.3	69
31	Brain magnetic resonance imaging CO2 stress testing in adolescent postconcussion syndrome. Journal of Neurosurgery, 2016, 125, 648-660.	0.9	69
32	Functional organization of respiratory neurones: a brief review of current questions and speculations. Experimental Physiology, 2004, 89, 517-529.	0.9	65
33	The effect of exercise on the central-chemoreceptor threshold in man.. Journal of Physiology, 1987, 383, 9-18.	1.3	63
34	Spinal connections of ventral-group bulbospinal inspiratory neurons studied with cross-correlation in the decerebrate rat. Experimental Brain Research, 1996, 111, 178-86.	0.7	63
35	Pacemakers handshake synchronization mechanism of mammalian respiratory rhythmogenesis. Proceedings of the National Academy of Sciences of the United States of America, 2008, 105, 18000-18005.	3.3	61
36	Ten-Year Experience with Extracorporeal Membrane Oxygenation for Severe Respiratory Failure. Chest, 1988, 94, 681-687.	0.4	60

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37	The effects of hypercapnia, hypoxia, exercise and anxiety on the pattern of breathing in man.. Journal of Physiology, 1979, 293, 285-300.	1.3	59
38	Monosynaptic excitation of thoracic motoneurones by inspiratory neurones of the nucleus tractus solitarius in the cat.. Journal of Physiology, 1987, 390, 415-431.	1.3	59
39	Circadian rhythms in the chemoreflex control of breathing. American Journal of Physiology - Regulatory Integrative and Comparative Physiology, 2000, 278, R282-R286.	0.9	58
40	The interaction of carbon dioxide and hypoxia in the control of cerebral blood flow. Pflugers Archiv European Journal of Physiology, 2012, 464, 345-351.	1.3	58
41	The chemoreflex control of breathing and its measurement. Canadian Journal of Anaesthesia, 1990, 37, 933-942.	0.7	57
42	Factors affecting the determination of cerebrovascular reactivity. Brain and Behavior, 2014, 4, 775-788.	1.0	57
43	Respiratory control of hypoglossal motoneurones in the rat. Pflugers Archiv European Journal of Physiology, 2001, 442, 78-86.	1.3	56
44	A model of respiratory rhythm generation. NeuroReport, 1991, 2, 623-626.	0.6	55
45	Physiological mechanisms of hyperventilation during human pregnancy. Respiratory Physiology and Neurobiology, 2008, 161, 76-86.	0.7	55
46	Connections from upper cervical inspiratory neurons to phrenic and intercostal motoneurons studied with cross-correlation in the decerebrate rat. Experimental Brain Research, 1996, 110, 196-204.	0.7	53
47	BÃ¶tzinger-complex expiratory neurons monosynaptically inhibit phrenic motoneurons in the decerebrate rat. Experimental Brain Research, 1998, 122, 149-156.	0.7	53
48	Decreased chemosensitivity and improvement of sleep apnea by nocturnal hemodialysis. Sleep Medicine, 2009, 10, 47-54.	0.8	53
49	The aging brain and cerebrovascular reactivity. NeuroImage, 2018, 181, 132-141.	2.1	53
50	The role of the central chemoreceptors: A modeling perspective. Respiratory Physiology and Neurobiology, 2010, 173, 230-243.	0.7	50
51	Sudden cold water immersion. Respiration Physiology, 1975, 23, 301-310.	2.8	49
52	BÃ¶tzinger-complex, bulbospinal expiratory neurones monosynaptically inhibit ventral-group respiratory neurones in the decerebrate rat. Experimental Brain Research, 1999, 124, 173-180.	0.7	49
53	Simultaneous assessment of central and peripheral chemoreflex regulation of muscle sympathetic nerve activity and ventilation in healthy young men. Journal of Physiology, 2019, 597, 3281-3296.	1.3	48
54	Dural Tissue Trauma and Cerebrospinal Fluid Leak after Epidural Needle Puncture. Anesthesiology, 2003, 99, 1376-1382.	1.3	46

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55	Phenotyping interindividual variability in obstructive sleep apnoea response to temazepam using ventilatory chemoreflexes during wakefulness. Journal of Sleep Research, 2011, 20, 526-532.	1.7	45
56	Identifying Significant Changes in Cerebrovascular Reactivity to Carbon Dioxide. American Journal of Neuroradiology, 2016, 37, 818-824.	1.2	45
57	The Ventilatory Response to Hypoxia Below the Carbon Dioxide Threshold. Applied Physiology, Nutrition, and Metabolism, 1997, 22, 23-36.	1.7	43
58	Comparing the effect of hypercapnia and hypoxia on the electroencephalogram during wakefulness. Clinical Neurophysiology, 2015, 126, 103-109.	0.7	43
59	Patient-Specific Alterations in CO2 Cerebrovascular Responsiveness in Acute and Sub-Acute Sports-Related Concussion. Frontiers in Neurology, 2018, 9, 23.	1.1	43
60	Carotid chemoreceptors in ventilatory responses to changes in venous CO2 load. Journal of Applied Physiology, 1981, 51, 1398-1403.	1.2	42
61	Adaptation in the respiratory control system. Canadian Journal of Physiology and Pharmacology, 2003, 81, 765-773.	0.7	41
62	Approaches to Brain Stress Testing: BOLD Magnetic Resonance Imaging with Computer-Controlled Delivery of Carbon Dioxide. PLoS ONE, 2012, 7, e47443.	1.1	41
63	Impaired dynamic cerebrovascular response to hypercapnia predicts development of white matter hyperintensities. NeuroImage: Clinical, 2016, 11, 796-801.	1.4	41
64	Assessing cerebrovascular reactivity by the pattern of response to progressive hypercapnia. Human Brain Mapping, 2017, 38, 3415-3427.	1.9	41
65	Sequential gas delivery provides precise control of alveolar gas exchange. Respiratory Physiology and Neurobiology, 2016, 225, 60-69.	0.7	40
66	Cerebrovascular reactivity and white matter integrity. Neurology, 2016, 87, 2333-2339.	1.5	39
67	Extracorporeal membrane oxygenator support for human lung transplantation. Journal of Thoracic and Cardiovascular Surgery, 1978, 76, 28-32.	0.4	38
68	The medullary respiratory neurons: a review. Canadian Journal of Physiology and Pharmacology, 1984, 62, 161-182.	0.7	38
69	The in-vivo oxyhaemoglobin dissociation curve at sea level and high altitude. Respiratory Physiology and Neurobiology, 2013, 186, 45-52.	0.7	38
70	Bilateral connections from ventral group inspiratory neurons to phrenic motoneurons in the rat determined by cross-correlation. Brain Research, 1995, 694, 55-60.	1.1	37
71	Entrainment, instability, quasi-periodicity, and chaos in a compound neural oscillator. Journal of Computational Neuroscience, 1998, 5, 35-51.	0.6	37
72	Inhibition of inspiratory neurons of the nucleus retroambigualis by expiratory neurons of the Botzinger Complex in the cat. Experimental Neurology, 1989, 106, 74-77.	2.0	36

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73	The ventilation, lactate and electromyographic thresholds during incremental exercise tests in normoxia, hypoxia and hyperoxia. European Journal of Applied Physiology and Occupational Physiology, 1994, 69, 110-118.	1.2	36
74	The Contribution of Chemoreflex Drives to Resting Breathing in Man. Experimental Physiology, 2001, 86, 109-116.	0.9	34
75	Overnight changes of chemoreflex control in obstructive sleep apnoea patients. Respiratory Physiology and Neurobiology, 2005, 146, 279-290.	0.7	34
76	Vascular Dysfunction in Leukoaraiosis. American Journal of Neuroradiology, 2016, 37, 2258-2264.	1.2	34
77	The effect of a rise in body temperature on the central-chemoreflex ventilatory response to carbon dioxide. European Journal of Applied Physiology and Occupational Physiology, 1996, 72-72, 537-541.	1.2	33
78	Central-peripheral respiratory chemoreflex interaction in humans. Respiratory Physiology and Neurobiology, 2012, 180, 126-131.	0.7	33
79	CrossTalk opposing view: Peripheral and central chemoreflexes have additive effects on ventilation in humans. Journal of Physiology, 2013, 591, 4351-4353.	1.3	33
80	Cerebrovascular Resistance: The Basis of Cerebrovascular Reactivity. Frontiers in Neuroscience, 2018, 12, 409.	1.4	33
81	The ventilatory response to carbon dioxide in hyperoxic exercise. Respiration Physiology, 1980, 40, 93-105.	2.8	32
82	Cerebral blood flow responses to changes in oxygen and carbon dioxide in humans. Canadian Journal of Physiology and Pharmacology, 2002, 80, 819-827.	0.7	32
83	Changes in respiratory control after 5 days at altitude. Respiratory Physiology and Neurobiology, 2005, 145, 41-52.	0.7	32
84	Longitudinal Brain Magnetic Resonance Imaging CO2 Stress Testing in Individual Adolescent Sports-Related Concussion Patients:â€‰A Pilot Study. Frontiers in Neurology, 2016, 7, 107.	1.1	32
85	Effects of stimulation of phrenic afferents on cervical respiratory interneurones and phrenic motoneurones in cats.. Journal of Physiology, 1996, 497, 803-812.	1.3	31
86	The respiratory effects of two modes of passive exercise. European Journal of Applied Physiology, 2003, 88, 544-552.	1.2	31
87	Rapid increases in ventilation accompany the transition from passive to active movement. Respiratory Physiology and Neurobiology, 2006, 152, 128-142.	0.7	31
88	Relationship between retinal blood flow and arterial oxygen. Journal of Physiology, 2016, 594, 625-640.	1.3	31
89	The role of vascular resistance in BOLD responses to progressive hypercapnia. Human Brain Mapping, 2017, 38, 5590-5602.	1.9	31
90	The effect of treadmill speed on ventilation at the start of exercise in man.. Journal of Physiology, 1987, 391, 13-24.	1.3	30

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91	Role of upper cervical inspiratory neurons studied by cross-correlation in the cat. Experimental Brain Research, 1992, 90, 153-62.	0.7	30
92	Changes in respiratory control after three hours of isocapnic hypoxia in humans. Journal of Physiology, 2003, 547, 271-281.	1.3	30
93	Nucleus raphÃ© obscurus modulates hypoglossal output of neonatal rat in vitro transverse brain stem slices. Journal of Applied Physiology, 2001, 90, 269-279.	1.2	29
94	The effect of acute morphine on obstructive sleep apnoea: a randomised double-blind placebo-controlled crossover trial. Thorax, 2019, 74, 177-184.	2.7	29
95	Coincidental changes in ventilation and electromyographic activity during consecutive incremental exercise tests. European Journal of Applied Physiology and Occupational Physiology, 1994, 68, 54-61.	1.2	28
96	End-inspiratory rebreathing reduces the end-tidal to arterial PCO2 gradient in mechanically ventilated pigs. Intensive Care Medicine, 2011, 37, 1543-1550.	3.9	28
97	THE EFFECT OF HALOTHANE AND THIOPENTONE ON VENTILATORY RESPONSES MEDIATED BY THE PERIPHERAL CHEMORECEPTORS IN MAN. British Journal of Anaesthesia, 1976, 48, 975-981.	1.5	27
98	The role of dorsal respiratory group neurons studied with cross-correlation in the decerebrate rat. Experimental Brain Research, 1998, 121, 29-34.	0.7	27
99	Excitation of upper cervical inspiratory neurons by inspiratory neurons of the nucleus retroambigualis in the cat. Experimental Neurology, 1987, 98, 404-417.	2.0	26
100	Projections from upper cervical inspiratory neurons to thoracic and lumbar expiratory motor nuclei in the cat. Experimental Neurology, 1988, 99, 544-555.	2.0	26
101	Axonal projections and synaptic connections of C5 segment expiratory interneurones in the cat.. Journal of Physiology, 1993, 470, 431-444.	1.3	26
102	Entrained Breathing and Oxygen Consumption During Treadmill Walking. Applied Physiology, Nutrition, and Metabolism, 1994, 19, 432-440.	1.7	26
103	The possible role of C5 segment inspiratory interneurons investigated by cross-correlation with phrenic motoneurons in decerebrate cats. Experimental Brain Research, 1996, 112, 35-40.	0.7	26
104	Functional synaptic connections among respiratory neurons. Respiration Physiology, 2000, 122, 237-246.	2.8	26
105	A mathematical model of the chemoreflex control of ventilation. Respiration Physiology, 1972, 15, 277-301.	2.8	25
106	Excitation of upper cervical inspiratory neurons by inspiratory neurons of the nucleus tractus solitarius in the cat. Experimental Neurology, 1987, 95, 126-141.	2.0	25
107	Temperature and pH affect respiratory rhythm of in-vitro preparations from neonatal rats. Respiration Physiology, 1999, 117, 97-107.	2.8	25
108	Central and peripheral chemoreflexes in panic disorder. Psychiatry Research, 2002, 113, 181-192.	1.7	25

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109	MRI-based cerebrovascular reactivity using transfer function analysis reveals temporal group differences between patients with sickle cell disease and healthy controls. NeuroImage: Clinical, 2016, 12, 624-630.	1.4	25
110	Limbic forebrain and midbrain modulation and phase-switching of expiratory neurons. Brain Research, 1972, 39, 235-239.	1.1	24
111	Respiratory response to passive limb movement is suppressed by a cognitive task. Journal of Applied Physiology, 2004, 97, 2112-2120.	1.2	24
112	Identification of a Novel Form of Noradrenergic-Dependent Respiratory Motor Plasticity Triggered by Vagal Feedback. Journal of Neuroscience, 2010, 30, 16886-16895.	1.7	24
113	Cross-correlation of medullary dorsomedial inspiratory neurons in the cat. Experimental Neurology, 1982, 75, 627-643.	2.0	23
114	Intracellular recordings from upper cervical inspiratory neurons in the cat. Brain Research, 1987, 435, 351-354.	1.1	23
115	Projections from inspiratory neurons of the nucleus retroambigualis to phrenic motoneurons in the cat. Experimental Neurology, 1989, 105, 306-310.	2.0	23
116	The fast exercise drive to breathe. Journal of Physiology, 2014, 592, 445-451.	1.3	23
117	Cerebrovascular Resistance in Healthy Aging and Mild Cognitive Impairment. Frontiers in Aging Neuroscience, 2019, 11, 79.	1.7	23
118	A mathematical model of cerebral blood flow control in anaemia and hypoxia. Journal of Physiology, 2020, 598, 717-730.	1.3	23
119	A commentary on eupnoea and gasping. Respiratory Physiology and Neurobiology, 2003, 139, 105-111.	0.7	22
120	Rapid elimination of CO through the lungs: coming full circle 100 years on. Experimental Physiology, 2011, 96, 1262-1269.	0.9	22
121	The contribution of peripheral chemoreceptors to ventilation during heavy exercise. Respiration Physiology, 1987, 68, 203-213.	2.8	21
122	Inhibitory connections among rostral medullary expiratory neurones detected with cross-correlation in the decerebrate rat*. Pflugers Archiv European Journal of Physiology, 2003, 446, 365-372.	1.3	21
123	Differences in the control of breathing between Himalayan and seaâ€level residents. Journal of Physiology, 2010, 588, 1591-1606.	1.3	21
124	Increased Carbon Monoxide Clearance during Exercise in Humans. Medicine and Science in Sports and Exercise, 2012, 44, 2118-2124.	0.2	21
125	Improved White Matter Cerebrovascular Reactivity after Revascularization in Patients with Steno-Occlusive Disease. American Journal of Neuroradiology, 2019, 40, 45-50.	1.2	21
126	Cross-correlation of medullary respiratory neurons in the cat. Experimental Neurology, 1978, 61, 15-30.	2.0	20

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127	The initial phase of exercise hyperpnoea in humans is depressed during a cognitive task. Experimental Physiology, 2005, 90, 357-365.	0.9	20
128	Rates of carbon monoxide elimination in males and females. Physiological Reports, 2014, 2, e12237.	0.7	20
129	BÃ¶tzinger expiratory neurones inhibit propriobulbar decrementing inspiratory neurones. NeuroReport, 1993, 4, 1215-1218.	0.6	19
130	Breathing Rhythm Generation: Focus on the Rostral Ventrolateral Medulla. Physiology, 1995, 10, 133-140.	1.6	19
131	Connections between respiratory neurones in the neonatal rat transverse medullary slice studied with crossâ€correlation. Journal of Physiology, 2003, 549, 327-332.	1.3	19
132	Differences in the control of breathing between Andean highlanders and lowlanders after 10 days acclimatization at 3850 m. Journal of Physiology, 2010, 588, 1607-1621.	1.3	19
133	Control of Cerebral Blood Flow by Blood Gases. Frontiers in Physiology, 2021, 12, 640075.	1.3	19
134	The propriobulbar respiratory neurons in the cat. Experimental Brain Research, 1990, 81, 213-20.	0.7	18
135	Changes in ventilation in response to ramp changes in treadmill exercise load. European Journal of Applied Physiology and Occupational Physiology, 1992, 65, 480-484.	1.2	18
136	Neural Drives to Breathing During Exercise. Applied Physiology, Nutrition, and Metabolism, 1994, 19, 289-304.	1.7	18
137	Mutual inhibition between BÃ¶tzinger-complex bulbospinal expiratory neurons detected with cross-correlation in the decerebrate rat. Experimental Brain Research, 1999, 125, 440-446.	0.7	18
138	Long-term facilitation of breathing is absent after episodes of hypercapnic hypoxia in awake humans. Respiratory Physiology and Neurobiology, 2007, 156, 132-136.	0.7	18
139	A Novel Stress-Diathesis Model to Predict Risk of Post-operative Delirium: Implications for Intra-operative Management. Frontiers in Aging Neuroscience, 2017, 9, 274.	1.7	18
140	Slowed Temporal and Parietal Cerebrovascular Response in Patients with Alzheimerâ€™s Disease. Canadian Journal of Neurological Sciences, 2020, 47, 366-373.	0.3	18
141	Cerebral Oxygen Saturation: Graded Response to Carbon Dioxide with Isoxia and Graded Response to Oxygen with Isocapnia. PLoS ONE, 2013, 8, e57881.	1.1	18
142	The chemical regulation of ventilation. Anaesthesia, 1971, 26, 142-154.	1.8	17
143	Cross-correlation of ventrolateral inspiratory neurons in the cat. Experimental Neurology, 1984, 83, 233-253.	2.0	17
144	and T₁ assessment of abdominal tissue response to graded hypoxia and hypercapnia using a controlled gas mixing circuit for small animals. Journal of Magnetic Resonance Imaging, 2016, 44, 305-316.	1.9	17

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145	A non-invasive magnetic resonance imaging approach for assessment of real-time microcirculation dynamics. Scientific Reports, 2017, 7, 7468.	1.6	17
146	Perfusion MRI using endogenous deoxyhemoglobin as a contrast agent: Preliminary data. Magnetic Resonance in Medicine, 2021, 86, 3012-3021.	1.9	17
147	The connections from Botzinger expiratory neurons to upper cervical inspiratory neurons in the cat. Experimental Neurology, 1989, 104, 138-146.	2.0	16
148	Synchronization of ventral-group, bulbospinal inspiratory neurons in the decerebrate rat. Experimental Brain Research, 1997, 117, 479-487.	0.7	16
149	Anxiety sensitivity as a predictor of panic attacks. Psychiatry Research, 2004, 129, 273-278.	1.7	16
150	Instability of the Middle Cerebral Artery Blood Flow in Response to CO2. PLoS ONE, 2013, 8, e70751.	1.1	16
151	Measurement of Cerebrovascular Reactivity as Blood Oxygen Level-Dependent Magnetic Resonance Imaging Signal Response to a Hypercapnic Stimulus in Mechanically Ventilated Patients. Journal of Stroke and Cerebrovascular Diseases, 2018, 27, 301-308.	0.7	16
152	Changes in chemoreflex characteristics following acute carbonic anhydrase inhibition in humans at rest. Experimental Physiology, 2000, 85, 847-56.	0.9	16
153	The effect of ethanol on the ventilatory responses mediated by the peripheral chemoreceptors in man. Canadian Anaesthetists' Society Journal, 1978, 25, 181-190.	0.5	15
154	Cross-correlation of augmenting expiratory neurons of the BÃ¶tzinger complex in the cat. Experimental Brain Research, 1995, 103, 251-255.	0.7	15
155	Bilateral synchronisation of respiratory motor output in rats: adult versus neonatal in vitro preparations. Pflugers Archiv European Journal of Physiology, 2001, 442, 943-951.	1.3	15
156	Transmission of respiratory rhythm: Midline-crossing connections at the level of the phrenic motor nucleus?. Respiratory Physiology and Neurobiology, 2006, 153, 139-147.	0.7	15
157	The ventilatory response to sine wave variation in exercise loads and limb movement frequency. Respiratory Physiology and Neurobiology, 2007, 158, 45-50.	0.7	15
158	Inspiratory activation is not required for episodic hypoxiaâ€induced respiratory longâ€term facilitation in postnatal rats. Journal of Physiology, 2007, 585, 593-606.	1.3	15
159	The recruitment times and firing patterns of the medullary respiratory neurones of the cat. Respiration Physiology, 1978, 34, 247-266.	2.8	14
160	Epidural Catheter Penetration of Human Dural Tissue. Anesthesiology, 2004, 100, 1491-1496.	1.3	14
161	Increased lung clearance of isoflurane shortens emergence in obesity: a prospective randomizedâ€controlled trial. Acta Anaesthesiologica Scandinavica, 2011, 55, 995-1001.	0.7	14
162	Respiratory, cerebrovascular and cardiovascular responses to isocapnic hypoxia. Respiratory Physiology and Neurobiology, 2011, 179, 259-268.	0.7	14

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163	Postâ€operative hypercapniaâ€induced hyperpnoea accelerates recovery from sevoflurane anaesthesia: a prospective randomised controlled trial. Acta Anaesthesiologica Scandinavica, 2013, 57, 623-630.	0.7	14
164	Evaluation of Cerebrovascular Reactivity in Subjects with and without Obstructive Sleep Apnea. Journal of Stroke and Cerebrovascular Diseases, 2018, 27, 162-168.	0.7	14
165	Phase-switching of respiration induced by central gray and hippocampal stimulation in the cat. Journal of Neural Transmission, 1974, 35, 327-335.	1.4	13
166	Cannulation of ascending aorta for long-term membrane oxygenator support. Journal of Thoracic and Cardiovascular Surgery, 1975, 69, 905-908.	0.4	13
167	Changes in ventilation at the start and end of moderate and heavy exercise of short and long duration. European Journal of Applied Physiology and Occupational Physiology, 1992, 65, 234-240.	1.2	13
168	Effects of tryptophan depletion on central and peripheral chemoreflexes in man. Respiratory Physiology and Neurobiology, 2002, 133, 183-195.	0.7	13
169	Non-invasive accurate measurement of arterial PCO2 in a pediatric animal model. Journal of Clinical Monitoring and Computing, 2013, 27, 147-155.	0.7	13
170	The simulation of multi-neurone networks: Modelling of the lateral inhibition of the eye and the generation of respiratory rhythm. Bulletin of Mathematical Biology, 1974, 36, 77-89.	0.9	12
171	Changes in respiration in the transition from heavy exercise to rest. European Journal of Applied Physiology and Occupational Physiology, 1988, 57, 606-610.	1.2	12
172	CO₂ does not affect passive exercise ventilatory decline. Journal of Applied Physiology, 2003, 95, 322-329.	1.2	12
173	A Promising Subject-Level Classification Model for Acute Concussion Based on Cerebrovascular Reactivity Metrics. Journal of Neurotrauma, 2021, 38, 1036-1047.	1.7	12
174	Measuring Peripheral Chemoreflex Hypersensitivity in Heart Failure. Frontiers in Physiology, 2020, 11, 595486.	1.3	12
175	Response of the dorsomedial respiratory neurons of cats to changes in lung volume. Experimental Neurology, 1980, 69, 334-348.	2.0	11
176	The changes in ventilation and heart rate at the start of treadmill exercise. Canadian Journal of Physiology and Pharmacology, 1983, 61, 120-126.	0.7	11
177	Respiratory rhythm generation. Canadian Anaesthetists' Society Journal, 1985, 32, 124-137.	0.5	11
178	Stabilization of intracellular recordings in the cat spinal cord using high-frequency ventilation. Canadian Journal of Physiology and Pharmacology, 1986, 64, 756-759.	0.7	11
179	The Reproducibility of Cerebrovascular Reactivity Across MRI Scanners. Frontiers in Physiology, 2021, 12, 668662.	1.3	11
180	Ventilatory responses to exercise performed below and above the first ventilatory threshold. European Journal of Applied Physiology and Occupational Physiology, 1994, 68, 327-335.	1.2	10

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181	Bilateral coordination of inspiratory neurones in the rat. Pflugers Archiv European Journal of Physiology, 2002, 443, 829-835.	1.3	10
182	Caudal expiratory neurones in the rat. Pflugers Archiv European Journal of Physiology, 2002, 444, 405-410.	1.3	10
183	Respiratory Muscle Training and the Performance of a Simulated Anti-G Straining Maneuver. Aviation, Space, and Environmental Medicine, 2007, 78, 1035-1041.	0.6	10
184	Circadian cerebrovascular reactivity to CO2. Respiratory Physiology and Neurobiology, 2014, 197, 15-18.	0.7	10
185	Limb movement frequency is a significant modulator of the ventilatory response during submaximal cycling exercise in humans. Respiratory Physiology and Neurobiology, 2016, 220, 10-16.	0.7	10
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