James Duffin

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261 6,960 45 69 g-index

429 7,751 3.8 5.99 ext. papers ext. citations avg, IF L-index

#	Paper	IF	Citations
261	Integration of cerebrovascular CO2 reactivity and chemoreflex control of breathing: mechanisms of regulation, measurement, and interpretation. <i>American Journal of Physiology - Regulatory Integrative and Comparative Physiology</i> , 2009 , 296, R1473-95	3.2	382
260	Prospective targeting and control of end-tidal CO2 and O2 concentrations. <i>Journal of Physiology</i> , 2007 , 581, 1207-19	3.9	219
259	Measuring cerebrovascular reactivity: what stimulus to use?. Journal of Physiology, 2013 , 591, 5809-21	3.9	175
258	The cerebrovascular response to carbon dioxide in humans. <i>Journal of Physiology</i> , 2011 , 589, 3039-48	3.9	156
257	A model of the chemoreflex control of breathing in humans: model parameters measurement. <i>Respiration Physiology</i> , 2000 , 120, 13-26		155
256	The entrainment of breathing frequency by exercise rhythm. <i>Journal of Physiology</i> , 1977 , 272, 553-61	3.9	139
255	The effect of hypoxia on the ventilatory response to carbon dioxide in man. <i>Respiration Physiology</i> , 1997 , 108, 101-15		124
254	Critical dependence of respiratory rhythmicity on metabolic CO2 load. <i>Journal of Applied Physiology</i> , 1981 , 50, 45-54	3.7	118
253	Non-invasive prospective targeting of arterial P(CO2) in subjects at rest. <i>Journal of Physiology</i> , 2008 , 586, 3675-82	3.9	108
252	The neuronal determinants of respiratory rhythm. <i>Progress in Neurobiology</i> , 1986 , 27, 101-82	10.9	106
251	Enhanced chemo-responsiveness in patients with sleep apnoea and end-stage renal disease. <i>European Respiratory Journal</i> , 2006 , 28, 151-8	13.6	96
250	A conceptual model for COIInduced redistribution of cerebral blood flow with experimental confirmation using BOLD MRI. <i>NeuroImage</i> , 2014 , 92, 56-68	7.9	94
249	A review of the control of breathing during exercise. <i>European Journal of Applied Physiology and Occupational Physiology</i> , 1995 , 71, 1-27		89
248	An electrophysiological investigation of propriospinal inspiratory neurons in the upper cervical cord of the cat. <i>Experimental Brain Research</i> , 1986 , 61, 625-37	2.3	88
247	Bilaterally independent respiratory rhythms in the decerebrate rat. <i>Neuroscience Letters</i> , 1998 , 247, 41-	-43.3	83
246	Role of acid-base balance in the chemoreflex control of breathing. <i>Journal of Applied Physiology</i> , 2005 , 99, 2255-65	3.7	83
245	Measuring the respiratory chemoreflexes in humans. <i>Respiratory Physiology and Neurobiology</i> , 2011 , 177, 71-9	2.8	76

244	Measuring the ventilatory response to hypoxia. Journal of Physiology, 2007, 584, 285-93	3.9	74
243	Effects of concurrent inspiratory and expiratory muscle training on respiratory and exercise performance in competitive swimmers. <i>European Journal of Applied Physiology</i> , 2005 , 94, 527-40	3.4	71
242	Upper cervical inspiratory neurons in the rat: an electrophysiological and morphological study. <i>Experimental Brain Research</i> , 1993 , 95, 477-87	2.3	71
241	The peripheral-chemoreceptor threshold to carbon dioxide in man. <i>Journal of Physiology</i> , 1988 , 406, 15	- 2 569	71
240	Respiratory pre-motor control of hypoglossal motoneurons in the rat. <i>Neuroscience</i> , 2002 , 110, 711-22	3.9	70
239	Measuring central-chemoreflex sensitivity in man: rebreathing and steady-state methods compared. <i>Respiration Physiology</i> , 1999 , 115, 23-33		70
238	Measuring cerebrovascular reactivity: the dynamic response to a step hypercapnic stimulus. <i>Journal of Cerebral Blood Flow and Metabolism</i> , 2015 , 35, 1746-56	7.3	62
237	Development of White Matter Hyperintensity Is Preceded by Reduced Cerebrovascular Reactivity. <i>Annals of Neurology</i> , 2016 , 80, 277-85	9.4	62
236	Repeated hypoxic exposures change respiratory chemoreflex control in humans. <i>Journal of Physiology</i> , 2001 , 534, 595-603	3.9	62
235	Functional organization of respiratory neurones: a brief review of current questions and speculations. <i>Experimental Physiology</i> , 2004 , 89, 517-29	2.4	60
234	Pacemakers handshake synchronization mechanism of mammalian respiratory rhythmogenesis. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2008 , 105, 18000-5	11.5	59
233	Neuroimaging Assessment of Cerebrovascular Reactivity in Concussion: Current Concepts, Methodological Considerations, and Review of the Literature. <i>Frontiers in Neurology</i> , 2016 , 7, 61	4.1	59
232	The effect of exercise on the central-chemoreceptor threshold in man. <i>Journal of Physiology</i> , 1987 , 383, 9-18	3.9	56
231	Assessing cerebrovascular reactivity abnormality by comparison to a reference atlas. <i>Journal of Cerebral Blood Flow and Metabolism</i> , 2015 , 35, 213-20	7.3	54
230	Brain magnetic resonance imaging CO2 stress testing in adolescent postconcussion syndrome. Journal of Neurosurgery, 2016 , 125, 648-60	3.2	54
229	The effects of hypercapnia, hypoxia, exercise and anxiety on the pattern of breathing in man. <i>Journal of Physiology</i> , 1979 , 293, 285-300	3.9	54
228	Spinal connections of ventral-group bulbospinal inspiratory neurons studied with cross-correlation in the decerebrate rat. <i>Experimental Brain Research</i> , 1996 , 111, 178-86	2.3	53
227	Monosynaptic excitation of thoracic motoneurones by inspiratory neurones of the nucleus tractus solitarius in the cat. <i>Journal of Physiology</i> , 1987 , 390, 415-31	3.9	52

226	Ten-year experience with extracorporeal membrane oxygenation for severe respiratory failure. <i>Chest</i> , 1988 , 94, 681-7	5.3	52
225	Cross correlation of medullary expiratory neurons in the cat. <i>Experimental Neurology</i> , 1981 , 73, 451-64	5.7	52
224	Circadian rhythms in the chemoreflex control of breathing. <i>American Journal of Physiology - Regulatory Integrative and Comparative Physiology</i> , 2000 , 278, R282-6	3.2	51
223	The chemoreflex control of breathing and its measurement. <i>Canadian Journal of Anaesthesia</i> , 1990 , 37, 933-42	3	50
222	Btzinger-complex expiratory neurons monosynaptically inhibit phrenic motoneurons in the decerebrate rat. <i>Experimental Brain Research</i> , 1998 , 122, 149-56	2.3	48
221	The dynamics of cerebrovascular reactivity shown with transfer function analysis. <i>NeuroImage</i> , 2015 , 114, 207-16	7.9	47
220	Respiratory control of hypoglossal motoneurones in the rat. <i>Pflugers Archiv European Journal of Physiology</i> , 2001 , 442, 78-86	4.6	47
219	BEzinger-complex, bulbospinal expiratory neurones monosynaptically inhibit ventral-group respiratory neurones in the decerebrate rat. <i>Experimental Brain Research</i> , 1999 , 124, 173-80	2.3	47
218	The interaction of carbon dioxide and hypoxia in the control of cerebral blood flow. <i>Pflugers Archiv European Journal of Physiology</i> , 2012 , 464, 345-51	4.6	46
217	Factors affecting the determination of cerebrovascular reactivity. <i>Brain and Behavior</i> , 2014 , 4, 775-88	3.4	45
216	Decreased chemosensitivity and improvement of sleep apnea by nocturnal hemodialysis. <i>Sleep Medicine</i> , 2009 , 10, 47-54	4.6	45
215	The role of the central chemoreceptors: a modeling perspective. <i>Respiratory Physiology and Neurobiology</i> , 2010 , 173, 230-43	2.8	45
214	Connections from upper cervical inspiratory neurons to phrenic and intercostal motoneurons studied with cross-correlation in the decerebrate rat. <i>Experimental Brain Research</i> , 1996 , 110, 196-204	2.3	45
213	Physiological mechanisms of hyperventilation during human pregnancy. <i>Respiratory Physiology and Neurobiology</i> , 2008 , 161, 76-86	2.8	44
212	Sudden cold water immersion. <i>Respiration Physiology</i> , 1975 , 23, 301-10		42
211	The ventilatory response to hypoxia below the carbon dioxide threshold. <i>Applied Physiology, Nutrition, and Metabolism</i> , 1997 , 22, 23-36		40
21 0	Adaptation in the respiratory control system. <i>Canadian Journal of Physiology and Pharmacology</i> , 2003 , 81, 765-73	2.4	40
209	Phenotyping interindividual variability in obstructive sleep apnoea response to temazepam using ventilatory chemoreflexes during wakefulness. <i>Journal of Sleep Research</i> , 2011 , 20, 526-32	5.8	38

208	A model of respiratory rhythm generation. <i>NeuroReport</i> , 1991 , 2, 623-6	1.7	38
207	Entrainment, instability, quasi-periodicity, and chaos in a compound neural oscillator. <i>Journal of Computational Neuroscience</i> , 1998 , 5, 35-51	1.4	37
206	Dural tissue trauma and cerebrospinal fluid leak after epidural needle puncture: effect of needle design, angle, and bevel orientation. <i>Anesthesiology</i> , 2003 , 99, 1376-82	4.3	36
205	Bilateral connections from ventral group inspiratory neurons to phrenic motoneurons in the rat determined by cross-correlation. <i>Brain Research</i> , 1995 , 694, 55-60	3.7	35
204	Carotid chemoreceptors in ventilatory responses to changes in venous CO2 load. <i>Journal of Applied Physiology</i> , 1981 , 51, 1398-403	3.7	35
203	Inhibition of inspiratory neurons of the nucleus retroambigualis by expiratory neurons of the Botzinger complex in the cat. <i>Experimental Neurology</i> , 1989 , 106, 74-7	5.7	34
202	The medullary respiratory neurons: a review. <i>Canadian Journal of Physiology and Pharmacology</i> , 1984 , 62, 161-82	2.4	34
201	Approaches to brain stress testing: BOLD magnetic resonance imaging with computer-controlled delivery of carbon dioxide. <i>PLoS ONE</i> , 2012 , 7, e47443	3.7	33
200	Extracorporeal membrane oxygenator support for human lung transplantation. <i>Journal of Thoracic and Cardiovascular Surgery</i> , 1978 , 76, 28-32	1.5	33
199	Comparing the effect of hypercapnia and hypoxia on the electroencephalogram during wakefulness. <i>Clinical Neurophysiology</i> , 2015 , 126, 103-9	4.3	32
198	Patient-Specific Alterations in CO Cerebrovascular Responsiveness in Acute and Sub-Acute Sports-Related Concussion. <i>Frontiers in Neurology</i> , 2018 , 9, 23	4.1	32
197	Effects of stimulation of phrenic afferents on cervical respiratory interneurones and phrenic motoneurones in cats. <i>Journal of Physiology</i> , 1996 , 497 (Pt 3), 803-12	3.9	31
196	Overnight changes of chemoreflex control in obstructive sleep apnoea patients. <i>Respiratory Physiology and Neurobiology</i> , 2005 , 146, 279-90	2.8	31
196 195		2.8	31
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195 194	Physiology and Neurobiology, 2005, 146, 279-90 Cerebral blood flow responses to changes in oxygen and carbon dioxide in humans. Canadian Journal of Physiology and Pharmacology, 2002, 80, 819-27 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, 537-41 The ventilation, lactate and electromyographic thresholds during incremental exercise tests in normoxia, hypoxia and hyperoxia. European Journal of Applied Physiology and Occupational		31

190	Role of upper cervical inspiratory neurons studied by cross-correlation in the cat. <i>Experimental Brain Research</i> , 1992 , 90, 153-62	2.3	29
189	The ventilatory response to carbon dioxide in hyperoxic exercise. <i>Respiration Physiology</i> , 1980 , 40, 93-1	05	29
188	Simultaneous assessment of central and peripheral chemoreflex regulation of muscle sympathetic nerve activity and ventilation in healthy young men. <i>Journal of Physiology</i> , 2019 , 597, 3281-3296	3.9	28
187	Cerebrovascular reactivity and white matter integrity. <i>Neurology</i> , 2016 , 87, 2333-2339	6.5	28
186	The aging brain and cerebrovascular reactivity. <i>NeuroImage</i> , 2018 , 181, 132-141	7.9	28
185	Changes in respiratory control after 5 days at altitude. <i>Respiratory Physiology and Neurobiology</i> , 2005 , 145, 41-52	2.8	28
184	The effect of treadmill speed on ventilation at the start of exercise in man. <i>Journal of Physiology</i> , 1987 , 391, 13-24	3.9	28
183	Central-peripheral respiratory chemoreflex interaction in humans. <i>Respiratory Physiology and Neurobiology</i> , 2012 , 180, 126-31	2.8	27
182	The role of dorsal respiratory group neurons studied with cross-correlation in the decerebrate rat. <i>Experimental Brain Research</i> , 1998 , 121, 29-34	2.3	27
181	The contribution of chemoreflex drives to resting breathing in man. <i>Experimental Physiology</i> , 2001 , 86, 109-16	2.4	27
180	Nucleus raphlbbscurus modulates hypoglossal output of neonatal rat in vitro transverse brain stem slices. <i>Journal of Applied Physiology</i> , 2001 , 90, 269-79	3.7	27
179	Sequential gas delivery provides precise control of alveolar gas exchange. <i>Respiratory Physiology and Neurobiology</i> , 2016 , 225, 60-9	2.8	27
178	Assessing cerebrovascular reactivity by the pattern of response to progressive hypercapnia. <i>Human Brain Mapping</i> , 2017 , 38, 3415-3427	5.9	26
177	The in-vivo oxyhaemoglobin dissociation curve at sea level and high altitude. <i>Respiratory Physiology and Neurobiology</i> , 2013 , 186, 45-52	2.8	26
176	The respiratory effects of two modes of passive exercise. <i>European Journal of Applied Physiology</i> , 2003 , 88, 544-52	3.4	26
175	Changes in respiratory control after three hours of isocapnic hypoxia in humans. <i>Journal of Physiology</i> , 2003 , 547, 271-81	3.9	26
174	Longitudinal Brain Magnetic Resonance Imaging CO2 Stress Testing in Individual Adolescent Sports-Related Concussion Patients: A Pilot Study. <i>Frontiers in Neurology</i> , 2016 , 7, 107	4.1	26
173	Functional synaptic connections among respiratory neurons. <i>Respiration Physiology</i> , 2000 , 122, 237-46		25

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172	Axonal projections and synaptic connections of C5 segment expiratory interneurones in the cat. <i>Journal of Physiology</i> , 1993 , 470, 431-44	3.9	25
171	Vascular Dysfunction in Leukoaraiosis. <i>American Journal of Neuroradiology</i> , 2016 , 37, 2258-2264	4.4	24
170	End-inspiratory rebreathing reduces the end-tidal to arterial PCO2 gradient in mechanically ventilated pigs. <i>Intensive Care Medicine</i> , 2011 , 37, 1543-50	14.5	24
169	Rapid increases in ventilation accompany the transition from passive to active movement. <i>Respiratory Physiology and Neurobiology</i> , 2006 , 152, 128-42	2.8	24
168	The possible role of C5 segment inspiratory interneurons investigated by cross-correlation with phrenic motoneurons in decerebrate cats. <i>Experimental Brain Research</i> , 1996 , 112, 35-40	2.3	24
167	Excitation of upper cervical inspiratory neurons by inspiratory neurons of the nucleus retroambigualis in the cat. <i>Experimental Neurology</i> , 1987 , 98, 404-17	5.7	24
166	Relationship between retinal blood flow and arterial oxygen. <i>Journal of Physiology</i> , 2016 , 594, 625-40	3.9	24
165	Cerebrovascular Resistance: The Basis of Cerebrovascular Reactivity. <i>Frontiers in Neuroscience</i> , 2018 , 12, 409	5.1	23
164	Cross-Talk opposing view: peripheral and central chemoreflexes have additive effects on ventilation in humans. <i>Journal of Physiology</i> , 2013 , 591, 4351-3	3.9	23
163	Coincidental changes in ventilation and electromyographic activity during consecutive incremental exercise tests. <i>European Journal of Applied Physiology and Occupational Physiology</i> , 1994 , 68, 54-61		23
162	Entrained breathing and oxygen consumption during treadmill walking. <i>Applied Physiology, Nutrition, and Metabolism</i> , 1994 , 19, 432-40		23
161	Excitation of upper cervical inspiratory neurons by inspiratory neurons of the nucleus tractus solitarius in the cat. <i>Experimental Neurology</i> , 1987 , 95, 126-41	5.7	23
160	Projections from upper cervical inspiratory neurons to thoracic and lumbar expiratory motor nuclei in the cat. <i>Experimental Neurology</i> , 1988 , 99, 544-55	5.7	23
159	Limbic forebrain and midbrain modulation and phase-switching of expiratory neurons. <i>Brain Research</i> , 1972 , 39, 235-9	3.7	23
158	A commentary on eupnoea and gasping. Respiratory Physiology and Neurobiology, 2003, 139, 105-11	2.8	22
157	Temperature and pH affect respiratory rhythm of in-vitro preparations from neonatal rats. <i>Respiration Physiology</i> , 1999 , 117, 97-107		22
156	Identification of a novel form of noradrenergic-dependent respiratory motor plasticity triggered by vagal feedback. <i>Journal of Neuroscience</i> , 2010 , 30, 16886-95	6.6	21
155	Inhibitory connections among rostral medullary expiratory neurones detected with cross-correlation in the decerebrate rat. <i>Pflugers Archiv European Journal of Physiology</i> , 2003 , 446, 365-	7 2 .6	21

154	The contribution of peripheral chemoreceptors to ventilation during heavy exercise. <i>Respiration Physiology</i> , 1987 , 68, 203-13		21
153	Cross-correlation of medullary dorsomedial inspiratory neurons in the cat. <i>Experimental Neurology</i> , 1982 , 75, 627-43	5.7	21
152	Differences in the control of breathing between Himalayan and sea-level residents. <i>Journal of Physiology</i> , 2010 , 588, 1591-606	3.9	20
151	Central and peripheral chemoreflexes in panic disorder. <i>Psychiatry Research</i> , 2002 , 113, 181-92	9.9	20
150	Projections from inspiratory neurons of the nucleus retroambigualis to phrenic motoneurons in the cat. <i>Experimental Neurology</i> , 1989 , 105, 306-10	5.7	20
149	Intracellular recordings from upper cervical inspiratory neurons in the cat. <i>Brain Research</i> , 1987 , 435, 351-4	3.7	20
148	Cross-correlation of medullary respiratory neurons in the cat. Experimental Neurology, 1978, 61, 15-30	5.7	20
147	The role of vascular resistance in BOLD responses to progressive hypercapnia. <i>Human Brain Mapping</i> , 2017 , 38, 5590-5602	5.9	19
146	The initial phase of exercise hyperpnoea in humans is depressed during a cognitive task. Experimental Physiology, 2005 , 90, 357-65	2.4	19
145	Increased carbon monoxide clearance during exercise in humans. <i>Medicine and Science in Sports and Exercise</i> , 2012 , 44, 2118-24	1.2	18
144	Respiratory response to passive limb movement is suppressed by a cognitive task. <i>Journal of Applied Physiology</i> , 2004 , 97, 2112-20	3.7	18
143	Mutual inhibition between BEzinger-complex bulbospinal expiratory neurons detected with cross-correlation in the decerebrate rat. <i>Experimental Brain Research</i> , 1999 , 125, 440-6	2.3	18
142	BEzinger expiratory neurones inhibit propriobulbar decrementing inspiratory neurones. <i>NeuroReport</i> , 1993 , 4, 1215-8	1.7	18
141	The propriobulbar respiratory neurons in the cat. Experimental Brain Research, 1990, 81, 213-20	2.3	18
140	The effect of acute morphine on obstructive sleep apnoea: a randomised double-blind placebo-controlled crossover trial. <i>Thorax</i> , 2019 , 74, 177-184	7.3	18
139	Differences in the control of breathing between Andean highlanders and lowlanders after 10 days acclimatization at 3850 m. <i>Journal of Physiology</i> , 2010 , 588, 1607-21	3.9	17
138	Connections between respiratory neurones in the neonatal rat transverse medullary slice studied with cross-correlation. <i>Journal of Physiology</i> , 2003 , 549, 327-32	3.9	17
137	Neural drives to breathing during exercise. <i>Applied Physiology, Nutrition, and Metabolism</i> , 1994 , 19, 289	-304	17

136	A mathematical model of the chemoreflex control of ventilation. <i>Respiration Physiology</i> , 1972 , 15, 277-30)1	17
135	Cerebrovascular Resistance in Healthy Aging and Mild Cognitive Impairment. <i>Frontiers in Aging Neuroscience</i> , 2019 , 11, 79	5.3	16
134	The fast exercise drive to breathe. <i>Journal of Physiology</i> , 2014 , 592, 445-51	3.9	16
133	Rapid elimination of CO through the lungs: coming full circle 100 years on. <i>Experimental Physiology</i> , 2011 , 96, 1262-9	2.4	16
132	Synchronization of ventral-group, bulbospinal inspiratory neurons in the decerebrate rat. Experimental Brain Research, 1997 , 117, 479-87	2.3	16
131	Long-term facilitation of breathing is absent after episodes of hypercapnic hypoxia in awake humans. <i>Respiratory Physiology and Neurobiology</i> , 2007 , 156, 132-6	2.8	16
130	Changes in ventilation in response to ramp changes in treadmill exercise load. <i>European Journal of Applied Physiology and Occupational Physiology</i> , 1992 , 65, 480-4		16
129	Changes in chemoreflex characteristics following acute carbonic anhydrase inhibition in humans at rest. <i>Experimental Physiology</i> , 2000 , 85, 847-56	2.4	16
128	MRI-based cerebrovascular reactivity using transfer function analysis reveals temporal group differences between patients with sickle cell disease and healthy controls. <i>NeuroImage: Clinical</i> , 2016 , 12, 624-630	5.3	15
127	Inspiratory activation is not required for episodic hypoxia-induced respiratory long-term facilitation in postnatal rats. <i>Journal of Physiology</i> , 2007 , 585, 593-606	3.9	15
126	Anxiety sensitivity as a predictor of panic attacks. <i>Psychiatry Research</i> , 2004 , 129, 273-8	9.9	15
125	The connections from botzinger expiratory neurons to upper cervical inspiratory neurons in the cat. <i>Experimental Neurology</i> , 1989 , 104, 138-46	5.7	15
124	The effect of halothane and thiopentone on ventilatory responses mediated bythe peripheral chemoreceptors in man. <i>British Journal of Anaesthesia</i> , 1976 , 48, 975-81	5.4	15
123	Rates of carbon monoxide elimination in males and females. <i>Physiological Reports</i> , 2014 , 2, e12237	2.6	14
122	Instability of the middle cerebral artery blood flow in response to CO2. <i>PLoS ONE</i> , 2013 , 8, e70751	3.7	14
121	Bilateral synchronisation of respiratory motor output in rats: adult versus neonatal in vitro preparations. <i>Pflugers Archiv European Journal of Physiology</i> , 2001 , 442, 943-51	4.6	14
120	Cross-correlation of ventrolateral inspiratory neurons in the cat. <i>Experimental Neurology</i> , 1984 , 83, 233-5	3 7	14
119	The effect of ethanol on the ventilatory responses mediated by the peripheral chemoreceptors in man. Canadian AnaesthetistsoSociety Journal, 1978, 25, 181-90		14

118	The ventilatory response to sine wave variation in exercise loads and limb movement frequency. <i>Respiratory Physiology and Neurobiology</i> , 2007 , 158, 45-50	2.8	13
117	Transmission of respiratory rhythm: midline-crossing connections at the level of the phrenic motor nucleus?. <i>Respiratory Physiology and Neurobiology</i> , 2006 , 153, 139-47	2.8	13
116	Cross-correlation of augmenting expiratory neurons of the BEzinger complex in the cat. <i>Experimental Brain Research</i> , 1995 , 103, 251-5	2.3	13
115	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, 234-40		13
114	Cannulation of ascending aorta for long-term membrane oxygenator support. <i>Journal of Thoracic and Cardiovascular Surgery</i> , 1975 , 69, 905-908	1.5	13
113	Cerebral oxygen saturation: graded response to carbon dioxide with isoxia and graded response to oxygen with isocapnia. <i>PLoS ONE</i> , 2013 , 8, e57881	3.7	13
112	Improved White Matter Cerebrovascular Reactivity after Revascularization in Patients with Steno-Occlusive Disease. <i>American Journal of Neuroradiology</i> , 2019 , 40, 45-50	4.4	13
111	Evaluation of Cerebrovascular Reactivity in Subjects with and without Obstructive Sleep Apnea. Journal of Stroke and Cerebrovascular Diseases, 2018 , 27, 162-168	2.8	12
110	Non-invasive accurate measurement of arterial PCO2 in a pediatric animal model. <i>Journal of Clinical Monitoring and Computing</i> , 2013 , 27, 147-55	2	12
109	Post-operative hypercapnia-induced hyperpnoea accelerates recovery from sevoflurane anaesthesia: a prospective randomised controlled trial. <i>Acta Anaesthesiologica Scandinavica</i> , 2013 , 57, 623-30	1.9	12
108	Increased lung clearance of isoflurane shortens emergence in obesity: a prospective randomized-controlled trial. <i>Acta Anaesthesiologica Scandinavica</i> , 2011 , 55, 995-1001	1.9	12
107	Epidural catheter penetration of human dural tissue: in vitro investigation. <i>Anesthesiology</i> , 2004 , 100, 1491-6	4.3	12
106	Effects of tryptophan depletion on central and peripheral chemoreflexes in man. <i>Respiratory Physiology and Neurobiology</i> , 2002 , 133, 183-95	2.8	12
105	Changes in respiration in the transition from heavy exercise to rest. <i>European Journal of Applied Physiology and Occupational Physiology</i> , 1988 , 57, 606-10		12
104	The recruitment times and firing patterns of the medullary respiratory neurones of the cat. <i>Respiration Physiology</i> , 1978 , 34, 247-66		12
103	Phase-switching of respiration induced by central gray and hippocampal stimulation in the cat. <i>Journal of Neural Transmission</i> , 1974 , 35, 327-35	4.3	12
102	T2* and T1 assessment of abdominal tissue response to graded hypoxia and hypercapnia using a controlled gas mixing circuit for small animals. <i>Journal of Magnetic Resonance Imaging</i> , 2016 , 44, 305-16	5.6	12
101	CO2 does not affect passive exercise ventilatory decline. <i>Journal of Applied Physiology</i> , 2003 , 95, 322-9	3.7	11

100	The chemical regulation of ventilation. <i>Anaesthesia</i> , 1971 , 26, 142-54	6.6	11
99	A non-invasive magnetic resonance imaging approach for assessment of real-time microcirculation dynamics. <i>Scientific Reports</i> , 2017 , 7, 7468	4.9	10
98	The changes in ventilation and heart rate at the start of treadmill exercise. <i>Canadian Journal of Physiology and Pharmacology</i> , 1983 , 61, 120-6	2.4	10
97	Response of the dorsomedial respiratory neurons of cats to changes in lung volume. <i>Experimental Neurology</i> , 1980 , 69, 334-48	5.7	10
96	A mathematical model of cerebral blood flow control in anaemia and hypoxia. <i>Journal of Physiology</i> , 2020 , 598, 717-730	3.9	10
95	Measurement of Cerebrovascular Reactivity as Blood Oxygen Level-Dependent Magnetic Resonance Imaging Signal Response to a Hypercapnic Stimulus in Mechanically Ventilated Patients. <i>Journal of Stroke and Cerebrovascular Diseases</i> , 2018 , 27, 301-308	2.8	9
94	Normal hypercapnic cerebrovascular conductance in obstructive sleep apnea. <i>Respiratory Physiology and Neurobiology</i> , 2014 , 190, 47-53	2.8	9
93	A Novel Stress-Diathesis Model to Predict Risk of Post-operative Delirium: Implications for Intra-operative Management. <i>Frontiers in Aging Neuroscience</i> , 2017 , 9, 274	5.3	9
92	Respiratory, cerebrovascular and cardiovascular responses to isocapnic hypoxia. <i>Respiratory Physiology and Neurobiology</i> , 2011 , 179, 259-68	2.8	9
91	Bilateral coordination of inspiratory neurones in the rat. <i>Pflugers Archiv European Journal of Physiology</i> , 2002 , 443, 829-35	4.6	9
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