Ana C Takakura

List of Publications by Year
in descending order

123 papers	3,281 citations	159585 30 h-index	182427 51 g-index
135 all docs	135 docs citations	135 times ranked	1786 citing authors

#	Article	IF	Citations
1	Respiratory disorders of Parkinsonâ€™s disease. Journal of Neurophysiology, 2022, 127, 1-15.	1.8	11
2	A5 noradrenergicâ€projecting C1 neurons activate sympathetic and breathing outputs in anaesthetized rats. Experimental Physiology, 2022, 107, 147-160.	2.0	8
3	Editorial: Integrative Physiology: Systemic Hypertension and Respiratory-Sympathetic Coupling. Frontiers in Physiology, 2022, 13, 841001.	2.8	0
4	5â€HT7 receptors expressed in the mouse parafacial region are not required for respiratory chemosensitivity. Journal of Physiology, 2022, 600, 2789-2811.	2.9	5
5	Inhibition of anandamide hydrolysis does not rescue respiratory abnormalities observed in an animal model of Parkinson's disease. Experimental Physiology, 2022, 107, 161-174.	2.0	0
6	Medullary astrocytes mediate irregular breathing patterns generation in chronic heart failure through purinergic P2X7 receptor signalling. EBioMedicine, 2022, 80, 104044.	6.1	2
7	Regulation of blood vessels by ATP in the ventral medullary surface in a rat model of Parkinsonâ€™s disease. Brain Research Bulletin, 2022, 187, 138-154.	3.0	1
8	The effect of central growth hormone action on hypoxia ventilatory response in conscious mice. Brain Research, 2022, 1791, 147995.	2.2	3
9	Neonatal apneic phenotype in a murine congenital central hypoventilation syndrome model is induced through nonâ€cell autonomous developmental mechanisms. Brain Pathology, 2021, 31, 84-102.	4.1	16
10	The retrotrapezoid nucleus and the neuromodulation of breathing. Journal of Neurophysiology, 2021, 125, 699-719.	1.8	14
11	BÃ¶tzinger inhibitory neurons and the control of active expiration. Journal of Physiology, 2021, 599, 1945-1947.	2.9	0
12	Baroreflex dysfunction in Parkinsonâ€™s disease: integration of central and peripheral mechanisms. Journal of Neurophysiology, 2021, 125, 1425-1439.	1.8	12
13	Unraveling the Mechanisms Underlying Irregularities in Inspiratory Rhythm Generation in a Mouse Model of Parkinson's Disease. Journal of Neuroscience, 2021, 41, 4732-4747.	3.6	18
14	Machine learning approaches reveal subtle differences in breathing and sleep fragmentation in<i>Phox2b</i>-derived astrocytes ablated mice. Journal of Neurophysiology, 2021, 125, 1164-1179.	1.8	3
15	Phox2bâ€expressing neurons of the retrotrapezoid nucleus regulate postâ€inspiration in conscious mice. FASEB Journal, 2021, 35, .	0.5	0
16	Excitatory and inhibitory modulation of parafacial respiratory neurons in the control of active expiration. Respiratory Physiology and Neurobiology, 2021, 289, 103657.	1.6	4
17	Forebrain and Hindbrain Projecting-neurons Target the Post-inspiratory Complex Cholinergic Neurons. Neuroscience, 2021, 476, 102-115.	2.3	8
18	Depletion of hypothalamic hypocretin/orexin neurons correlates with impaired memory in a Parkinson's disease animal model. Experimental Neurology, 2020, 323, 113110.	4.1	11

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19	Episodic stimulation of central chemoreceptor neurons elicits disordered breathing and autonomic dysfunction in volume overload heart failure. American Journal of Physiology - Lung Cellular and Molecular Physiology, 2020, 318, L27-L40.	2.9	15
20	Hypertension and sympathetic nervous system overactivity rely on the vascular tone of pial vessels of the rostral ventrolateral medulla in spontaneously hypertensive rats. Experimental Physiology, 2020, 105, 65-74.	2.0	5
21	Oxidative stress in the medullary respiratory neurons contributes to respiratory dysfunction in the 6â€OHDA model of Parkinson's disease. Journal of Physiology, 2020, 598, 5271-5293.	2.9	9
22	Stimulation of retrotrapezoid nucleus Phox2bâ€expressing neurons rescues breathing dysfunction in an experimental Parkinsonâ€™s disease rat model. Brain Pathology, 2020, 30, 926-944.	4.1	9
23	Attenuated baroreflex in a Parkinson's disease animal model coincides with impaired activation of non-C1 neurons. Autonomic Neuroscience: Basic and Clinical, 2020, 225, 102655.	2.8	8
24	GABAergic neurons of the medullary raphe regulate active expiration during hypercapnia. Journal of Neurophysiology, 2020, 123, 1933-1943.	1.8	8
25	Pilocarpine-induced status epilepticus reduces chemosensory control of breathing. Brain Research Bulletin, 2020, 161, 98-105.	3.0	7
26	C1 neurons are part of the circuitry that recruits active expiration in response to the activation of peripheral chemoreceptors. ELife, 2020, 9, .	6.0	24
27	Vascular control of the CO2/H+-dependent drive to breathe. ELife, 2020, 9, .	6.0	23
28	M4-muscarinic acetylcholine receptor into the pedunculopontine tegmental nucleus mediates respiratory modulation of conscious rats. Respiratory Physiology and Neurobiology, 2019, 269, 103254.	1.6	4
29	Distinct pathways to the parafacial respiratory group to trigger active expiration in adult rats. American Journal of Physiology - Lung Cellular and Molecular Physiology, 2019, 317, L402-L413.	2.9	16
30	Rostral ventrolateral medullary catecholaminergic neurones mediate irregular breathing pattern in volume overload heart failure rats. Journal of Physiology, 2019, 597, 5799-5820.	2.9	14
31	The role of PHOX2Bâ€derived astrocytes in chemosensory control of breathing and sleep homeostasis. Journal of Physiology, 2019, 597, 2225-2251.	2.9	27
32	Amygdala rapid kindling impairs breathing in response to chemoreflex activation. Brain Research, 2019, 1718, 159-168.	2.2	15
33	Cholinergic neurons in the pedunculopontine tegmental nucleus modulate breathing in rats by direct projections to the retrotrapezoid nucleus. Journal of Physiology, 2019, 597, 1919-1934.	2.9	21
34	Respiratory disturbances in a mouse model of Parkinson's disease. Experimental Physiology, 2019, 104, 729-739.	2.0	28
35	Ablation of brainstem C1 neurons improves cardiac function in volume overload heart failure. Clinical Science, 2019, 133, 393-405.	4.3	20
36	The involvement of the pathway connecting the substantia nigra, the periaqueductal gray matter and the retrotrapezoid nucleus in breathing control in a rat model of Parkinson's disease. Experimental Neurology, 2018, 302, 46-56.	4.1	36

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37	Minocycline alters expression of inflammatory markers in autonomic brain areas and ventilatory responses induced by acute hypoxia. Experimental Physiology, 2018, 103, 884-895.	2.0	18
38	Impaired chemosensory control of breathing after depletion of bulbospinal catecholaminergic neurons in rats. Pflugers Archiv European Journal of Physiology, 2018, 470, 277-293.	2.8	11
39	Raphe Pallidus is Not Important to Central Chemoreception in a Rat Model of Parkinsonâ€™s Disease. Neuroscience, 2018, 369, 350-362.	2.3	9
40	Interaction between the retrotrapezoid nucleus and the parafacial respiratory group to regulate active expiration and sympathetic activity in rats. American Journal of Physiology - Lung Cellular and Molecular Physiology, 2018, 315, L891-L909.	2.9	42
41	Inhibition of the hypercapnic ventilatory response by adenosine in the retrotrapezoid nucleus in awake rats. Neuropharmacology, 2018, 138, 47-56.	4.1	14
42	Correlation between neuroanatomical and functional respiratory changes observed in an experimental model of Parkinson's disease. Experimental Physiology, 2018, 103, 1377-1389.	2.0	31
43	Breathing responses produced by optogenetic stimulation of adrenergic C1 neurons are dependent on the connection with preBÃ¶tzinger complex in rats. Pflugers Archiv European Journal of Physiology, 2018, 470, 1659-1672.	2.8	21
44	Orexinergic neurons are involved in the chemosensory control of breathing during the dark phase in a Parkinson's disease model. Experimental Neurology, 2018, 309, 107-118.	4.1	22
45	Central and Peripheral Respiratory Disturbances in a Mice Model of Parkinson's Disease. FASEB Journal, 2018, 32, 894.9.	0.5	0
46	Selective Depletion of Astrocytes Derived From a Phox2bâ€Progenitor Domain Reduces Hypoxia Ventilatory Response in Conscious Mice. FASEB Journal, 2018, 32, 894.7.	0.5	0
47	Role of the locus coeruleus catecholaminergic neurons in the chemosensory control of breathing in a Parkinson's disease model. Experimental Neurology, 2017, 293, 172-180.	4.1	43
48	Role of A5 noradrenergic neurons in the chemoreflex control of respiratory and sympathetic activities in unanesthetized conditions. Neuroscience, 2017, 354, 146-157.	2.3	17
49	Depletion of rostral ventrolateral medullary catecholaminergic neurons impairs the hypoxic ventilatory response in conscious rats. Neuroscience, 2017, 351, 1-14.	2.3	27
50	Cardiovascular dysfunction associated with neurodegeneration in an experimental model of Parkinsonâ€™s disease. Brain Research, 2017, 1657, 156-166.	2.2	34
51	Fluorocitrate-mediated depolarization of astrocytes in the retrotrapezoid nucleus stimulates breathing. Journal of Neurophysiology, 2017, 118, 1690-1697.	1.8	26
52	Impaired central respiratory chemoreflex in an experimental genetic model of epilepsy. Journal of Physiology, 2017, 595, 983-999.	2.9	21
53	Purinergic regulation of vascular tone in the retrotrapezoid nucleus is specialized to support the drive to breathe. ELife, 2017, 6, .	6.0	42
54	Purinergic receptor blockade in the retrotrapezoid nucleus attenuates the respiratory chemoreflexes in awake rats. Acta Physiologica, 2016, 217, 80-93.	3.8	23

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55	In vitro characterization of noradrenergic modulation of chemosensitive neurons in the retrotrapezoid nucleus. Journal of Neurophysiology, 2016, 116, 1024-1035.	1.8	21
56	Respiratory and autonomic dysfunction in congenital central hypoventilation syndrome. Journal of Neurophysiology, 2016, 116, 742-752.	1.8	43
57	The retrotrapezoid nucleus as a central brainstem area for central and peripheral chemoreceptor interactions. Experimental Physiology, 2016, 101, 455-456.	2.0	5
58	Acute hypoxia activates hypothalamic paraventricular nucleus-projecting catecholaminergic neurons in the C1 region. Experimental Neurology, 2016, 285, 1-11.	4.1	23
59	Î±₁- and Î±₂-adrenergic receptors in the retrotrapezoid nucleus differentially regulate breathing in anesthetized adult rats. Journal of Neurophysiology, 2016, 116, 1036-1048.	1.8	26
60	Area postrema undergoes dynamic postnatal changes in mice and humans. Journal of Comparative Neurology, 2016, 524, 1259-1269.	1.6	11
61	Inhibition of the pontine KÃ¶lliker-Fuse nucleus reduces genioglossal activity elicited by stimulation of the retrotrapezoid chemoreceptor neurons. Neuroscience, 2016, 328, 9-21.	2.3	33
62	GABA mechanisms of the nucleus of the solitary tract regulates the cardiovascular and sympathetic effects of moxonidine. Autonomic Neuroscience: Basic and Clinical, 2016, 194, 1-7.	2.8	6
63	Neuroanatomical and physiological evidence that the retrotrapezoid nucleus/parafacial region regulates expiration in adult rats. Respiratory Physiology and Neurobiology, 2016, 227, 9-22.	1.6	40
64	HCN channels contribute to serotonergic modulation of ventral surface chemosensitive neurons and respiratory activity. Journal of Neurophysiology, 2015, 113, 1195-1205.	1.8	43
65	Brainstem areas activated by intermittent apnea in awake unrestrained rats. Neuroscience, 2015, 297, 262-271.	2.3	11
66	Respiratory deficits in a rat model of Parkinsonâ€™s disease. Neuroscience, 2015, 297, 194-204.	2.3	50
67	Independent purinergic mechanisms of central and peripheral chemoreception in the rostral ventrolateral medulla. Journal of Physiology, 2015, 593, 1067-1074.	2.9	12
68	Molecular underpinnings of ventral surface chemoreceptor function: focus on KCNQ channels. Journal of Physiology, 2015, 593, 1075-1081.	2.9	9
69	Respiratory and sympathetic chemoreflex regulation by KÃ¶lliker-Fuse neurons in rats. Pflugers Archiv European Journal of Physiology, 2015, 467, 231-239.	2.8	12
70	Baroreflex impairment in a rat model of Parkinson's disease. FASEB Journal, 2015, 29, .	0.5	0
71	Selective inhibition of the adrenergic C1 neurons reduces the hypoxic ventilatory response in unanesthetized rats. FASEB Journal, 2015, 29, 652.24.	0.5	1
72	Regulation of the chemosensory control of breathing by KÃ¶lliker-Fuse neurons. American Journal of Physiology - Regulatory Integrative and Comparative Physiology, 2014, 307, R57-R67.	1.8	42

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73	Phox2bâ€expressing retrotrapezoid neurons and the integration of central and peripheral chemosensory control of breathing in conscious rats. Experimental Physiology, 2014, 99, 571-585.	2.0	70
74	Purinergic signalling contributes to chemoreception in the retrotrapezoid nucleus but not the nucleus of the solitary tract or medullary raphe. Journal of Physiology, 2014, 592, 1309-1323.	2.9	41
75	Acute exercise-induced activation of Phox2b-expressing neurons of the retrotrapezoid nucleus in rats may involve the hypothalamus. Neuroscience, 2014, 258, 355-363.	2.3	39
76	Control of breathing and blood pressure by parafacial neurons in conscious rats. Experimental Physiology, 2013, 98, 304-315.	2.0	19
77	Activation of central Î±2-adrenoceptors mediates salivary gland vasoconstriction. Archives of Oral Biology, 2013, 58, 167-173.	1.8	5
78	Is carotid body input the only critical mechanism involved in hypertension in spontaneously hypertensive rat?. Journal of Physiology, 2013, 591, 745-746.	2.9	0
79	Commissural nucleus of the solitary tract regulates the antihypertensive effects elicited by moxonidine. Neuroscience, 2013, 250, 80-91.	2.3	15
80	Arterial chemoreceptor activation reduces the activity of parapyramidal serotonergic neurons in rats. Neuroscience, 2013, 237, 199-207.	2.3	12
81	P2Y1 Receptors Expressed by C1 Neurons Determine Peripheral Chemoreceptor Modulation of Breathing, Sympathetic Activity, and Blood Pressure. Hypertension, 2013, 62, 263-273.	2.7	28
82	Purinergic signaling in the retrotrapezoid nucleus (RTN) contributes to central and peripheral chemoreflexes by divergent mechansims. FASEB Journal, 2013, 27, 1137.15.	0.5	0
83	HCN channels contribute to serotonergic modulation of chemoreceptors in the retrotrapezoid nucleus. FASEB Journal, 2013, 27, 1214.11.	0.5	0
84	Chemosensory control by purinergic signaling within the retrotrapezoid nucleus (RTN) in conscious rats. FASEB Journal, 2013, 27, 1137.14.	0.5	0
85	KCNQ Channels Determine Serotonergic Modulation of Ventral Surface Chemoreceptors and Respiratory Drive. Journal of Neuroscience, 2012, 32, 16943-16952.	3.6	36
86	Pontomedullary and hypothalamic distribution of Fos-like immunoreactive neurons after acute exercise in rats. Neuroscience, 2012, 212, 120-130.	2.3	46
87	Regulation of ventral surface CO₂/H⁺â€sensitive neurons by purinergic signalling. Journal of Physiology, 2012, 590, 2137-2150.	2.9	82
88	Brainstem areas activated by intermittent apnea in awake unrestrained rats. FASEB Journal, 2012, 26, 899.6.	0.5	0
89	P2Y1â€receptors are expressed by CO2/H+â€insensitive neurons in the retrotrapezoid nucleus (RTN) and contribute to the peripheral drive to breathe. FASEB Journal, 2012, 26, .	0.5	0
90	Important GABAergic mechanism within the NTS and the control of sympathetic baroreflex in SHR. Autonomic Neuroscience: Basic and Clinical, 2011, 159, 62-70.	2.8	10

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91	Central mechanisms involved in pilocarpine-induced pressor response. Autonomic Neuroscience: Basic and Clinical, 2011, 164, 34-42.	2.8	4
92	Control of the central chemoreflex by A5 noradrenergic neurons in rats. Neuroscience, 2011, 199, 177-186.	2.3	29
93	Contribution of excitatory amino acid receptors of the retrotrapezoid nucleus to the sympathetic chemoreflex in rats. Experimental Physiology, 2011, 96, 989-999.	2.0	33
94	Chemosensory control by commissural nucleus of the solitary tract in rats. Respiratory Physiology and Neurobiology, 2011, 179, 227-234.	1.6	21
95	Ventrolateral medulla mechanisms involved in cardiorespiratory responses to central chemoreceptor activation in rats. American Journal of Physiology - Regulatory Integrative and Comparative Physiology, 2011, 300, R501-R510.	1.8	44
96	Contribution of excitatory amino acid receptors of the retrotrapezoid nucleus to sympathetic chemoreflex in rats. FASEB Journal, 2011, 25, 1076.9.	0.5	0
97	Role of the A5 noradrenergic neurons in the control of central chemoreflex in rats. FASEB Journal, 2011, 25, 1076.7.	0.5	0
98	Anesthetic Activation of Central Respiratory Chemoreceptor Neurons Involves Inhibition of a THIK-1-Like Background K+ Current. Journal of Neuroscience, 2010, 30, 9324-9334.	3.6	67
99	Effects of bilateral inhibition of retrotrapezoid nucleus on breathing in conscious rats. FASEB Journal, 2010, 24, 1026.9.	0.5	0
100	Changes on respiratory chemosensitivity after vagotomy in rats. FASEB Journal, 2010, 24, 1026.11.	0.5	0
101	Antihypertensive effects of central ablations in spontaneously hypertensive rats. American Journal of Physiology - Regulatory Integrative and Comparative Physiology, 2009, 296, R1797-R1806.	1.8	31
102	Galanin is a selective marker of the retrotrapezoid nucleus in rats. Journal of Comparative Neurology, 2009, 512, 373-383.	1.6	49
103	Activation of Î±2-adrenoceptors in the lateral hypothalamus reduces pilocarpine-induced salivation in rats. Neuroscience Letters, 2009, 450, 225-228.	2.1	12
104	Selective lesion of retrotrapezoid Phox2bâ€expressing neurons raises the apnoeic threshold in rats. Journal of Physiology, 2008, 586, 2975-2991.	2.9	119
105	Serotonergic Neurons Activate Chemosensitive Retrotrapezoid Nucleus Neurons by a pH-Independent Mechanism. Journal of Neuroscience, 2007, 27, 14128-14138.	3.6	127
106	GABAergic Pump Cells of Solitary Tract Nucleus Innervate Retrotrapezoid Nucleus Chemoreceptors. Journal of Neurophysiology, 2007, 98, 374-381.	1.8	41
107	Activation of 5-Hydroxytryptamine Type 3 Receptor-Expressing C-Fiber Vagal Afferents Inhibits Retrotrapezoid Nucleus Chemoreceptors in Rats. Journal of Neurophysiology, 2007, 98, 3627-3637.	1.8	30
108	Central nervous system distribution of the transcription factor Phox2b in the adult rat. Journal of Comparative Neurology, 2007, 503, 627-641.	1.6	124

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109	Inhibitory input from slowly adapting lung stretch receptors to retrotrapezoid nucleus chemoreceptors. Journal of Physiology, 2007, 580, 285-300.	2.9	66
110	Commissural nucleus of the solitary tract is important for cardiovascular responses to caudal pressor area activation. Brain Research, 2007, 1161, 32-37.	2.2	6
111	Involvement of central Î±1- and Î±2-adrenoceptors on cardiovascular responses to moxonidine. European Journal of Pharmacology, 2007, 563, 164-171.	3.5	9
112	Antihypertensive Responses Elicited by Central Moxonidine in Rats: Possible Role of Nitric Oxide. Journal of Cardiovascular Pharmacology, 2006, 47, 780-787.	1.9	8
113	Peripheral chemoreceptor inputs to retrotrapezoid nucleus (RTN) CO2-sensitive neurons in rats. Journal of Physiology, 2006, 572, 503-523.	2.9	273
114	Central chemoreceptors and sympathetic vasomotor outflow. Journal of Physiology, 2006, 577, 369-386.	2.9	119
115	Expression of Phox2b by Brainstem Neurons Involved in Chemosensory Integration in the Adult Rat. Journal of Neuroscience, 2006, 26, 10305-10314.	3.6	311
116	Effects of AV3V lesion on pilocarpine-induced pressor response and salivary gland vasodilation. Brain Research, 2005, 1055, 111-121.	2.2	17
117	Role of pressor mechanisms from the NTS and CVLM in control of arterial pressure. American Journal of Physiology - Regulatory Integrative and Comparative Physiology, 2005, 289, R1416-R1425.	1.8	19
118	Central blockade of nitric oxide synthesis reduces moxonidine-induced hypotension. British Journal of Pharmacology, 2004, 142, 765-771.	5.4	20
119	Central moxonidine on salivary gland blood flow and cardiovascular responses to pilocarpine. Brain Research, 2003, 987, 155-163.	2.2	16
120	Central Î±2 adrenergic receptors and cholinergic-induced salivation in rats. Brain Research Bulletin, 2003, 59, 383-386.	3.0	14
121	Central Muscarinic Receptors Signal Pilocarpine-induced Salivation. Journal of Dental Research, 2003, 82, 993-997.	5.2	46
122	Inhibition of pilocarpine-induced salivation in rats by central noradrenaline. Archives of Oral Biology, 2002, 47, 429-434.	1.8	19
123	Moxonidine reduces pilocarpine-induced salivation in rats. Autonomic Neuroscience: Basic and Clinical, 2001, 91, 32-36.	2.8	10