

Ana C Takakura

List of Publications by Year in descending order

Source: <https://exaly.com/author-pdf/609262/publications.pdf>

Version: 2024-02-01

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	Expression of Phox2b by Brainstem Neurons Involved in Chemosensory Integration in the Adult Rat. <i>Journal of Neuroscience</i> , 2006, 26, 10305-10314.	3.6	311
2	Peripheral chemoreceptor inputs to retrotrapezoid nucleus (RTN) CO ₂ -sensitive neurons in rats. <i>Journal of Physiology</i> , 2006, 572, 503-523.	2.9	273
3	Serotonergic Neurons Activate Chemosensitive Retrotrapezoid Nucleus Neurons by a pH-Independent Mechanism. <i>Journal of Neuroscience</i> , 2007, 27, 14128-14138.	3.6	127
4	Central nervous system distribution of the transcription factor Phox2b in the adult rat. <i>Journal of Comparative Neurology</i> , 2007, 503, 627-641.	1.6	124
5	Central chemoreceptors and sympathetic vasomotor outflow. <i>Journal of Physiology</i> , 2006, 577, 369-386.	2.9	119
6	Selective lesion of retrotrapezoid Phox2b-expressing neurons raises the apnoeic threshold in rats. <i>Journal of Physiology</i> , 2008, 586, 2975-2991.	2.9	119
7	Regulation of ventral surface CO ₂ /H ⁺ -sensitive neurons by purinergic signalling. <i>Journal of Physiology</i> , 2012, 590, 2137-2150.	2.9	82
8	Phox2b-expressing retrotrapezoid neurons and the integration of central and peripheral chemosensory control of breathing in conscious rats. <i>Experimental Physiology</i> , 2014, 99, 571-585.	2.0	70
9	Anesthetic Activation of Central Respiratory Chemoreceptor Neurons Involves Inhibition of a THIK-1-Like Background K ⁺ Current. <i>Journal of Neuroscience</i> , 2010, 30, 9324-9334.	3.6	67
10	Inhibitory input from slowly adapting lung stretch receptors to retrotrapezoid nucleus chemoreceptors. <i>Journal of Physiology</i> , 2007, 580, 285-300.	2.9	66
11	Respiratory deficits in a rat model of Parkinson's disease. <i>Neuroscience</i> , 2015, 297, 194-204.	2.3	50
12	Galanin is a selective marker of the retrotrapezoid nucleus in rats. <i>Journal of Comparative Neurology</i> , 2009, 512, 373-383.	1.6	49
13	Central Muscarinic Receptors Signal Pilocarpine-induced Salivation. <i>Journal of Dental Research</i> , 2003, 82, 993-997.	5.2	46
14	Pontomedullary and hypothalamic distribution of Fos-like immunoreactive neurons after acute exercise in rats. <i>Neuroscience</i> , 2012, 212, 120-130.	2.3	46
15	Ventrolateral medulla mechanisms involved in cardiorespiratory responses to central chemoreceptor activation in rats. <i>American Journal of Physiology - Regulatory Integrative and Comparative Physiology</i> , 2011, 300, R501-R510.	1.8	44
16	HCN channels contribute to serotonergic modulation of ventral surface chemosensitive neurons and respiratory activity. <i>Journal of Neurophysiology</i> , 2015, 113, 1195-1205.	1.8	43
17	Respiratory and autonomic dysfunction in congenital central hypoventilation syndrome. <i>Journal of Neurophysiology</i> , 2016, 116, 742-752.	1.8	43
18	Role of the locus coeruleus catecholaminergic neurons in the chemosensory control of breathing in a Parkinson's disease model. <i>Experimental Neurology</i> , 2017, 293, 172-180.	4.1	43

#	ARTICLE	IF	CITATIONS
19	Regulation of the chemosensory control of breathing by K \ddot{A} lliker-Fuse neurons. American Journal of Physiology - Regulatory Integrative and Comparative Physiology, 2014, 307, R57-R67.	1.8	42
20	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
21	Purinergic regulation of vascular tone in the retrotrapezoid nucleus is specialized to support the drive to breathe. ELife, 2017, 6, .	6.0	42
22	GABAergic Pump Cells of Solitary Tract Nucleus Innervate Retrotrapezoid Nucleus Chemoreceptors. Journal of Neurophysiology, 2007, 98, 374-381.	1.8	41
23	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
24	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
25	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
26	KCNQ Channels Determine Serotonergic Modulation of Ventral Surface Chemoreceptors and Respiratory Drive. Journal of Neuroscience, 2012, 32, 16943-16952.	3.6	36
27	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
28	Cardiovascular dysfunction associated with neurodegeneration in an experimental model of Parkinson's disease. Brain Research, 2017, 1657, 156-166.	2.2	34
29	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
30	Inhibition of the pontine K \ddot{A} lliker-Fuse nucleus reduces genioglossal activity elicited by stimulation of the retrotrapezoid chemoreceptor neurons. Neuroscience, 2016, 328, 9-21.	2.3	33
31	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
32	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
33	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
34	Control of the central chemoreflex by A5 noradrenergic neurons in rats. Neuroscience, 2011, 199, 177-186.	2.3	29
35	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
36	Respiratory disturbances in a mouse model of Parkinson's disease. Experimental Physiology, 2019, 104, 729-739.	2.0	28

#	ARTICLE	IF	CITATIONS
37	Depletion of rostral ventrolateral medullary catecholaminergic neurons impairs the hypoxic ventilatory response in conscious rats. <i>Neuroscience</i> , 2017, 351, 1-14.	2.3	27
38	The role of PHOX2B-derived astrocytes in chemosensory control of breathing and sleep homeostasis. <i>Journal of Physiology</i> , 2019, 597, 2225-2251.	2.9	27
39	α_1 - and α_2 -adrenergic receptors in the retrotrapezoid nucleus differentially regulate breathing in anesthetized adult rats. <i>Journal of Neurophysiology</i> , 2016, 116, 1036-1048.	1.8	26
40	Fluorocitrate-mediated depolarization of astrocytes in the retrotrapezoid nucleus stimulates breathing. <i>Journal of Neurophysiology</i> , 2017, 118, 1690-1697.	1.8	26
41	C1 neurons are part of the circuitry that recruits active expiration in response to the activation of peripheral chemoreceptors. <i>ELife</i> , 2020, 9, .	6.0	24
42	Purinergic receptor blockade in the retrotrapezoid nucleus attenuates the respiratory chemoreflexes in awake rats. <i>Acta Physiologica</i> , 2016, 217, 80-93.	3.8	23
43	Acute hypoxia activates hypothalamic paraventricular nucleus-projecting catecholaminergic neurons in the C1 region. <i>Experimental Neurology</i> , 2016, 285, 1-11.	4.1	23
44	Vascular control of the CO ₂ /H ⁺ -dependent drive to breathe. <i>ELife</i> , 2020, 9, .	6.0	23
45	Orexinergic neurons are involved in the chemosensory control of breathing during the dark phase in a Parkinson's disease model. <i>Experimental Neurology</i> , 2018, 309, 107-118.	4.1	22
46	Chemosensory control by commissural nucleus of the solitary tract in rats. <i>Respiratory Physiology and Neurobiology</i> , 2011, 179, 227-234.	1.6	21
47	In vitro characterization of noradrenergic modulation of chemosensitive neurons in the retrotrapezoid nucleus. <i>Journal of Neurophysiology</i> , 2016, 116, 1024-1035.	1.8	21
48	Impaired central respiratory chemoreflex in an experimental genetic model of epilepsy. <i>Journal of Physiology</i> , 2017, 595, 983-999.	2.9	21
49	Breathing responses produced by optogenetic stimulation of adrenergic C1 neurons are dependent on the connection with preBötzing complex in rats. <i>Pflügers Archiv European Journal of Physiology</i> , 2018, 470, 1659-1672.	2.8	21
50	Cholinergic neurons in the pedunculopontine tegmental nucleus modulate breathing in rats by direct projections to the retrotrapezoid nucleus. <i>Journal of Physiology</i> , 2019, 597, 1919-1934.	2.9	21
51	Central blockade of nitric oxide synthesis reduces moxonidine-induced hypotension. <i>British Journal of Pharmacology</i> , 2004, 142, 765-771.	5.4	20
52	Ablation of brainstem C1 neurons improves cardiac function in volume overload heart failure. <i>Clinical Science</i> , 2019, 133, 393-405.	4.3	20
53	Inhibition of pilocarpine-induced salivation in rats by central noradrenaline. <i>Archives of Oral Biology</i> , 2002, 47, 429-434.	1.8	19
54	Role of pressor mechanisms from the NTS and CVLM in control of arterial pressure. <i>American Journal of Physiology - Regulatory Integrative and Comparative Physiology</i> , 2005, 289, R1416-R1425.	1.8	19

#	ARTICLE	IF	CITATIONS
55	Control of breathing and blood pressure by parafacial neurons in conscious rats. <i>Experimental Physiology</i> , 2013, 98, 304-315.	2.0	19
56	Minocycline alters expression of inflammatory markers in autonomic brain areas and ventilatory responses induced by acute hypoxia. <i>Experimental Physiology</i> , 2018, 103, 884-895.	2.0	18
57	Unraveling the Mechanisms Underlying Irregularities in Inspiratory Rhythm Generation in a Mouse Model of Parkinson's Disease. <i>Journal of Neuroscience</i> , 2021, 41, 4732-4747.	3.6	18
58	Effects of AV3V lesion on pilocarpine-induced pressor response and salivary gland vasodilation. <i>Brain Research</i> , 2005, 1055, 111-121.	2.2	17
59	Role of A5 noradrenergic neurons in the chemoreflex control of respiratory and sympathetic activities in unanesthetized conditions. <i>Neuroscience</i> , 2017, 354, 146-157.	2.3	17
60	Central moxonidine on salivary gland blood flow and cardiovascular responses to pilocarpine. <i>Brain Research</i> , 2003, 987, 155-163.	2.2	16
61	Distinct pathways to the parafacial respiratory group to trigger active expiration in adult rats. <i>American Journal of Physiology - Lung Cellular and Molecular Physiology</i> , 2019, 317, L402-L413.	2.9	16
62	Neonatal apneic phenotype in a murine congenital central hypoventilation syndrome model is induced through non-cell autonomous developmental mechanisms. <i>Brain Pathology</i> , 2021, 31, 84-102.	4.1	16
63	Commissural nucleus of the solitary tract regulates the antihypertensive effects elicited by moxonidine. <i>Neuroscience</i> , 2013, 250, 80-91.	2.3	15
64	Amygdala rapid kindling impairs breathing in response to chemoreflex activation. <i>Brain Research</i> , 2019, 1718, 159-168.	2.2	15
65	Episodic stimulation of central chemoreceptor neurons elicits disordered breathing and autonomic dysfunction in volume overload heart failure. <i>American Journal of Physiology - Lung Cellular and Molecular Physiology</i> , 2020, 318, L27-L40.	2.9	15
66	Central α_2 adrenergic receptors and cholinergic-induced salivation in rats. <i>Brain Research Bulletin</i> , 2003, 59, 383-386.	3.0	14
67	Inhibition of the hypercapnic ventilatory response by adenosine in the retrotrapezoid nucleus in awake rats. <i>Neuropharmacology</i> , 2018, 138, 47-56.	4.1	14
68	Rostral ventrolateral medullary catecholaminergic neurones mediate irregular breathing pattern in volume overload heart failure rats. <i>Journal of Physiology</i> , 2019, 597, 5799-5820.	2.9	14
69	The retrotrapezoid nucleus and the neuromodulation of breathing. <i>Journal of Neurophysiology</i> , 2021, 125, 699-719.	1.8	14
70	Activation of α_2 -adrenoceptors in the lateral hypothalamus reduces pilocarpine-induced salivation in rats. <i>Neuroscience Letters</i> , 2009, 450, 225-228.	2.1	12
71	Arterial chemoreceptor activation reduces the activity of parapyramidal serotonergic neurons in rats. <i>Neuroscience</i> , 2013, 237, 199-207.	2.3	12
72	Independent purinergic mechanisms of central and peripheral chemoreception in the rostral ventrolateral medulla. <i>Journal of Physiology</i> , 2015, 593, 1067-1074.	2.9	12

#	ARTICLE	IF	CITATIONS
73	Respiratory and sympathetic chemoreflex regulation by K ^A lliker-Fuse neurons in rats. Pflugers Archiv European Journal of Physiology, 2015, 467, 231-239.	2.8	12
74	Baroreflex dysfunction in Parkinson's disease: integration of central and peripheral mechanisms. Journal of Neurophysiology, 2021, 125, 1425-1439.	1.8	12
75	Brainstem areas activated by intermittent apnea in awake unrestrained rats. Neuroscience, 2015, 297, 262-271.	2.3	11
76	Area postrema undergoes dynamic postnatal changes in mice and humans. Journal of Comparative Neurology, 2016, 524, 1259-1269.	1.6	11
77	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
78	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
79	Respiratory disorders of Parkinson's disease. Journal of Neurophysiology, 2022, 127, 1-15.	1.8	11
80	Moxonidine reduces pilocarpine-induced salivation in rats. Autonomic Neuroscience: Basic and Clinical, 2001, 91, 32-36.	2.8	10
81	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
82	Involvement of central α_1 - and α_2 -adrenoceptors on cardiovascular responses to moxonidine. European Journal of Pharmacology, 2007, 563, 164-171.	3.5	9
83	Molecular underpinnings of ventral surface chemoreceptor function: focus on KCNQ channels. Journal of Physiology, 2015, 593, 1075-1081.	2.9	9
84	Raphe Pallidus is Not Important to Central Chemoreception in a Rat Model of Parkinson's Disease. Neuroscience, 2018, 369, 350-362.	2.3	9
85	Oxidative stress in the medullary respiratory neurons contributes to respiratory dysfunction in the 6-OHDA model of Parkinson's disease. Journal of Physiology, 2020, 598, 5271-5293.	2.9	9
86	Stimulation of retrotrapezoid nucleus Phox2b-expressing neurons rescues breathing dysfunction in an experimental Parkinson's disease rat model. Brain Pathology, 2020, 30, 926-944.	4.1	9
87	Antihypertensive Responses Elicited by Central Moxonidine in Rats: Possible Role of Nitric Oxide. Journal of Cardiovascular Pharmacology, 2006, 47, 780-787.	1.9	8
88	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
89	GABAergic neurons of the medullary raphe regulate active expiration during hypercapnia. Journal of Neurophysiology, 2020, 123, 1933-1943.	1.8	8
90	Forebrain and Hindbrain Projecting-neurons Target the Post-inspiratory Complex Cholinergic Neurons. Neuroscience, 2021, 476, 102-115.	2.3	8

#	ARTICLE	IF	CITATIONS
91	A5 noradrenergic-projecting C1 neurons activate sympathetic and breathing outputs in anaesthetized rats. <i>Experimental Physiology</i> , 2022, 107, 147-160.	2.0	8
92	Pilocarpine-induced status epilepticus reduces chemosensory control of breathing. <i>Brain Research Bulletin</i> , 2020, 161, 98-105.	3.0	7
93	Commissural nucleus of the solitary tract is important for cardiovascular responses to caudal pressor area activation. <i>Brain Research</i> , 2007, 1161, 32-37.	2.2	6
94	GABA mechanisms of the nucleus of the solitary tract regulates the cardiovascular and sympathetic effects of moxonidine. <i>Autonomic Neuroscience: Basic and Clinical</i> , 2016, 194, 1-7.	2.8	6
95	Activation of central β_2 -adrenoceptors mediates salivary gland vasoconstriction. <i>Archives of Oral Biology</i> , 2013, 58, 167-173.	1.8	5
96	The retrotrapezoid nucleus as a central brainstem area for central and peripheral chemoreceptor interactions. <i>Experimental Physiology</i> , 2016, 101, 455-456.	2.0	5
97	Hypertension and sympathetic nervous system overactivity rely on the vascular tone of pial vessels of the rostral ventrolateral medulla in spontaneously hypertensive rats. <i>Experimental Physiology</i> , 2020, 105, 65-74.	2.0	5
98	5-HT ₇ receptors expressed in the mouse parafacial region are not required for respiratory chemosensitivity. <i>Journal of Physiology</i> , 2022, 600, 2789-2811.	2.9	5
99	Central mechanisms involved in pilocarpine-induced pressor response. <i>Autonomic Neuroscience: Basic and Clinical</i> , 2011, 164, 34-42.	2.8	4
100	M4-muscarinic acetylcholine receptor into the pedunculopontine tegmental nucleus mediates respiratory modulation of conscious rats. <i>Respiratory Physiology and Neurobiology</i> , 2019, 269, 103254.	1.6	4
101	Excitatory and inhibitory modulation of parafacial respiratory neurons in the control of active expiration. <i>Respiratory Physiology and Neurobiology</i> , 2021, 289, 103657.	1.6	4
102	Machine learning approaches reveal subtle differences in breathing and sleep fragmentation in <i>Phox2b</i> -derived astrocytes ablated mice. <i>Journal of Neurophysiology</i> , 2021, 125, 1164-1179.	1.8	3
103	The effect of central growth hormone action on hypoxia ventilatory response in conscious mice. <i>Brain Research</i> , 2022, 1791, 147995.	2.2	3
104	Medullary astrocytes mediate irregular breathing patterns generation in chronic heart failure through purinergic P2X7 receptor signalling. <i>EBioMedicine</i> , 2022, 80, 104044.	6.1	2
105	Selective inhibition of the adrenergic C1 neurons reduces the hypoxic ventilatory response in unanesthetized rats. <i>FASEB Journal</i> , 2015, 29, 652.24.	0.5	1
106	Regulation of blood vessels by ATP in the ventral medullary surface in a rat model of Parkinson's disease. <i>Brain Research Bulletin</i> , 2022, 187, 138-154.	3.0	1
107	Is carotid body input the only critical mechanism involved in hypertension in spontaneously hypertensive rat?. <i>Journal of Physiology</i> , 2013, 591, 745-746.	2.9	0
108	Böttinger inhibitory neurons and the control of active expiration. <i>Journal of Physiology</i> , 2021, 599, 1945-1947.	2.9	0

#	ARTICLE	IF	CITATIONS
109	Phox2b-expressing neurons of the retrotrapezoid nucleus regulate post-inspiration in conscious mice. FASEB Journal, 2021, 35, .	0.5	0
110	Effects of bilateral inhibition of retrotrapezoid nucleus on breathing in conscious rats. FASEB Journal, 2010, 24, 1026.9.	0.5	0
111	Changes on respiratory chemosensitivity after vagotomy in rats. FASEB Journal, 2010, 24, 1026.11.	0.5	0
112	Contribution of excitatory amino acid receptors of the retrotrapezoid nucleus to sympathetic chemoreflex in rats. FASEB Journal, 2011, 25, 1076.9.	0.5	0
113	Role of the A5 noradrenergic neurons in the control of central chemoreflex in rats. FASEB Journal, 2011, 25, 1076.7.	0.5	0
114	Brainstem areas activated by intermittent apnea in awake unrestrained rats. FASEB Journal, 2012, 26, 899.6.	0.5	0
115	P2Y1-receptors are expressed by CO ₂ /H ⁺ -insensitive neurons in the retrotrapezoid nucleus (RTN) and contribute to the peripheral drive to breathe. FASEB Journal, 2012, 26, .	0.5	0
116	Purinergic signaling in the retrotrapezoid nucleus (RTN) contributes to central and peripheral chemoreflexes by divergent mechanisms. FASEB Journal, 2013, 27, 1137.15.	0.5	0
117	HCN channels contribute to serotonergic modulation of chemoreceptors in the retrotrapezoid nucleus. FASEB Journal, 2013, 27, 1214.11.	0.5	0
118	Chemosensory control by purinergic signaling within the retrotrapezoid nucleus (RTN) in conscious rats. FASEB Journal, 2013, 27, 1137.14.	0.5	0
119	Baroreflex impairment in a rat model of Parkinson's disease. FASEB Journal, 2015, 29, .	0.5	0
120	Central and Peripheral Respiratory Disturbances in a Mice Model of Parkinson's Disease. FASEB Journal, 2018, 32, 894.9.	0.5	0
121	Selective Depletion of Astrocytes Derived From a Phox2b-Progenitor Domain Reduces Hypoxia Ventilatory Response in Conscious Mice. FASEB Journal, 2018, 32, 894.7.	0.5	0
122	Editorial: Integrative Physiology: Systemic Hypertension and Respiratory-Sympathetic Coupling. Frontiers in Physiology, 2022, 13, 841001.	2.8	0
123	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