Ana Obeso

List of Publications by Year
in descending order

103 papers	3,451 citations	147801 31 h-index	144013 57 g-index
103 all docs	103 docs citations	103 times ranked	1880 citing authors

#	Article	IF	Citations
1	Carotid body chemoreceptors: from natural stimuli to sensory discharges.. Physiological Reviews, 1994, 74, 829-898.	28.8	979
2	Oxygen and acid chemoreception in the carotid body chemoreceptors. Trends in Neurosciences, 1992, 15, 146-153.	8.6	184
3	Significance of ROS in oxygen sensing in cell systems with sensitivity to physiological hypoxia. Respiratory Physiology and Neurobiology, 2002, 132, 17-41.	1.6	109
4	The role of dihydropyridine-sensitive Ca2+ channels in stimulus-evoked catecholamine release from chemoreceptor cells of the carotid body. Neuroscience, 1992, 47, 463-472.	2.3	86
5	Molecular identification of KvÎ± subunits that contribute to the oxygenâ€sensitive K⁺ current of chemoreceptor cells of the rabbit carotid body. Journal of Physiology, 2002, 542, 369-382.	2.9	76
6	Characterization of the synthesis and release of catecholamine in the rat carotid body in vitro. American Journal of Physiology - Cell Physiology, 2000, 278, C490-C499.	4.6	74
7	Intermittent hypoxia and diet-induced obesity: effects on oxidative status, sympathetic tone, plasma glucose and insulin levels, and arterial pressure. Journal of Applied Physiology, 2014, 117, 706-719.	2.5	72
8	Carotid body, insulin, and metabolic diseases: unraveling the links. Frontiers in Physiology, 2014, 5, 418.	2.8	67
9	Ionic mechanisms for the transduction of acidic stimuli in rabbit carotid body glomus cells.. Journal of Physiology, 1991, 433, 533-548.	2.9	66
10	Effects of cyanide and uncoupler on chemoreceptor activity and ATP content of the cat carotid body. Brain Research, 1989, 481, 250-257.	2.2	62
11	Caffeine inhibition of rat carotid body chemoreceptors is mediated by A2A and A2B adenosine receptors. Journal of Neurochemistry, 2006, 98, 616-628.	3.9	62
12	Protective Cardiovascular Effect of Sleep Apnea Severity in Obesity Hypoventilation Syndrome. Chest, 2016, 150, 68-79.	0.8	56
13	Hypoxic intensity: a determinant for the contribution of ATP and adenosine to the genesis of carotid body chemosensory activity. Journal of Applied Physiology, 2012, 112, 2002-2010.	2.5	54
14	Effects of cigarette smoke and hypoxia on pulmonary circulation in the guinea pig. European Respiratory Journal, 2011, 38, 617-627.	6.7	51
15	Chemoreception in the context of the general biology of ROS. Respiratory Physiology and Neurobiology, 2007, 157, 30-44.	1.6	50
16	Effects of high potassium on the release of [3H]dopamine from the cat carotid body in vitro.. Journal of Physiology, 1986, 379, 293-307.	2.9	48
17	Effect of p47phox gene deletion on ROS production and oxygen sensing in mouse carotid body chemoreceptor cells. American Journal of Physiology - Lung Cellular and Molecular Physiology, 2005, 289, L916-L924.	2.9	47
18	Carotid body function and ventilatory responses in intermittent hypoxia. evidence for anomalous brainstem integration of arterial chemoreceptor input. Journal of Cellular Physiology, 2011, 226, 1961-1969.	4.1	47

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19	Cellular mechanisms of oxygen chemoreception in the carotid body. Respiration Physiology, 1995, 102, 137-147.	2.7	45
20	Functional abolition of carotid body activity restores insulin action and glucose homeostasis in rats: key roles for visceral adipose tissue and the liver. Diabetologia, 2017, 60, 158-168.	6.3	45
21	Effects of 2-deoxy-d-glucose on in vitro cat carotid body. Brain Research, 1986, 371, 25-36.	2.2	42
22	Characterization of cultured chemoreceptor cells dissociated from adult rabbit carotid body. American Journal of Physiology - Cell Physiology, 1992, 263, C1152-C1159.	4.6	41
23	Low glucose effects on rat carotid body chemoreceptor cells' secretory responses and action potential frequency in the carotid sinus nerve. Journal of Physiology, 2007, 585, 721-730.	2.9	41
24	An antagonistic interaction between A_{2B} adenosine and D₂ dopamine receptors modulates the function of rat carotid body chemoreceptor cells. Journal of Neurochemistry, 2008, 107, 1369-1381.	3.9	39
25	The effects of intermittent hypoxia on redox status, NF-ÎºB activation, and plasma lipid levels are dependent on the lowest oxygen saturation. Free Radical Biology and Medicine, 2013, 65, 1143-1154.	2.9	39
26	Correlation between adenosine triphosphate levels, dopamine release and electrical activity in the carotid body: Support for the metabolic hypothesis of chemoreception. Brain Research, 1985, 348, 64-68.	2.2	37
27	High fat diet blunts the effects of leptin on ventilation and on carotid body activity. Journal of Physiology, 2018, 596, 3187-3199.	2.9	37
28	Age protects from harmful effects produced by chronic intermittent hypoxia. Journal of Physiology, 2016, 594, 1773-1790.	2.9	33
29	Evidence for two types of nicotinic receptors in the cat carotid body chemoreceptor cells. Brain Research, 1997, 754, 298-302.	2.2	32
30	NADPH oxidase inhibition does not interfere with low P O 2 transduction in rat and rabbit CB chemoreceptor cells. American Journal of Physiology - Cell Physiology, 1999, 276, C593-C601.	4.6	32
31	Ventilatory responses and carotid body function in adult rats perinatally exposed to hyperoxia. Journal of Physiology, 2004, 554, 126-144.	2.9	32
32	Adenosine in Peripheral Chemoreception: New Insights into a Historically Overlooked Molecule â€" Invited Article. Advances in Experimental Medicine and Biology, 2009, 648, 145-159.	1.6	32
33	The role of NADPH oxidase in carotid body arterial chemoreceptors. Respiratory Physiology and Neurobiology, 2007, 157, 45-54.	1.6	31
34	A revisit to O2 sensing and transduction in the carotid body chemoreceptors in the context of reactive oxygen species biology. Respiratory Physiology and Neurobiology, 2010, 174, 317-330.	1.6	31
35	The Effect of Supplemental Oxygen in Obesity Hypoventilation Syndrome. Journal of Clinical Sleep Medicine, 2016, 12, 1379-1388.	2.6	31
36	Participation of Na+ channels in the response of carotid body chemoreceptor cells to hypoxia. American Journal of Physiology - Cell Physiology, 1994, 267, C738-C744.	4.6	30

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37	Intracellular Ca²⁺stores in chemoreceptor cells of the rabbit carotid body: significance for chemoreception. American Journal of Physiology - Cell Physiology, 2000, 279, C51-C61.	4.6	29
38	Reduced to oxidized glutathione ratios and oxygen sensing in calf and rabbit carotid body chemoreceptor cells. Journal of Physiology, 2001, 537, 209-220.	2.9	28
39	Function of the rat carotid body chemoreceptors in ageing. Journal of Neurochemistry, 2006, 99, 711-723.	3.9	28
40	Chronic intermittent hypoxia mimicking sleep apnoea increases spontaneous tumorigenesis in mice. European Respiratory Journal, 2017, 49, 1602111.	6.7	28
41	Effect of low O2 on glucose uptake in rabbit carotid body. Journal of Applied Physiology, 1993, 74, 2387-2393.	2.5	27
42	Molecular identification and functional role of voltage-gated sodium channels in rat carotid body chemoreceptor cells. Regulation of expression by chronic hypoxia in vivo. Journal of Neurochemistry, 2007, 102, 231-245.	3.9	27
43	Effects of low glucose on carotid body chemoreceptor cell activity studied in cultures of intact organs and in dissociated cells. American Journal of Physiology - Cell Physiology, 2012, 302, C1128-C1140.	4.6	26
44	Exploring the Mediators that Promote Carotid Body Dysfunction in Type 2 Diabetes and Obesity Related Syndromes. International Journal of Molecular Sciences, 2020, 21, 5545.	4.1	24
45	Frequency and magnitude of intermittent hypoxia modulate endothelial wound healing in a cell culture model of sleep apnea. Journal of Applied Physiology, 2017, 123, 1047-1054.	2.5	22
46	Chronic Caffeine Intake in Adult Rat Inhibits Carotid Body Sensitization Produced by Chronic Sustained Hypoxia but Maintains Intact Chemoreflex Output. Molecular Pharmacology, 2012, 82, 1056-1065.	2.3	21
47	MaxiK potassium channels in the function of chemoreceptor cells of the rat carotid body. American Journal of Physiology - Cell Physiology, 2009, 297, C715-C722.	4.6	20
48	Effects of cigarette smoke and chronic hypoxia on airways remodeling and resistance. Clinical significance. Respiratory Physiology and Neurobiology, 2011, 179, 305-313.	1.6	20
49	General redox environment and carotid body chemoreceptor function. American Journal of Physiology - Cell Physiology, 2009, 296, C620-C631.	4.6	19
50	Metabolic activation of carotid body glomus cells by hypoxia. Journal of Applied Physiology, 1989, 67, 484-487.	2.5	18
51	Activation of the release of dopamine in the carotid body by veratridine. Evidence for the presence of voltage-dependent Na+ channels in type I cells. Neuroscience Letters, 1988, 94, 274-278.	2.1	16
52	Carotid body function in aged rats: responses to hypoxia, ischemia, dopamine, and adenosine. Age, 2011, 33, 337-350.	3.0	16
53	Fernando de Castro and the discovery of the arterial chemoreceptors. Frontiers in Neuroanatomy, 2014, 8, 25.	1.7	16
54	Disclosing caffeine action on insulin sensitivity: Effects on rat skeletal muscle. European Journal of Pharmaceutical Sciences, 2015, 70, 107-116.	4.0	16

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55	Effects of reducing agents on glutathione metabolism and the function of carotid body chemoreceptor cells. Biological Chemistry, 2004, 385, 265-74.	2.5	14
56	Role of Glutathione Redox State in Oxygen Sensing by Carotid Body Chemoreceptor Cells. Methods in Enzymology, 2004, 381, 40-71.	1.0	14
57	The Carotid Body Does Not Mediate the Acute Ventilatory Effects of Leptin. Advances in Experimental Medicine and Biology, 2015, 860, 379-385.	1.6	13
58	Guinea Pig Oxygen-Sensing and Carotid Body Functional Properties. Frontiers in Physiology, 2017, 8, 285.	2.8	13
59	Guinea Pig as a Model to Study the Carotid Body Mediated Chronic Intermittent Hypoxia Effects. Frontiers in Physiology, 2018, 9, 694.	2.8	11
60	Effects of mitochondrial poisons on glutathione redox potential and carotid body chemoreceptor activity. Respiratory Physiology and Neurobiology, 2009, 165, 104-111.	1.6	10
61	Moderate ethanol ingestion, redox status, and cardiovascular system in the rat. Alcohol, 2011, 45, 381-391.	1.7	10
62	Ca2+ Dynamics in Chemoreceptor Cells: An Overview. Advances in Experimental Medicine and Biology, 1993, 337, 149-156.	1.6	10
63	The A2B-D2 Receptor Interaction that Controls Carotid Body Catecholamines Release Locates Between the Last Two Steps of Hypoxic Transduction Cascade. Advances in Experimental Medicine and Biology, 2009, 648, 161-168.	1.6	8
64	Hypoxic pulmonary vasoconstriction, carotid body function and erythropoietin production in adult rats perinatally exposed to hyperoxia. Journal of Physiology, 2015, 593, 2459-2477.	2.9	7
65	An Overview on the Homeostasis of Ca2+ in Chemoreceptor Cells of the Rabbit and Rat Carotid Bodies. , 2006, 580, 215-222.		7
66	Functional Identification of KvÎ± Subunits Contributing to the O2-Sensitive K+ Current in Rabbit Carotid Body Chemoreceptor Cells. Advances in Experimental Medicine and Biology, 2003, 536, 33-39.	1.6	7
67	Tris buffer: effects on catecholamine synthesis. Journal of Neurochemistry, 1979, 32, 1143-1145.	3.9	6
68	Spermine attenuates carotid body glomus cell oxygen sensing by inhibiting L-type Ca2+ channels. Respiratory Physiology and Neurobiology, 2011, 175, 80-89.	1.6	6
69	Chronic Intermittent Hypoxia Induces Early-Stage Metabolic Dysfunction Independently of Adipose Tissue Deregulation. Antioxidants, 2021, 10, 1233.	5.1	6
70	Function of NADPH Oxidase and Signaling by Reactive Oxygen Species in Rat Carotid Body Type I Cells. , 2006, 580, 155-160.		6
71	Some Reflections on Intermittent Hypoxia. Does it Constitute the Translational Niche for Carotid Body Chemoreceptor Researchers?. Advances in Experimental Medicine and Biology, 2012, 758, 333-342.	1.6	6
72	Effects of almitrine on the release of catecholamines from the rabbit carotid body <i>in vitro</i>. British Journal of Pharmacology, 1992, 106, 697-702.	5.4	5

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73	Significance of Ros in Oxygen Chemoreception in the Carotid Body Chemoreception. Advances in Experimental Medicine and Biology, 2002, 475, 425-434.	1.6	5
74	Serotonin Dynamics and Actions in the Rat Carotid Body: Preliminary Findings. Advances in Experimental Medicine and Biology, 2012, 758, 255-263.	1.6	5
75	Maladaptive Pulmonary Vascular Responses to Chronic Sustained and Chronic Intermittent Hypoxia in Rat. Antioxidants, 2022, 11, 54.	5.1	5
76	Hydroxycobalamin Reveals the Involvement of Hydrogen Sulfide in the Hypoxic Responses of Rat Carotid Body Chemoreceptor Cells. Antioxidants, 2019, 8, 62.	5.1	4
77	Peripheral Dopamine 2-Receptor Antagonist Reverses Hypertension in a Chronic Intermittent Hypoxia Rat Model. International Journal of Molecular Sciences, 2020, 21, 4893.	4.1	4
78	Tetrodotoxin as a Tool to Elucidate Sensory Transduction Mechanisms: The Case for the Arterial Chemoreceptors of the Carotid Body. Marine Drugs, 2011, 9, 2683-2704.	4.6	3
79	Ionic Mechanisms of the Chemoreception Process in Type I Cells of the Carotid Body. , 1990, , 44-57.		3
80	Does Ageing Modify Ventilatory Responses to Dopamine in Anaesthetised Rats Breathing Spontaneously?. Advances in Experimental Medicine and Biology, 2009, 648, 265-271.	1.6	3
81	Interactions Between Postnatal Sustained Hypoxia and Intermittent Hypoxia in the Adulthood to Alter Brainstem Structures and Respiratory Function. Advances in Experimental Medicine and Biology, 2012, 758, 225-231.	1.6	3
82	Experimental Observations on the Biological Significance of Hydrogen Sulfide in Carotid Body Chemoreception. Advances in Experimental Medicine and Biology, 2015, 860, 9-16.	1.6	2
83	Obstructive Sleep Apnea and Cancer: Insights from Intermittent Hypoxia Experimental Models. Current Sleep Medicine Reports, 2017, 3, 22-29.	1.4	2
84	Effects of Perinatal Hyperoxia on Carotid Body Chemoreceptor Activity in Vitro. Advances in Experimental Medicine and Biology, 2003, 536, 517-524.	1.6	2
85	Effects of the Polyamine Spermine on Arterial Chemoreception. Advances in Experimental Medicine and Biology, 2009, 648, 97-104.	1.6	2
86	Effect of Chronic Caffeine Intake on Carotid Body Catecholamine Dynamics in Control and Chronically Hypoxic Rats. Advances in Experimental Medicine and Biology, 2012, 758, 315-323.	1.6	2
87	Effects of Cigarette Smoke and Chronic Hypoxia on Ventilation in Guinea Pigs. Clinical Significance. Advances in Experimental Medicine and Biology, 2012, 758, 325-332.	1.6	2
88	Intracellular Ca2+ Deposits and Catecholamine Secretion by Chemoreceptor Cells of the Rabbit Carotid Body. Advances in Experimental Medicine and Biology, 1996, 410, 279-284.	1.6	1
89	ATP Content in the Cat Carotid Body under Different Experimental Conditions. Support for the Metabolic Hypothesis. , 1987, , 78-90.		1
90	Hyperinsulinemia due to altered insulin secretion contributes to insulin resistance in chronic intermittent hypoxia independently of obesity. , 2019, , .		1

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91	Assessment of Na+ Channel Involvement in the Release of Catecholamines from Chemoreceptor Cells of the Carotid Body. Advances in Experimental Medicine and Biology, 1994, 360, 201-204.	1.6	1
92	Adrenal Medulla Chemo Sensitivity Does Not Compensate the Lack of Hypoxia Driven Carotid Body Chemo Reflex in Guinea Pigs. Advances in Experimental Medicine and Biology, 2018, 1071, 167-174.	1.6	0
93	Involvement of Na+:H+ and Na+:Ca++ Antiporters in the Chemotransduction of Acidic Stimuli. , 1990, , 35-41.		0
94	LATE-BREAKING ABSTRACT: Effects of long term intermittent hypoxia (IH) mimicking obstructive sleep apnea (OSA) on spontaneous tumorigenesis in aged mice. , 2015, , .		0
95	Protective cardiovascular effect of sleep apnea severity in obesity hypoventilation syndrome. , 2016, , .		0
96	Vascular sexual dimorphism and pulmonary hypertension in a rat chronic hypoxia model. , 2017, , .		0
97	Aged mice obstructive sleep apnoea model with spontaneous tumorigenesis: physiological parameters. , 2017, , .		0
98	Pulmonary Hypertension in Female Rats: Estrogens and Age Influence. , 2018, , .		0
99	Maladaptive Pulmonary vascular responses to chronic intermittent and sustained hypoxia in a rat hypertension model. , 2018, , .		0
100	Chronic Intermittent Hypoxia effects are not mediated by guinea pig carotid body sensitization. , 2018, , .		0
101	Sex and age differences in pulmonary vascular responses in a chronic hypoxic rat model. , 2019, , .		0
102	Modification of the Glutathione Redox Environment and Chemoreceptor Cell Responses. , 2006, 580, 325-330.		0
103	Arterial Chemoreceptors. , 2002, , 114-140.		0