

Rodrigo R Del Rio

List of Publications by Year in descending order

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96
papers

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times ranked

3395
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#	ARTICLE	IF	CITATIONS
1	Extracellular Cysteine in Connexins: Role as Redox Sensors. <i>Frontiers in Physiology</i> , 2016, 7, 1.	2.8	247
2	Chronic intermittent hypoxia enhances cat chemosensory and ventilatory responses to hypoxia. <i>Journal of Physiology</i> , 2004, 560, 577-586.	2.9	184
3	Carotid Chemoreceptor Ablation Improves Survival in Heart Failure. <i>Journal of the American College of Cardiology</i> , 2013, 62, 2422-2430.	2.8	167
4	Carotid body denervation improves autonomic and cardiac function and attenuates disordered breathing in congestive heart failure. <i>Journal of Physiology</i> , 2014, 592, 391-408.	2.9	137
5	A Chemical, Morphological, and Electrochemical (XPS, SEM/EDX, CV, and EIS) Analysis of Electrochemically Modified Electrode Surfaces of Natural Chalcopyrite (CuFeS ₂) and Pyrite (FeS ₂) in Alkaline Solutions. <i>Journal of Physical Chemistry B</i> , 2005, 109, 4977-4988.	2.6	113
6	Carotid body inflammation and cardiorespiratory alterations in intermittent hypoxia. <i>European Respiratory Journal</i> , 2012, 39, 1492-1500.	6.7	111
7	Carotid Body Ablation Abrogates Hypertension and Autonomic Alterations Induced by Intermittent Hypoxia in Rats. <i>Hypertension</i> , 2016, 68, 436-445.	2.7	90
8	Reactivity of electrodes modified with substituted metallophthalocyanines. Correlations with redox potentials, Hammett parameters and donor?acceptor intermolecular hardness. <i>Electrochimica Acta</i> , 2001, 46, 3227-3235.	5.2	88
9	Contribution of endothelin-1 to the enhanced carotid body chemosensory responses induced by chronic intermittent hypoxia. <i>Brain Research</i> , 2006, 1086, 152-159.	2.2	82
10	Carotid body chemoreceptors, sympathetic neural activation, and cardiometabolic disease. <i>Biological Research</i> , 2016, 49, 13.	3.4	78
11	An Electrochemical Deposition Route for Obtaining Fe_2O_3 Thin Films. <i>Electrochemical and Solid-State Letters</i> , 2006, 9, C110.	2.2	77
12	Differential expression of pro-inflammatory cytokines, endothelin-1 and nitric oxide synthases in the rat carotid body exposed to intermittent hypoxia. <i>Brain Research</i> , 2011, 1395, 74-85.	2.2	74
13	Carotid body potentiation induced by intermittent hypoxia: Implications for cardiorespiratory changes induced by sleep apnoea. <i>Clinical and Experimental Pharmacology and Physiology</i> , 2009, 36, 1197-1204.	1.9	73
14	Role of the Carotid Body in the Pathophysiology of Heart Failure. <i>Current Hypertension Reports</i> , 2013, 15, 356-362.	3.5	66
15	Neuroinflammation in heart failure: new insights for an old disease. <i>Journal of Physiology</i> , 2020, 598, 33-59.	2.9	62
16	Mechanisms of carotid body chemoreflex dysfunction during heart failure. <i>Experimental Physiology</i> , 2015, 100, 124-129.	2.0	58
17	An Electrochemical Deposition Route for Obtaining Fe_2O_3 Thin Films. <i>Electrochemical and Solid-State Letters</i> , 2007, 10, D95.	2.2	51
18	Electrosynthesis of polythiophene nanowires via mesoporous silica thin film templates. <i>Electrochemistry Communications</i> , 2009, 11, 2117-2120.	4.7	50

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19	Electrosynthesis and Electrochemical Characterization of a Thin Phase of Cu_2S (xâ†’ 2) on ITO Electrode. <i>Langmuir</i> , 2002, 18, 8647-8654.	3.5	49
20	Corrosion protection of carbon steel and copper by polyaniline and poly(ortho-methoxyaniline) films in sodium chloride medium. Electrochemical and morphological study. <i>Journal of Applied Electrochemistry</i> , 2007, 37, 519-525.	2.9	46
21	Inhibition of hydrogen sulfide restores normal breathing stability and improves autonomic control during experimental heart failure. <i>Journal of Applied Physiology</i> , 2013, 114, 1141-1150.	2.5	46
22	Contribution of peripheral and central chemoreceptors to sympathoâ€œexcitation in heart failure. <i>Journal of Physiology</i> , 2017, 595, 43-51.	2.9	46
23	Use of fluorine-doped tin oxide electrodes for lipoic acid determination in dietary supplements. <i>Journal of Electroanalytical Chemistry</i> , 2012, 668, 1-6.	3.8	44
24	Selective electrochemical determination of dopamine, using a poly(3,4-ethylenedioxythiophene)/polydopamine hybrid film modified electrode. <i>Journal of Electroanalytical Chemistry</i> , 2013, 704, 130-136.	3.8	44
25	Simvastatin Treatment Attenuates Increased Respiratory Variability and Apnea/Hypopnea Index in Rats With Chronic Heart Failure. <i>Hypertension</i> , 2014, 63, 1041-1049.	2.7	44
26	Enhanced carotid body chemosensory activity and the cardiovascular alterations induced by intermittent hypoxia. <i>Frontiers in Physiology</i> , 2014, 5, 468.	2.8	44
27	Inflammation and oxidative stress during intermittent hypoxia: the impact on chemoreception. <i>Experimental Physiology</i> , 2015, 100, 149-155.	2.0	43
28	Synaptic Functions of Hemichannels and Pannexons: A Double-Edged Sword. <i>Frontiers in Molecular Neuroscience</i> , 2018, 11, 435.	2.9	42
29	Corrosion inhibition of copper in chloride media by 1,5-bis(4-dithiocarboxylate-1-dodecyl-5-hydroxy-3-methylpyrazolyl)pentane. <i>Corrosion Science</i> , 2008, 50, 729-736.	6.6	40
30	Chronic intermittent hypoxia-induced vascular enlargement and VEGF upregulation in the rat carotid body is not prevented by antioxidant treatment. <i>American Journal of Physiology - Lung Cellular and Molecular Physiology</i> , 2011, 301, L702-L711.	2.9	39
31	Cardiac diastolic and autonomic dysfunction are aggravated by central chemoreflex activation in heart failure with preserved ejection fraction rats. <i>Journal of Physiology</i> , 2017, 595, 2479-2495.	2.9	38
32	Chronocoulometric Study of the Electrochemistry of Prussian Blue. <i>Journal of Physical Chemistry B</i> , 2005, 109, 15483-15488.	2.6	35
33	Role of the Carotid Body Chemoreflex in the Pathophysiology of Heart Failure: A Perspective from Animal Studies. <i>Advances in Experimental Medicine and Biology</i> , 2015, 860, 167-185.	1.6	35
34	Characterization of a novel and genetically different small infective variant of <i>Piscirickettsia salmonis</i> . <i>Microbial Pathogenesis</i> , 2008, 44, 370-378.	2.9	33
35	Carotid body potentiation during chronic intermittent hypoxia: implication for hypertension. <i>Frontiers in Physiology</i> , 2014, 5, 434.	2.8	32
36	Central role of carotid body chemoreceptors in disordered breathing and cardiorenal dysfunction in chronic heart failure. <i>Frontiers in Physiology</i> , 2014, 5, 438.	2.8	32

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37	Neurobehavioral and autonomic alterations in adults with obstructive sleep apnea. <i>Sleep Medicine</i> , 2014, 15, 1319-1323.	1.6	32
38	Cardiovascular and ventilatory acclimatization induced by chronic intermittent hypoxia: A role for the carotid body in the pathophysiology of sleep apnea. <i>Biological Research</i> , 2005, 38, 335-40.	3.4	31
39	Benefits of oxytocin administration in obstructive sleep apnea. <i>American Journal of Physiology - Lung Cellular and Molecular Physiology</i> , 2017, 313, L825-L833.	2.9	31
40	Carotid Body-Mediated Chemoreflex Drive in The Setting of low and High Output Heart Failure. <i>Scientific Reports</i> , 2017, 7, 8035.	3.3	29
41	Characterization of pure ZnO thin films prepared by a direct photochemical method. <i>Journal of Non-Crystalline Solids</i> , 2006, 352, 4088-4092.	3.1	26
42	Arginase—endothelial nitric oxide synthase imbalance contributes to endothelial dysfunction during chronic intermittent hypoxia. <i>Journal of Hypertension</i> , 2015, 33, 515-524.	0.5	25
43	KLF2 mediates enhanced chemoreflex sensitivity, disordered breathing and autonomic dysregulation in heart failure. <i>Journal of Physiology</i> , 2018, 596, 3171-3185.	2.9	24
44	Cardiorespiratory Alterations Induced by Intermittent Hypoxia in a Rat Model of Sleep Apnea. <i>Advances in Experimental Medicine and Biology</i> , 2010, 669, 271-274.	1.6	23
45	Electrochemistry of methimazole on fluorine-doped tin oxide electrodes and its square-wave voltammetric determination in pharmaceutical formulations. <i>Electrochimica Acta</i> , 2013, 88, 871-876.	5.2	23
46	Cognitive impairment in heart failure is associated with altered Wnt signaling in the hippocampus. <i>Aging</i> , 2019, 11, 5924-5942.	3.1	23
47	Captopril Electrochemical Oxidation on Fluorine-Doped SnO ₂ Electrodes and Their Determination in Pharmaceutical Preparations. <i>Electroanalysis</i> , 2010, 22, 2269-2276.	2.9	22
48	Relevance of the Carotid Body Chemoreflex in the Progression of Heart Failure. <i>BioMed Research International</i> , 2015, 2015, 1-7.	1.9	22
49	Intermittent Hypoxia-Induced Carotid Body Chemosensory Potentiation and Hypertension Are Critically Dependent on Peroxynitrite Formation. <i>Oxidative Medicine and Cellular Longevity</i> , 2016, 2016, 1-9.	4.0	22
50	Selective carotid body ablation in experimental heart failure: a new therapeutic tool to improve cardiorespiratory control. <i>Experimental Physiology</i> , 2015, 100, 136-142.	2.0	21
51	Endothelins in the cat petrosal ganglion and carotid body: Effects and immunolocalization. <i>Brain Research</i> , 2006, 1069, 154-158.	2.2	19
52	Role of neurotransmitter gases in the control of the carotid body in heart failure. <i>Respiratory Physiology and Neurobiology</i> , 2012, 184, 197-203.	1.6	19
53	Inhibition of rat carotid body glomus cells TASK-like channels by acute hypoxia is enhanced by chronic intermittent hypoxia. <i>Respiratory Physiology and Neurobiology</i> , 2013, 185, 600-607.	1.6	18
54	Exercise training attenuates chemoreflex-mediated reductions of renal blood flow in heart failure. <i>American Journal of Physiology - Heart and Circulatory Physiology</i> , 2015, 309, H259-H266.	3.2	18

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55	Electrosynthesis of Cu ²⁺ /Se Films on Copper Electrodes in Alkaline Media: A Voltammetric, Electrochemical Quartz Crystal Microbalance and Transient Study. Journal of Physical Chemistry B, 2005, 109, 3212-3221.	2.6	17
56	Temperature Effect on Nucleation and Growth Mechanism of Poly(<i>o</i> -anisidine) and Poly(aniline) Electro-Synthesis. Journal of the Electrochemical Society, 2013, 160, G125-G134.	2.9	16
57	Editorial: Carotid body: a new target for rescuing neural control of cardiorespiratory balance in disease. Frontiers in Physiology, 2015, 6, 181.	2.8	16
58	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
59	Carbon monoxide: A new player in the redox regulation of connexin hemichannels. IUBMB Life, 2015, 67, 428-437.	3.4	14
60	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
61	Contribution of Endothelin-1 and Endothelin A and B Receptors to the Enhanced Carotid Body Chemosensory Responses Induced by Chronic Intermittent Hypoxia. Advances in Experimental Medicine and Biology, 2008, 605, 228-232.	1.6	13
62	Electrochemistry behavior of endogenous thiols on fluorine doped tin oxide electrodes. Electrochimica Acta, 2011, 56, 8711-8717.	5.2	13
63	Gap-junctional channel and hemichannel activity of two recently identified connexin 26 mutants associated with deafness. Pflügers Archiv European Journal of Physiology, 2016, 468, 909-918.	2.8	13
64	Understanding the loss of electrochemical activity of nanosized LiMn ₂ O ₄ particles: a combined experimental and <i>ab initio</i> DFT study. Journal of Materials Chemistry A, 2018, 6, 14967-14974.	10.3	13
65	CdS amorphous thin films photochemical synthesis and optical characterization. Materials Science in Semiconductor Processing, 2008, 11, 94-99.	4.0	12
66	SCANNING ELECTRON MICROSCOPY AND ATOMIC FORCE MICROSCOPY OF CHITOSAN COMPOSITE FILMS. Journal of the Chilean Chemical Society, 2010, 55, 352-354.	1.2	12
67	Modulatory effects of histamine on cat carotid body chemoreception. Respiratory Physiology and Neurobiology, 2008, 164, 401-410.	1.6	11
68	Revisiting the physiological effects of exercise training on autonomic regulation and chemoreflex control in heart failure: does ejection fraction matter?. American Journal of Physiology - Heart and Circulatory Physiology, 2018, 314, H464-H474.	3.2	11
69	Crucial Role of the Carotid Body Chemoreceptors on the Development of High Arterial Blood Pressure During Chronic Intermittent Hypoxia. Advances in Experimental Medicine and Biology, 2015, 860, 255-260.	1.6	10
70	POLY-O-AMINOPHENOL OBTAINED AT HIGH POTENTIALS BY CYCLIC VOLTAMMETRY ON SnO ₂ : F ELECTRODES: APPLICATION IN QUANTITATIVE DETERMINATION OF ASCORBIC ACID. Journal of the Chilean Chemical Society, 2009, 54, .	1.2	9
71	The carotid body and its relevance in pathophysiology. Experimental Physiology, 2015, 100, 121-123.	2.0	9
72	Ventilatory and Autonomic Regulation in Sleep Apnea Syndrome: A Potential Protective Role for Erythropoietin?. Frontiers in Physiology, 2018, 9, 1440.	2.8	9

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73	Anodic Electrosynthesis of a Thin Film of Cu ₂ S on a Gold Electrode. A Voltammetric, Nanoelectrogravimetric, and I/t Transient Study. <i>Journal of Physical Chemistry B</i> , 2002, 106, 12684-12692.	2.6	7
74	Electrosynthesis, characterization and electrocatalytic properties of Prussian Blue (PB) nanoparticles disposed on a template. <i>Journal of Solid State Electrochemistry</i> , 2009, 13, 1303-1308.	2.5	7
75	Electro-Oxidation of Nitrite Using an Oxidized Glassy Carbon Electrode as Amperometric Sensor. <i>Electrocatalysis</i> , 2015, 6, 300-307.	3.0	6
76	Heart rate variability alterations in infants with spontaneous hypertonia. <i>Pediatric Research</i> , 2019, 86, 77-84.	2.3	6
77	Seed layer effect on morphological, structural, and optical properties of electrochemically grown ZnO nanowires over different SnO ₂ :F/glass substrates. <i>Journal of Solid State Electrochemistry</i> , 2020, 24, 797-808.	2.5	6
78	Chronic Intermittent Hypoxia Enhances Carotid Body Chemosensory Responses to Acute Hypoxia. , 2006, 580, 227-232.		6
79	INVESTIGATION AND OPTICAL EVALUATION OF PRECURSORS FOR THE PHOTODEPOSITION OF NANOSIZED ZnS AMORPHOUS THIN FILMS. <i>Journal of the Chilean Chemical Society</i> , 2007, 52, .	1.2	5
80	Carotid Body Type-I Cells Under Chronic Sustained Hypoxia: Focus on Metabolism and Membrane Excitability. <i>Frontiers in Physiology</i> , 2018, 9, 1282.	2.8	5
81	Acute Effects of Systemic Erythropoietin Injections on Carotid Body Chemosensory Activity Following Hypoxic and Hypercapnic Stimulation. <i>Advances in Experimental Medicine and Biology</i> , 2018, 1071, 95-102.	1.6	5
82	Role of Endothelin-1 on the Enhanced Carotid Body Activity Induced by Chronic Intermittent Hypoxia. , 2006, 580, 345-350.		5
83	New Aspects of the Electroadsorption of Ethyl Xanthate on Copper Electrodes. <i>Journal of Physical Chemistry B</i> , 2005, 109, 22920-22927.	2.6	4
84	MODIFICATION OF BORON DOPED DIAMOND ELECTRODES WITH GLUCOSE OXIDASE, CHARACTERIZATION BY ELECTROCHEMICAL TECHNIQUES. <i>Journal of the Chilean Chemical Society</i> , 2011, 56, 621-624.	1.2	4
85	ELECTRODES MODIFIED BY Π STACKING OF METALLIC PHTHALOCYANINES AND ITS ELECTROCATALYTIC ACTIVITY ON NITRITE OXIDATION. <i>Journal of the Chilean Chemical Society</i> , 2013, 58, 1971-1975.	1.2	3
86	A Potentiostatic and Atomic Force Microscopy Study of the Nucleation and Growth Mechanisms of Certain Metallic Cyanometalates. <i>Journal of Physical Chemistry C</i> , 2007, 111, 17541-17550.	3.1	2
87	Modification of composites of block copolymers“gold nanoparticles with enzymes and their characterization by electrochemical techniques. <i>Journal of Solid State Electrochemistry</i> , 2011, 15, 697-702.	2.5	2
88	Commentaries on Viewpoint: Precedence and autocracy in breathing control. <i>Journal of Applied Physiology</i> , 2015, 118, 1557-1559.	2.5	2
89	ELECTROCHEMICAL AND SPECTROSCOPIC PROPERTIES OF INDOLIZINO[1,2-B] QUINOLE DERIVATES. <i>Journal of the Chilean Chemical Society</i> , 2013, 58, 1976-1979.	1.2	1
90	Reply from Noah J. Marcus, Rodrigo Del Rio and Harold D. Schultz. <i>Journal of Physiology</i> , 2014, 592, 1905-1906.	2.9	1

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91	Topical Application of Connexin43 Hemichannel Blocker Reduces Carotid Body-Mediated Chemoreflex Drive in Rats. <i>Advances in Experimental Medicine and Biology</i> , 2018, 1071, 61-68.	1.6	1
92	Hypothyroidism affects D2 receptor-mediated breathing without altering D2 receptor expression. <i>Respiratory Physiology and Neurobiology</i> , 2014, 193, 29-37.	1.6	0
93	In adult female hamsters hypothyroidism stimulates D1 receptor-mediated breathing without altering D1 receptor expression. <i>Respiratory Physiology and Neurobiology</i> , 2015, 218, 32-39.	1.6	0
94	Chronic phenytoin treatment reduces rat carotid body chemosensory responses to acute hypoxia. <i>Brain Research</i> , 2016, 1649, 38-43.	2.2	0
95	July ECI biocommentary. <i>Pediatric Research</i> , 2019, 86, 9-9.	2.3	0
96	Comparison of Different Synthetic Routes of Hybrid Hematite-TiO ₂ Nanotubes-Based Electrodes. <i>Materials</i> , 2021, 14, 4501.	2.9	0