Juan AndrÃ©s Orellana

List of Publications by Year
in descending order

60 papers	3,892 citations	109264 35 h-index	133188 59 g-index
62 all docs	62 docs citations	62 times ranked	3245 citing authors

#	Article	IF	Citations
1	ATP and glutamate released via astroglial connexin 43â€ƒhemichannels mediate neuronal death through activation of pannexin 1 hemichannels. Journal of Neurochemistry, 2011, 118, 826-840.	2.1	324
2	Amyloid Î²-Induced Death in Neurons Involves Glial and Neuronal Hemichannels. Journal of Neuroscience, 2011, 31, 4962-4977.	1.7	256
3	Release of gliotransmitters through astroglial connexin 43 hemichannels is necessary for fear memory consolidation in the basolateral amygdala. FASEB Journal, 2012, 26, 3649-3657.	0.2	211
4	Modulation of Brain Hemichannels and Gap Junction Channels by Pro-Inflammatory Agents and Their Possible Role in Neurodegeneration. Antioxidants and Redox Signaling, 2009, 11, 369-399.	2.5	205
5	Connexin and pannexin hemichannels in inflammatory responses of glia and neurons. Brain Research, 2012, 1487, 3-15.	1.1	177
6	Cell membrane permeabilization via connexin hemichannels in living and dying cells. Experimental Cell Research, 2010, 316, 2377-2389.	1.2	168
7	Glucose increases intracellular free Ca²⁺ in tanycytes via ATP released through connexin 43 hemichannels. Glia, 2012, 60, 53-68.	2.5	154
8	Inhibition of cytokine-induced connexin43 hemichannel activity in astrocytes is neuroprotective. Molecular and Cellular Neurosciences, 2010, 45, 37-46.	1.0	152
9	Hypoxia in high glucose followed by reoxygenation in normal glucose reduces the viability of cortical astrocytes through increased permeability of connexin 43 hemichannels. Glia, 2010, 58, 329-343.	2.5	142
10	The Role of Gap Junction Channels During Physiologic and Pathologic Conditions of the Human Central Nervous System. Journal of NeuroImmune Pharmacology, 2012, 7, 499-518.	2.1	110
11	Glial connexin expression and function in the context of Alzheimer's disease. Biochimica Et Biophysica Acta - Biomembranes, 2012, 1818, 2048-2057.	1.4	81
12	Restraint stress increases hemichannel activity in hippocampal glial cells and neurons. Frontiers in Cellular Neuroscience, 2015, 9, 102.	1.8	80
13	Gap junction channels and hemichannels in the CNS: Regulation by signaling molecules. Neuropharmacology, 2013, 75, 567-582.	2.0	78
14	Hemichannels: New pathways for gliotransmitter release. Neuroscience, 2015, 286, 45-59.	1.1	78
15	Hemichannels: new roles in astroglial function. Frontiers in Physiology, 2014, 5, 193.	1.3	77
16	Currently Used Methods for Identification and Characterization of Hemichannels. Cell Communication and Adhesion, 2008, 15, 207-218.	1.0	74
17	Glial hemichannels and their involvement in aging and neurodegenerative diseases. Reviews in the Neurosciences, 2012, 23, 163-77.	1.4	72
18	Pannexin1 hemichannels are critical for HIV infection of human primary CD4+ T lymphocytes. Journal of Leukocyte Biology, 2013, 94, 399-407.	1.5	69

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19	<scp>HIV</scp> increases the release of dickkopfâ€1 protein from human astrocytes by a Cx43 hemichannelâ€dependent mechanism. Journal of Neurochemistry, 2014, 128, 752-763.	2.1	67
20	Astrocytes inhibit nitric oxide-dependent Ca²⁺dynamics in activated microglia: Involvement of ATP released via pannexin 1 channels. Glia, 2013, 61, 2023-2037.	2.5	65
21	Metabolic inhibition increases activity of connexin-32 hemichannels permeable to Ca²⁺ in transfected HeLa cells. American Journal of Physiology - Cell Physiology, 2009, 297, C665-C678.	2.1	63
22	Understanding Risk Factors for Alzheimer's Disease: Interplay of Neuroinflammation, Connexin-based Communication and Oxidative Stress. Archives of Medical Research, 2012, 43, 632-644.	1.5	62
23	Cannabinoids prevent the opposite regulation of astroglial connexin43 hemichannels and gap junction channels induced by proâ€inflammatory treatments. Journal of Neurochemistry, 2009, 111, 1383-1397.	2.1	54
24	Cation permeation through connexin 43 hemichannels is cooperative, competitive and saturable with parameters depending on the permeant species. Biochemical and Biophysical Research Communications, 2011, 409, 603-609.	1.0	53
25	Prenatal exposure to inflammatory conditions increases Cx43 and Panx1 unopposed channel opening and activation of astrocytes in the offspring effect on neuronal survival. Glia, 2015, 63, 2058-2072.	2.5	53
26	Possible Involvement of Different Connexin43 Domains in Plasma Membrane Permeabilization Induced by Ischemia-Reperfusion. Journal of Membrane Biology, 2007, 218, 49-63.	1.0	51
27	Cannabinoids prevent the amyloid Î²â€induced activation of astroglial hemichannels: A neuroprotective mechanism. Glia, 2017, 65, 122-137.	2.5	50
28	Connexins and Pannexins: New Insights into Microglial Functions and Dysfunctions. Frontiers in Molecular Neuroscience, 2016, 9, 86.	1.4	46
29	Connexin 43 Hemichannel Activity Promoted by Pro-Inflammatory Cytokines and High Glucose Alters Endothelial Cell Function. Frontiers in Immunology, 2018, 9, 1899.	2.2	45
30	Synaptic Functions of Hemichannels and Pannexons: A Double-Edged Sword. Frontiers in Molecular Neuroscience, 2018, 11, 435.	1.4	42
31	Chronic stress decreases the expression of sympathetic markers in the pineal gland and increases plasma melatonin concentration in rats. Journal of Neurochemistry, 2006, 97, 1279-1287.	2.1	40
32	Excess cholesterol induces mouse egg activation and may cause female infertility. Proceedings of the National Academy of Sciences of the United States of America, 2014, 111, E4972-80.	3.3	40
33	Hemichannels in the Neurovascular Unit and White Matter Under Normal and Inflamed Conditions. CNS and Neurological Disorders - Drug Targets, 2011, 10, 404-414.	0.8	39
34	Connexin 43 hemichannels and pannexinâ€1 channels contribute to the Î±â€synucleinâ€induced dysfunction and death of astrocytes. Glia, 2019, 67, 1598-1619.	2.5	39
35	Role of Connexins and Pannexins in Ischemic Stroke. Current Medicinal Chemistry, 2014, 21, 2165-2182.	1.2	36
36	Regulation of Intercellular Calcium Signaling Through Calcium Interactions with Connexin-Based Channels. Advances in Experimental Medicine and Biology, 2012, 740, 777-794.	0.8	35

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37	Role of Astroglial Hemichannels and Pannexons in Memory and Neurodegenerative Diseases. Frontiers in Integrative Neuroscience, 2016, 10, 26.	1.0	34
38	Heavy Alcohol Exposure Activates Astroglial Hemichannels and Pannexons in the Hippocampus of Adolescent Rats: Effects on Neuroinflammation and Astrocyte Arborization. Frontiers in Cellular Neuroscience, 2018, 12, 472.	1.8	34
39	Prenatal nicotine exposure enhances Cx43 and Panx1 unopposed channel activity in brain cells of adult offspring mice fed a high-fat/cholesterol diet. Frontiers in Cellular Neuroscience, 2014, 8, 403.	1.8	33
40	The Opening of Connexin 43 Hemichannels Alters Hippocampal Astrocyte Function and Neuronal Survival in Prenatally LPS-Exposed Adult Offspring. Frontiers in Cellular Neuroscience, 2019, 13, 460.	1.8	33
41	Disruption in Connexin-Based Communication Is Associated with Intracellular Ca2+ Signal Alterations in Astrocytes from Niemann-Pick Type C Mice. PLoS ONE, 2013, 8, e71361.	1.1	33
42	Connexin-Based Channels in Astrocytes: How to Study Their Properties. Methods in Molecular Biology, 2012, 814, 283-303.	0.4	32
43	Adolescent Binge Alcohol Exposure Affects the Brain Function Through Mitochondrial Impairment. Molecular Neurobiology, 2017, 55, 4473-4491.	1.9	31
44	Dysfunctions of the Diffusional Membrane Pathways Mediated Hemichannels in Inherited and Acquired Human Diseases. Current Vascular Pharmacology, 2009, 7, 486-505.	0.8	30
45	Modulation of interferonâ€Î³â€induced glial cell activation by transforming growth factor Î²1: A role for STAT1 and MAPK pathways. Journal of Neurochemistry, 2012, 123, 113-123.	2.1	30
46	Connexin and Pannexin-Based Channels in Oligodendrocytes: Implications in Brain Health and Disease. Frontiers in Cellular Neuroscience, 2019, 13, 3.	1.8	24
47	Physiological Functions of Glial Cell Hemichannels. Advances in Experimental Medicine and Biology, 2016, 949, 93-108.	0.8	20
48	HIV gp120 Protein Increases the Function of Connexin 43 Hemichannels and Pannexin-1 Channels in Astrocytes: Repercussions on Astroglial Function. International Journal of Molecular Sciences, 2020, 21, 2503.	1.8	20
49	New Implications for the Melanocortin System in Alcohol Drinking Behavior in Adolescents: The Glial Dysfunction Hypothesis. Frontiers in Cellular Neuroscience, 2017, 11, 90.	1.8	17
50	Interferon-Î³ and high glucose-induced opening of Cx43 hemichannels causes endothelial cell dysfunction and damage. Biochimica Et Biophysica Acta - Molecular Cell Research, 2020, 1867, 118720.	1.9	17
51	Neuron-Glia Crosstalk in the Autonomic Nervous System and Its Possible Role in the Progression of Metabolic Syndrome: A New Hypothesis. Frontiers in Physiology, 2015, 6, 350.	1.3	15
52	The Neuroglial Dialog Between Cannabinoids and Hemichannels. Frontiers in Molecular Neuroscience, 2018, 11, 79.	1.4	14
53	Astroglial gliotransmitters released via Cx43 hemichannels regulate NMDARâ€dependent transmission and shortâ€term fear memory in the basolateral amygdala. FASEB Journal, 2022, 36, e22134.	0.2	14
54	Permeation of Molecules through Astroglial Connexin 43 Hemichannels Is Modulated by Cytokines with Parameters Depending on the Permeant Species. International Journal of Molecular Sciences, 2020, 21, 3970.	1.8	12

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55	Astroglial Hemichannels and Pannexons: The Hidden Link between Maternal Inflammation and Neurological Disorders. International Journal of Molecular Sciences, 2021, 22, 9503.	1.8	12
56	Activation of Melanocortin-4 Receptor by a Synthetic Agonist Inhibits Ethanolinduced Neuroinflammation in Rats. Current Pharmaceutical Design, 2020, 25, 4799-4805.	0.9	10
57	Chlorpromazine reduces the intercellular communication via gap junctions in mammalian cells. Toxicology and Applied Pharmacology, 2006, 213, 187-197.	1.3	8
58	Neurodegeneration in Multiple Sclerosis: The Role of Nrf2-Dependent Pathways. Antioxidants, 2022, 11, 1146.	2.2	8
59	Editorial: Single membrane channels formed by connexins or pannexins: focus on the nervous system. Frontiers in Cellular Neuroscience, 2015, 9, 402.	1.8	0
60	Synaptic Functions of Astroglial Hemichannels. , 0, , .		0