Igor Medina

List of Publications by Year
in descending order

50	3,878	159585 30	206112 48
papers	citations	h-index	g-index

54	54	54	4340
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Leptin increases GABAergic synaptogenesis through the Rho guanine exchange factor Î²-PIX in developing hippocampal neurons. Science Signaling, 2021, 14, .	3.6	8
2	Oxytocin administration in neonates shapes hippocampal circuitry and restores social behavior in a mouse model of autism. Molecular Psychiatry, 2021, 26, 7582-7595.	7.9	45
3	Contribution of Smoothened Receptor Signaling in GABAergic Neurotransmission and Chloride Homeostasis in the Developing Rodent Brain. Frontiers in Physiology, 2021, 12, 798066.	2.8	3
4	Smoothened receptor Signaling regulates the developmental shift of GABA polarity in rat somatosensory cortex. Journal of Cell Science, 2020, 133, .	2.0	8
5	Staurosporine and NEM mainly impair WNK-SPAK/OSR1 mediated phosphorylation of KCC2 and NKCC1. PLoS ONE, 2020, 15, e0232967.	2.5	14
6	Methods for investigating the activities of neuronal chloride transporters. , 2020, , 21-41.		1
7	Impaired regulation of KCC2 phosphorylation leads to neuronal network dysfunction and neurodevelopmental pathology. Science Signaling, 2019, 12, .	3.6	66
8	The adipocyte hormone leptin sets the emergence of hippocampal inhibition in mice. ELife, 2018, 7, .	6.0	20
9	Mechanism of BDNF Modulation in GABAergic Synaptic Transmission in Healthy and Disease Brains. Frontiers in Cellular Neuroscience, 2018, 12, 273.	3.7	72
10	Molecular architecture of potassium chloride co-transporter KCC2. Scientific Reports, 2017, 7, 16452.	3.3	66
11	The small molecule CLP257 does not modify activity of the K+â€“Clâ^' co-transporter KCC2 but does potentiate GABAA receptor activity. Nature Medicine, 2017, 23, 1394-1396.	30.7	47
12	Molecular cloning and biochemical characterization of two cation chloride cotransporter subfamily members of Hydra vulgaris. PLoS ONE, 2017, 12, e0179968.	2.5	9
13	A Novel View on the Role of Intracellular Tails in Surface Delivery of the Potassium-Chloride Cotransporter KCC2. ENeuro, 2017, 4, ENEURO.0055-17.2017.	1.9	16
14	KCC2 regulates actin dynamics in dendritic spines via interaction with Î²-PIX. Journal of Cell Biology, 2015, 209, 671-686.	5.2	97
15	WNK1-regulated inhibitory phosphorylation of the KCC2 cotransporter maintains the depolarizing action of GABA in immature neurons. Science Signaling, 2015, 8, ra65.	3.6	133
16	KCC2 regulates actin dynamics in dendritic spines via interaction with Î²-PIX. Journal of Experimental Medicine, 2015, 212, 2127OIA56.	8.5	0
17	Genetically encoded impairment of neuronal <scp>KCC</scp> 2 cotransporter function in human idiopathic generalized epilepsy. EMBO Reports, 2014, 15, 766-774.	4.5	163
18	Pro-Brain-Derived Neurotrophic Factor Inhibits GABAergic Neurotransmission by Activating Endocytosis and Repression of GABA_AReceptors. Journal of Neuroscience, 2014, 34, 13516-13534.	3.6	43

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19	Current view on the functional regulation of the neuronal K+-Clâ^' cotransporter KCC2. Frontiers in Cellular Neuroscience, 2014, 8, 27.	3.7	186
20	Improved method for efficient imaging of intracellular Clâ^' with Cl-Sensor using conventional fluorescence setup. Frontiers in Molecular Neuroscience, 2013, 6, 7.	2.9	27
21	Enhanced synaptic activity and epileptiform events in the embryonic KCC2 deficient hippocampus. Frontiers in Cellular Neuroscience, 2011, 5, 23.	3.7	35
22	Knocking down of the KCC2 in rat hippocampal neurons increases intracellular chloride concentration and compromises neuronal survival. Journal of Physiology, 2011, 589, 2475-2496.	2.9	88
23	Genetically encoded Cl-Sensor as a tool for monitoring of Cl-dependent processes in small neuronal compartments. Journal of Neuroscience Methods, 2010, 193, 14-23.	2.5	60
24	AAVâ€mediated expression of wildâ€type and ALSâ€linked mutant VAPB selectively triggers death of motoneurons through a Ca²⁺â€dependent ERâ€associated pathway. Journal of Neurochemistry, 2010, 114, 795-809.	3.9	52
25	Activity-Dependent Dendritic Release of BDNF and Biological Consequences. Molecular Neurobiology, 2009, 39, 37-49.	4.0	152
26	Characterization in Cultured Cerebellar Granule Cells and in the Developing Rat Brain of mRNA Variants for the NMDA Receptor 2C Subunit. Journal of Neurochemistry, 2008, 74, 1798-1808.	3.9	16
27	The MUPP1â€“SynGAPÎ± protein complex does not mediate activity-induced LTP. Molecular and Cellular Neurosciences, 2008, 38, 183-188.	2.2	8
28	Mutations in KCNJ13 Cause Autosomal-Dominant Snowflake Vitreoretinal Degeneration. American Journal of Human Genetics, 2008, 82, 174-180.	6.2	93
29	Back-propagating action potential. Communicative and Integrative Biology, 2008, 1, 153-155.	1.4	8
30	Backpropagating Action Potentials Trigger Dendritic Release of BDNF during Spontaneous Network Activity. Journal of Neuroscience, 2008, 28, 7013-7023.	3.6	116
31	Extrasynaptic NMDA Receptors Reshape Gene Ranks. Science's STKE: Signal Transduction Knowledge Environment, 2007, 2007, pe23.	3.9	10
32	Efficient transfection of DNA or shRNA vectors into neurons using magnetofection. Nature Protocols, 2007, 2, 3090-3101.	12.0	114
33	Opposing role of synaptic and extrasynaptic NMDA receptors in regulation of the extracellular signal-regulated kinases (ERK) activity in cultured rat hippocampal neurons. Journal of Physiology, 2006, 572, 789-798.	2.9	275
34	Change in the shape and density of dendritic spines caused by overexpression of acidic calponin in cultured hippocampal neurons. Hippocampus, 2006, 16, 183-197.	1.9	32
35	GABA Neurotransmission and Neural Cation-Chloridec Co-transporters: Actions Beyond Ion Transport. Critical Reviews in Neurobiology, 2006, 18, 105-112.	3.1	13
36	Early expression of KCC2 in rat hippocampal cultures augments expression of functional GABA synapses. Journal of Physiology, 2005, 566, 671-679.	2.9	126

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37	SynGAP-MUPP1-CaMKII Synaptic Complexes Regulate p38 MAP Kinase Activity and NMDA Receptor-Dependent Synaptic AMPA Receptor Potentiation. Neuron, 2004, 43, 563-574.	8.1	254
38	The NMDA Receptor Is Coupled to the ERK Pathway by a Direct Interaction between NR2B and RasGRF1. Neuron, 2003, 40, 775-784.	8.1	394
39	Process formation results from the imbalance between motor-mediated forces. Journal of Cell Science, 2001, 114, 3899-3904.	2.0	20
40	A Switch Mechanism for Gî²î³ Activation of IKACh. Journal of Biological Chemistry, 2000, 275, 29709-29716.	3.4	55
41	Mobilization of intracellular calcium stores participates in the rise of [Ca2+]iand the toxic actions of the HIV coat protein GP120. European Journal of Neuroscience, 1999, 11, 1167-1178.	2.6	43
42	Calcium-dependent inactivation of the monosynaptic NMDA EPSCs in rat hippocampal neurons in culture. European Journal of Neuroscience, 1999, 11, 2422-2430.	2.6	23
43	Maturation of kainate-induced epileptiform activities in interconnected intact neonatal limbic structures in vitro. European Journal of Neuroscience, 1999, 11, 3468-3480.	2.6	50
44	Structure, G Protein Activation, and Functional Relevance of the Cardiac G Protein-Gated K+ Channel, IKACh. Annals of the New York Academy of Sciences, 1999, 868, 386-398.	3.8	35
45	A Novel Inward Rectifier K+ Channel with Unique Pore Properties. Neuron, 1998, 20, 995-1005.	8.1	170
46	Gî²î³ Binding to GIRK4 Subunit Is Critical for G Protein-gated K+ Channel Activation. Journal of Biological Chemistry, 1998, 273, 16946-16952.	3.4	79
47	Ca2+ Oscillations Mediated by the Synergistic Excitatory Actions of GABAA and NMDA Receptors in the Neonatal Hippocampus. Neuron, 1997, 18, 243-255.	8.1	377
48	A Novel In Vitro Preparation: the Intact Hippocampal Formation. Neuron, 1997, 19, 743-749.	8.1	136
49	The calcium-dependent transient inactivation of recombinant NMDA receptor-channel does not involve the high affinity calmodulin binding site of the NR1 subunit. Neuroscience Letters, 1997, 223, 137-139.	2.1	13
50	The hypoglycemic sulphonylurea tolbutamide increases - but not kainate-activated currents in hippocampal neurons in culture. European Journal of Pharmacology, 1993, 249, 325-329.	3.5	3