Rafael Gutierrez

List of Publications by Year
in descending order

45 papers	1,935 citations	218677 26 h-index	243625 44 g-index
46 all docs	46 docs citations	46 times ranked	1791 citing authors

#	Article	IF	Citations
1	Synaptic and Vesicular Coexistence of VGLUT and VGAT in Selected Excitatory and Inhibitory Synapses. Journal of Neuroscience, 2010, 30, 7634-7645.	3.6	142
2	Plasticity of the GABAergic Phenotype of the â€œGlutamatergicâ€•Granule Cells of the Rat Dentate Gyrus. Journal of Neuroscience, 2003, 23, 5594-5598.	3.6	119
3	The dual glutamatergicâ€"GABAergic phenotype of hippocampal granule cells. Trends in Neurosciences, 2005, 28, 297-303.	8.6	117
4	Expression of connexin genes in hippocampus of kainate-treated and kindled rats under conditions of experimental epilepsy. Molecular Brain Research, 2000, 83, 44-51.	2.3	98
5	Synaptic reorganization in explanted cultures of rat hippocampus. Brain Research, 1999, 815, 304-316.	2.2	95
6	Seizures Induce Simultaneous GABAergic and Glutamatergic Transmission in the Dentate Gyrus-CA3 System. Journal of Neurophysiology, 2000, 84, 3088-3090.	1.8	91
7	Activity-dependent expression of GAD67 in the granule cells of the rat hippocampus. Brain Research, 2001, 917, 139-146.	2.2	91
8	Activity-Dependent Expression of Simultaneous Glutamatergic and GABAergic Neurotransmission From the Mossy Fibers In Vitro. Journal of Neurophysiology, 2002, 87, 2562-2570.	1.8	86
9	Kindling induces transient fast inhibition in the dentate gyrus-CA3 projection. European Journal of Neuroscience, 2001, 13, 1371-1379.	2.6	84
10	Programmed and Induced Phenotype of the Hippocampal Granule Cells. Journal of Neuroscience, 2005, 25, 6939-6946.	3.6	83
11	The GABAergic phenotype of the â€œglutamatergicâ€•granule cells of the dentate gyrus. Progress in Neurobiology, 2003, 71, 337-358.	5.7	81
12	Vesicular GABA transporter mRNA expression in the dentate gyrus and in mossy fiber synaptosomes. Molecular Brain Research, 2001, 93, 209-214.	2.3	65
13	Pre-synaptic histamine H3 receptors regulate glutamate, but not GABA release in rat thalamus. Neuropharmacology, 2007, 52, 527-535.	4.1	53
14	Â/Â Oscillatory Activity in the CA3 Hippocampal Area is Depressed by Aberrant GABAergic Transmission from the Dentate Gyrus after Seizures. Journal of Neuroscience, 2007, 27, 251-259.	3.6	52
15	GABA Actions in Hippocampal Area CA3 During Postnatal Development: Differential Shift From Depolarizing to Hyperpolarizing in Somatic and Dendritic Compartments. Journal of Neurophysiology, 2008, 99, 1523-1534.	1.8	51
16	Mossy fiber synaptic transmission: communication from the dentate gyrus to area CA3. Progress in Brain Research, 2007, 163, 109-805.	1.4	47
17	Activity-Dependent Induction of Multitransmitter Signaling Onto Pyramidal Cells and Interneurons of Hippocampal Area CA3. Journal of Neurophysiology, 2003, 89, 3155-3167.	1.8	45
18	The GABAergic projection of the dentate gyrus to hippocampal area CA3 of the rat: pre- and postsynaptic actions after seizures. Journal of Physiology, 2005, 567, 939-949.	2.9	43

#	Article	IF	Citations
19	On Cotransmission & Neurotransmitter Phenotype Plasticity. Molecular Interventions: Pharmacological Perspectives From Biology, Chemistry and Genomics, 2007, 7, 138-146.	3.4	40
20	Epileptiform activity induced by low Mg2+ in cultured rat hippocampal slices. Brain Research, 1999, 815, 294-303.	2.2	38
21	Mixed Electricalâ€“Chemical Synapses in Adult Rat Hippocampus are Primarily Glutamatergic and Coupled by Connexin-36. Frontiers in Neuroanatomy, 2012, 6, 13.	1.7	35
22	Mixed electricalâ€“chemical transmission between hippocampal mossy fibers and pyramidal cells. European Journal of Neuroscience, 2012, 35, 76-82.	2.6	35
23	Co-Existence of GABA and Glu in the Hippocampal Granule Cells: Implications for Epilepsy. Current Topics in Medicinal Chemistry, 2006, 6, 975-978.	2.1	34
24	Coâ€release of glutamate and GABA from single, identified mossy fibre giant boutons. Journal of Physiology, 2012, 590, 4789-4800.	2.9	34
25	Glutamic acid decarboxylase (GAD)67, but not GAD65, is constitutively expressed during development and transiently overexpressed by activity in the granule cells of the rat. Neuroscience Letters, 2003, 353, 69-71.	2.1	30
26	Mixed neurotransmission in the hippocampal mossy fibers. Frontiers in Cellular Neuroscience, 2013, 7, 210.	3.7	28
27	Presence of claudins mRNA in the brain. Molecular Brain Research, 2002, 104, 250-254.	2.3	24
28	Electrical coupling between hippocampal neurons: contrasting roles of principal cell gap junctions and interneuron gap junctions. Cell and Tissue Research, 2018, 373, 671-691.	2.9	24
29	Activation of STAT3 Regulates Reactive Astrogliosis and Neuronal Death Induced by AÎ²O Neurotoxicity. International Journal of Molecular Sciences, 2020, 21, 7458.	4.1	23
30	Neuraminidase activity in different regions of the seizing epileptic and non-epileptic brain. Brain Research, 2003, 964, 211-217.	2.2	21
31	A novel class of peptide found in scorpion venom with neurodepressant effects in peripheral and central nervous system of the rat. Biochimica Et Biophysica Acta - Proteins and Proteomics, 2003, 1649, 58-67.	2.3	18
32	Early Appearance and Spread of Fast Ripples in the Hippocampus in a Model of Cortical Traumatic Brain Injury. Journal of Neuroscience, 2018, 38, 9034-9046.	3.6	15
33	Excitation-inhibition balance in the CA3 network - neuronal specificity and activity-dependent plasticity. European Journal of Neuroscience, 2011, 33, 1771-1785.	2.6	14
34	Tonic modulation of inhibition by dopamine D4 receptors in the rat hippocampus. Hippocampus, 2005, 15, 254-259.	1.9	13
35	Blockade of the membranal GABA transporter potentiates GABAergic responses evoked in pyramidal cells by mossy fiber activation after seizures. Hippocampus, 2005, 15, 281-284.	1.9	13
36	Target-Dependent Compartmentalization of the Corelease of Glutamate and GABA from the Mossy Fibers. Journal of Neuroscience, 2017, 37, 701-714.	3.6	11

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37	Entorhinal cortex lesions result in adenosine-sensitive high frequency oscillations in the hippocampus. Experimental Neurology, 2015, 271, 319-328.	4.1	9
38	Granule cells born in the adult rat hippocampus can regulate the expression of GABAergic markers. Experimental Neurology, 2012, 237, 134-141.	4.1	8
39	Neuronal Glutamatergic Network Electrically Wired with Silent But Activatable Gap Junctions. Journal of Neuroscience, 2020, 40, 4661-4672.	3.6	7
40	Dissociation of CA3 pyramidal cells with attached, functional, identified mossy fiber and interneuronal boutons for studying glutamatergic and GABAergic synaptic transmission. Journal of Neuroscience Methods, 2012, 208, 155-160.	2.5	6
41	Cocultures of GFP⁺â€‹granule cells with GFP^{â^’}â€‹pyramidal cells and interneurons for the study of mossy fiber neurotransmission with paired recordings. Hippocampus, 2013, 23, 247-252.	1.9	4
42	The plastic neurotransmitter phenotype of the hippocampal granule cells and of the moss in their messy fibers. Journal of Chemical Neuroanatomy, 2016, 73, 9-20.	2.1	4
43	Differential frequency-dependent antidromic resonance of the Schaffer collaterals and mossy fibers. Brain Structure and Function, 2016, 221, 1793-1807.	2.3	3
44	Glutamic acid decarboxylase (GAD)67, but not GAD65, is constitutively expressed during development and transiently overexpressed by activity in the granule cells of the rat. Neuroscience Letters, 2003, 353, 69-69.	2.1	1
45	Kindling the GABAergic Phenotype of the Glutamatergic Granule Cells. , 2005, , 71-79.		0