GermÃ¡n Barrionuevo

List of Publications by Year
in descending order

41 papers	3,546 citations	186265 28 h-index	302126 39 g-index
42 all docs	42 docs citations	42 times ranked	3380 citing authors

#	Article	IF	Citations
1	Intracellular injections of EGTA block induction of hippocampal long-term potentiation. Nature, 1983, 305, 719-721.	27.8	1,060
2	Impairment of Long-term Potentiation and Associative Memory in Mice That Overexpress Extracellular Superoxide Dismutase. Journal of Neuroscience, 2000, 20, 7631-7639.	3.6	194
3	Dopamine Modulates Excitability of Basolateral Amygdala Neurons In Vitro. Journal of Neurophysiology, 2005, 93, 1598-1610.	1.8	158
4	Dopamine Increases Excitability of Pyramidal Neurons in Primate Prefrontal Cortex. Journal of Neurophysiology, 2000, 84, 2799-2809.	1.8	154
5	Functional Properties of Fast Spiking Interneurons and Their Synaptic Connections With Pyramidal Cells in Primate Dorsolateral Prefrontal Cortex. Journal of Neurophysiology, 2005, 93, 942-953.	1.8	140
6	The DIADEM Data Sets: Representative Light Microscopy Images of Neuronal Morphology to Advance Automation of Digital Reconstructions. Neuroinformatics, 2011, 9, 143-157.	2.8	128
7	Cluster Analysisâ€“Based Physiological Classification and Morphological Properties of Inhibitory Neurons in Layers 2â€“3 of Monkey Dorsolateral Prefrontal Cortex. Journal of Neurophysiology, 2005, 94, 3009-3022.	1.8	120
8	Dopamine Increases Inhibition in the Monkey Dorsolateral Prefrontal Cortex through Cell Type-Specific Modulation of Interneurons. Cerebral Cortex, 2006, 17, 1020-1032.	2.9	110
9	The Extracellular Signal-Regulated Kinase Cascade Is Required for NMDA Receptor-Independent LTP in Area CA1 But Not Area CA3 of the Hippocampus. Journal of Neuroscience, 2000, 20, 3057-3066.	3.6	109
10	Induction of Hebbian and Non-Hebbian Mossy Fiber Long-Term Potentiation by Distinct Patterns of High-Frequency Stimulation. Journal of Neuroscience, 1996, 16, 4293-4299.	3.6	106
11	Synaptic targets of the intrinsic axon collaterals of supragranular pyramidal neurons in monkey prefrontal cortex. Journal of Comparative Neurology, 2001, 430, 209-221.	1.6	96
12	Revisiting the role of the hippocampal mossy fiber synapse. Hippocampus, 2001, 11, 408-417.	1.9	82
13	Voltage-Gated Sodium Channels Shape Subthreshold EPSPs in Layer 5 Pyramidal Neurons From Rat Prefrontal Cortex. Journal of Neurophysiology, 2001, 86, 1671-1684.	1.8	76
14	Dendritic morphology and its effects on the amplitude and rise-time of synaptic signals in hippocampal CA3 pyramidal cells. , 1996, 369, 331-334.		74
15	NMDA Receptor-dependent LTD in different subfields of hippocampus in vivo and in vitro. , 1996, 6, 43-51.		65
16	Early Maintenance of Hippocampal Mossy Fiberâ€"Long-Term Potentiation Depends on Protein and RNA Synthesis and Presynaptic Granule Cell Integrity. Journal of Neuroscience, 2003, 23, 4842-4849.	3.6	61
17	Bidirectional Hebbian Plasticity at Hippocampal Mossy Fiber Synapses on CA3 Interneurons. Journal of Neuroscience, 2008, 28, 14042-14055.	3.6	60
18	Electrophysiological and Pharmacological Characterization of the Direct Perforant Path Input to Hippocampal Area CA3. Journal of Neurophysiology, 1998, 79, 2111-2118.	1.8	57

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19	Amplification of Perforant-Path EPSPs in CA3 Pyramidal Cells by LVA Calcium and Sodium Channels. Journal of Neurophysiology, 1998, 80, 1558-1561.	1.8	53
20	Role of UCHL1 in axonal injury and functional recovery after cerebral ischemia. Proceedings of the National Academy of Sciences of the United States of America, 2019, 116, 4643-4650.	7.1	53
21	Large Amplitude Miniature Excitatory Postsynaptic Currents in Hippocampal CA3 Pyramidal Neurons Are of Mossy Fiber Origin. Journal of Neurophysiology, 1997, 77, 1075-1086.	1.8	52
22	Posttetanic potentiation and presynaptically induced long-term potentiation at the mossy fiber synapse in rat hippocampus. Journal of Neurobiology, 1995, 26, 370-385.	3.6	50
23	Synaptic Efficacy during Repetitive Activation of Excitatory Inputs in Primate Dorsolateral Prefrontal Cortex. Cerebral Cortex, 2004, 14, 530-542.	2.9	50
24	Selective reduction by dopamine of excitatory synaptic inputs to pyramidal neurons in primate prefrontal cortex. Journal of Physiology, 2002, 539, 707-712.	2.9	49
25	Long-term potentiation in hippocampal CA3 neurons: Tetanized input regulates heterosynaptic efficacy. Synapse, 1989, 4, 132-142.	1.2	45
26	Long-Term Depression in the Hippocampus In Vivo Is Associated with Protein Phosphatase-Dependent Alterations in Extracellular Signal-Regulated Kinase. Journal of Neurochemistry, 2001, 74, 192-198.	3.9	45
27	Potassium-induced long-term potentiation in rat hippocampal slices. Brain Research, 1992, 580, 100-105.	2.2	39
28	Short- and Long-Term Plasticity of the Perforant Path Synapse in Hippocampal Area CA3. Journal of Neurophysiology, 2002, 88, 528-533.	1.8	37
29	Quantitative morphometry of electrophysiologically identified CA3b interneurons reveals robust local geometry and distinct cell classes. Journal of Comparative Neurology, 2009, 515, 677-695.	1.6	33
30	Multiple forms of long-term synaptic plasticity at hippocampal mossy fiber synapses on interneurons. Neuropharmacology, 2011, 60, 740-747.	4.1	31
31	Coincidence detection of convergent perforant path and mossy fibre inputs by CA3 interneurons. Journal of Physiology, 2008, 586, 2695-2712.	2.9	27
32	Differences in Reperfusion-Induced Mitochondrial Oxidative Stress and Cell Death Between Hippocampal CA1 and CA3 Subfields Are Due to the Mitochondrial Thioredoxin System. Antioxidants and Redox Signaling, 2017, 27, 534-549.	5.4	25
33	Oxygenâ€"Glucose Deprivation Differentially Affects Neocortical Pyramidal Neurons and Parvalbumin-Positive Interneurons. Neuroscience, 2019, 412, 72-82.	2.3	21
34	TrkBâ€mediated activation of the phosphatidylinositolâ€3â€kinase/Akt cascade reduces the damage inflicted by oxygenâ€"glucose deprivation in area <scp>CA</scp>3 of the rat hippocampus. European Journal of Neuroscience, 2018, 47, 1096-1109.	2.6	20
35	Optimized Real-Time Monitoring of Glutathione Redox Status in Single Pyramidal Neurons in Organotypic Hippocampal Slices during Oxygenâ€"Glucose Deprivation and Reperfusion. ACS Chemical Neuroscience, 2015, 6, 1838-1848.	3.5	15
36	Origin of the Apparent Asynchronous Activity of Hippocampal Mossy Fibers. Journal of Neurophysiology, 1997, 78, 24-30.	1.8	14

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37	Actions of phosphomonoesters on CA1 hippocampal neurons as revealed by a combined electrophysiological and nuclear magnetic resonance study. Synapse, 1991, 9, 7-13.	1.2	11
38	Functional expression of TrkB receptors on interneurones and pyramidal cells of area CA3 of the rat hippocampus. Neuropharmacology, 2021, 182, 108379.	4.1	9
39	Mitochondrial GSH Systems in CA1 Pyramidal Cells and Astrocytes React Differently during Oxygen-Glucose Deprivation and Reperfusion. ACS Chemical Neuroscience, 2018, 9, 738-748.	3.5	7
40	Brain Sciences â€“ An Open Access Journal. Brain Sciences, 2011, 1, 1-2.	2.3	6
41	Revisiting the role of the hippocampal mossy fiber synapse. Hippocampus, 2001, 11, 408-417.	1.9	4