Qian-Quan Sun

List of Publications by Year
in descending order

41 papers	2,061 citations	346980 22 h-index	325983 40 g-index
42 all docs	42 docs citations	42 times ranked	3250 citing authors

#	Article	IF	Citations
1	Circuit Mechanisms Underlying Epileptogenesis in a Mouse Model of Focal Cortical Malformation. Current Biology, 2021, 31, 334-345.e4.	1.8	9
2	FXR1 regulation of parvalbumin interneurons in the prefrontal cortex is critical for schizophrenia-like behaviors. Molecular Psychiatry, 2021, 26, 6845-6867.	4.1	20
3	A long-range, recurrent neuronal network linking the emotion regions with the somatic motor cortex. Cell Reports, 2021, 36, 109733.	2.9	6
4	Engineering Adenylate Cyclase Activated by Near-Infrared Window Light for Mammalian Optogenetic Applications. ACS Synthetic Biology, 2019, 8, 1314-1324.	1.9	20
5	Cortical Layer and Spectrotemporal Architecture of Epileptiform Activity in vivo in a Mouse Model of Focal Cortical Malformation. Frontiers in Neural Circuits, 2019, 13, 2.	1.4	7
6	Circuit-specific and neuronal subcellular-wide E-I balance in cortical pyramidal cells. Scientific Reports, 2018, 8, 3971.	1.6	12
7	Medial Prefrontal Cortexâ€“Pontine Nuclei Projections Modulate Suboptimal Cue-Induced Associative Motor Learning. Cerebral Cortex, 2018, 28, 880-893.	1.6	24
8	Enhanced Burst-Suppression and Disruption of Local Field Potential Synchrony in a Mouse Model of Focal Cortical Dysplasia Exhibiting Spike-Wave Seizures. Frontiers in Neural Circuits, 2016, 10, 93.	1.4	15
9	Continuous spikeâ€waves during slowâ€wave sleep in a mouse model of focal cortical dysplasia. Epilepsia, 2016, 57, 1581-1593.	2.6	17
10	Hierarchical organization of long-range circuits in the olfactory cortices. Physiological Reports, 2015, 3, e12550.	0.7	3
11	An optogenetics- and imaging-assisted simultaneous multiple patch-clamp recording system for decoding complex neural circuits. Nature Protocols, 2015, 10, 397-412.	5.5	51
12	Laserspritzer: A Simple Method for Optogenetic Investigation with Subcellular Resolutions. PLoS ONE, 2014, 9, e101600.	1.1	6
13	Functional and structural specific roles of activity-driven BDNF within circuits formed by single spiny stellate neurons of the barrel cortex. Frontiers in Cellular Neuroscience, 2014, 8, 372.	1.8	5
14	Thorough GABAergic innervation of the entire axon initial segment revealed by an optogenetic â€˜laserspritzerâ€™. Journal of Physiology, 2014, 592, 4257-4276.	1.3	13
15	Distribution of CaMKIIÎ± expression in the brain in vivo, studied by CaMKIIÎ±-GFP mice. Brain Research, 2013, 1518, 9-25.	1.1	174
16	Neural coding during active somatosensation revealed using illusory touch. Nature Neuroscience, 2013, 16, 958-965.	7.1	228
17	Characterization of axoâ€axonic synapses in the piriform cortex of Mus musculus. Journal of Comparative Neurology, 2012, 520, 832-847.	0.9	28
18	A key mechanism underlying sensory experience-dependent maturation of neocortical GABAergic circuits in vivo. Proceedings of the National Academy of Sciences of the United States of America, 2011, 108, 12131-12136.	3.3	77

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19	The Balance Between Excitation And Inhibition And Functional Sensory Processing In The Somatosensory Cortex. International Review of Neurobiology, 2011, 97, 305-333.	0.9	40
20	Developmental maturation of excitation and inhibition balance in principal neurons across four layers of somatosensory cortex. Neuroscience, 2011, 174, 10-25.	1.1	80
21	Whisker experience modulates longâ€term depression in neocortical Î³â€aminobutyric acidergic interneurons in barrel cortex. Journal of Neuroscience Research, 2011, 89, 73-85.	1.3	3
22	Development of NMDA NR2 subunits and their roles in critical period maturation of neocortical GABAergic interneurons. Developmental Neurobiology, 2011, 71, 221-245.	1.5	52
23	Postnatal Maturation and Experience-Dependent Plasticity of Inhibitory Circuits in Barrel Cortex. , 2010, , 91-111.		0
24	GABAergic Inhibitory Interneurons in the Posterior Piriform Cortex of the GAD67-GFP Mouse. Cerebral Cortex, 2009, 19, 3011-3029.	1.6	37
25	Experience-Dependent Intrinsic Plasticity in Interneurons of Barrel Cortex Layer IV. Journal of Neurophysiology, 2009, 102, 2955-2973.	0.9	60
26	A novel role of dendritic gap junction and mechanisms underlying its interaction with thalamocortical conductance in fast spiking inhibitory neurons. BMC Neuroscience, 2009, 10, 131.	0.8	3
27	Differential Metabotropic Glutamate Receptor Expression and Modulation in Two Neocortical Inhibitory Networks. Journal of Neurophysiology, 2009, 101, 2679-2692.	0.9	25
28	The Missing Piece in the "Use It or Lose It" Puzzle: Is Inhibition Regulated by Activity or Does it Act on its Own Accord?. Reviews in the Neurosciences, 2007, 18, 295-310.	1.4	19
29	Long-Term Modifications in the Strength of Excitatory Associative Inputs in the Piriform Cortex. Chemical Senses, 2007, 32, 783-794.	1.1	8
30	Major defects in neocortical GABAergic inhibitory circuits in mice lacking the fragile X mental retardation protein. Neuroscience Letters, 2007, 412, 227-232.	1.0	222
31	Novel interneuronal network in the mouse posterior piriform cortex. Journal of Comparative Neurology, 2006, 499, 1000-1015.	0.9	34
32	Barrel Cortex Microcircuits: Thalamocortical Feedforward Inhibition in Spiny Stellate Cells Is Mediated by a Small Number of Fast-Spiking Interneurons. Journal of Neuroscience, 2006, 26, 1219-1230.	1.7	216
33	Major Effects of Sensory Experiences on the Neocortical Inhibitory Circuits. Journal of Neuroscience, 2006, 26, 8691-8701.	1.7	152
34	Reorganization of barrel circuits leads to thalamically-evoked cortical epileptiform activity. Thalamus & Related Systems, 2005, 3, 261.	0.5	13
35	Target-Specific Neuropeptide Y-Ergic Synaptic Inhibition and Its Network Consequences within the Mammalian Thalamus. Journal of Neuroscience, 2003, 23, 9639-9649.	1.7	55
36	Vasoactive Intestinal Polypeptide and Pituitary Adenylate Cyclase-Activating Polypeptide Activate Hyperpolarization-Activated Cationic Current and Depolarize Thalamocortical NeuronsIn Vitro. Journal of Neuroscience, 2003, 23, 2751-2758.	1.7	48

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37	Somatostatin Inhibits Thalamic Network OscillationsIn Vitro: Actions on the GABAergic Neurons of the Reticular Nucleus. Journal of Neuroscience, 2002, 22, 5374-5386.	1.7	62
38	Neuropeptide Y receptors differentially modulate Gâ€proteinâ€activated inwardly rectifying K + channels and highâ€voltageâ€activated Ca 2+ channels in rat thalamic neurons. Journal of Physiology, 2001, 531, 67-79.	1.3	82
39	Differential regulation of GABA release and neuronal excitability mediated by neuropeptide Y 1 and Y 2 receptors in rat thalamic neurons. Journal of Physiology, 2001, 531, 81-94.	1.3	61
40	G-Proteins Are Involved in 5-HT Receptor-Mediated Modulation of N- and P/Q- But Not T-Type Ca²⁺Channels. Journal of Neuroscience, 1999, 19, 890-899.	1.7	40
41	Differential inhibition of N and P/Q Ca2+currents by 5-HT1Aand 5-HT1Dreceptors in spinal neurons ofXenopuslarvae. Journal of Physiology, 1998, 510, 103-120.	1.3	34