Sylvain Crochet

List of Publications by Year
in descending order

46	3,638	218677	233421
papers	citations	26 h-index	45 g-index

48	48	48	3875
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Learning-related congruent and incongruent changes of excitation and inhibition in distinct cortical areas. PLoS Biology, 2022, 20, e3001667.	5.6	6
2	Cell-type-specific nicotinic input disinhibits mouse barrel cortex during active sensing. Neuron, 2021, 109, 778-787.e3.	8.1	52
3	Rapid suppression and sustained activation of distinct cortical regions for a delayed sensory-triggered motor response. Neuron, 2021, 109, 2183-2201.e9.	8.1	46
4	Cell type-specific membrane potential changes in dorsolateral striatum accompanying reward-based sensorimotor learning. Function, 2021, 2, zqab049.	2.3	4
5	Axonal and Dendritic Morphology of Excitatory Neurons in Layer 2/3 Mouse Barrel Cortex Imaged Through Whole-Brain Two-Photon Tomography and Registered to a Digital Brain Atlas. Frontiers in Neuroanatomy, 2021, 15, 791015.	1.7	7
6	Cortical circuits for transforming whisker sensation into goal-directed licking. Current Opinion in Neurobiology, 2020, 65, 38-48.	4.2	13
7	Match Making in Sensory Cortex. Neuron, 2020, 106, 363-365.	8.1	0
8	Projection-specific Activity of Layer 2/3 Neurons Imaged in Mouse Primary Somatosensory Barrel Cortex During a Whisker Detection Task. Function, 2020, 1, zqaa008.	2.3	10
9	Neural Circuits for Goal-Directed Sensorimotor Transformations. Trends in Neurosciences, 2019, 42, 66-77.	8.6	60
10	Reward-Based Learning Drives Rapid Sensory Signals in Medial Prefrontal Cortex and Dorsal Hippocampus Necessary for Goal-Directed Behavior. Neuron, 2018, 97, 83-91.e5.	8.1	123
11	Diverse Long-Range Axonal Projections of Excitatory Layer 2/3 Neurons in Mouse Barrel Cortex. Frontiers in Neuroanatomy, 2018, 12, 33.	1.7	65
12	The Cortical States of Wakefulness. Frontiers in Systems Neuroscience, 2018, 12, 64.	2.5	85
13	Highly Dynamic Spatiotemporal Organization of Low-Frequency Activities During Behavioral States in the Mouse Cerebral Cortex. Cerebral Cortex, 2017, 27, 5444-5462.	2.9	34
14	Movement Initiation Signals in Mouse Whisker Motor Cortex. Neuron, 2016, 92, 1368-1382.	8.1	97
15	Cortical Sensorimotor Reverberations. Neuron, 2015, 86, 1116-1118.	8.1	4
16	Cell-Type-Specific Sensorimotor Processing in Striatal Projection Neurons during Goal-Directed Behavior. Neuron, 2015, 88, 298-305.	8.1	165
17	Cholinergic Signals in Mouse Barrel Cortex during Active Whisker Sensing. Cell Reports, 2014, 9, 1654-1660.	6.4	194
18	From Perception to Action: A Spatiotemporal Cortical Map. Neuron, 2014, 81, 5-8.	8.1	4

#	Article	IF	Citations
19	Extracellular Ca2+ fluctuations in vivo affect afterhyperpolarization potential and modify firing patterns of neocortical neurons. Experimental Neurology, 2013, 245, 5-14.	4.1	12
20	Synaptic Computation and Sensory Processing in Neocortical Layer 2/3. Neuron, 2013, 78, 28-48.	8.1	222
21	Thalamic control of cortical states. Nature Neuroscience, 2012, 15, 370-372.	14.8	278
22	Intracellular Whole-Cell Patch-Clamp Recordings of Cortical Neurons in Awake Head-Restrained Mice. Neuromethods, 2011, , 219-235.	0.3	5
23	Properties of Slow Oscillation during Slow-Wave Sleep and Anesthesia in Cats. Journal of Neuroscience, 2011, 31, 14998-15008.	3.6	201
24	Synaptic Mechanisms Underlying Sparse Coding of Active Touch. Neuron, 2011, 69, 1160-1175.	8.1	234
25	Cortical Dynamics by Layers. Neuron, 2009, 64, 298-300.	8.1	13
26	Combined Voltage and Calcium Epifluorescence Imaging In Vitro and In Vivo Reveals Subthreshold and Suprathreshold Dynamics of Mouse Barrel Cortex. Journal of Neurophysiology, 2007, 97, 3751-3762.	1.8	162
27	A potent non-monoaminergic paradoxical sleep inhibitory system: a reverse microdialysis and single-unit recording study. European Journal of Neuroscience, 2006, 24, 1404-1412.	2.6	56
28	Correlating whisker behavior with membrane potential in barrel cortex of awake mice. Nature Neuroscience, 2006, 9, 608-610.	14.8	488
29	Synaptic Plasticity in Local Cortical Network In Vivo and Its Modulation by the Level of Neuronal Activity. Cerebral Cortex, 2006, 16, 618-631.	2.9	46
30	Modulation of synaptic transmission in neocortex by network activities. European Journal of Neuroscience, 2005, 21, 1030-1044.	2.6	91
31	Synaptic Enhancement Induced Through Callosal Pathways in Cat Association Cortex. Journal of Neurophysiology, 2004, 92, 3221-3232.	1.8	14
32	Synaptic Interactions Between Thalamic and Cortical Inputs Onto Cortical Neurons In Vivo. Journal of Neurophysiology, 2004, 91, 1990-1998.	1.8	46
33	Experimental evidence and modeling studies support a synchronizing role for electrical coupling in the cat thalamic reticular neurons in vivo. European Journal of Neuroscience, 2004, 20, 111-119.	2.6	60
34	The cortically evoked secondary depolarization affects the integrative properties of thalamic reticular neurons. European Journal of Neuroscience, 2004, 20, 2691-2696.	2.6	5
35	The histamine H3 receptor as a novel therapeutic target for cognitive and sleep disorders. Trends in Pharmacological Sciences, 2004, 25, 618-625.	8.7	212
36	Synaptic responsiveness of neocortical neurons to callosal volleys during paroxysmal depolarizing shifts. Neuroscience, 2004, 124, 231-239.	2.3	8

#	Article	IF	Citations
37	A neural mechanism of sleep and wakefulness. Sleep and Biological Rhythms, 2003, 1, 29-42.	1.0	44
38	Spontaneous field potentials influence the activity of neocortical neurons during paroxysmal activities in vivo. Neuroscience, 2003, 119, 277-291.	2.3	22
39	Protean agonism at histamine H3 receptors in vitro and in vivo. Proceedings of the National Academy of Sciences of the United States of America, 2003, 100, 11086-11091.	7.1	136
40	Dopaminergic Modulation of Behavioral States in Mesopontine Tegmentum: A Reverse Microdialysis Study in Freely Moving Cats. Sleep, 2003, 26, 801-806.	1.1	64
41	Role of dorsal raphe neurons in paradoxical sleep generation in the cat: no evidence for a serotonergic mechanism. European Journal of Neuroscience, 2001, 13, 103-112.	2.6	23
42	Increase in antidromic excitability in presumed serotonergic dorsal raphe neurons during paradoxical sleep in the cat. Brain Research, 2001, 898, 332-341.	2.2	10
43	Role of dorsal raphe neurons in paradoxical sleep generation in the cat: no evidence for a serotonergic mechanism. European Journal of Neuroscience, 2001, 13, 103-112.	2.6	22
44	Serotonergic dorsal raphe neurons cease firing by disfacilitation during paradoxical sleep. NeuroReport, 2000, 11, 3237-3241.	1.2	78
45	Effects of microdialysis application of monoamines on the EEG and behavioural states in the cat mesopontine tegmentum. European Journal of Neuroscience, 1999, 11, 3738-3752.	2.6	82
46	Alpha-2 adrenoceptor mediated paradoxical (REM) sleep inhibition in the cat. NeuroReport, 1999, 10, 2199-2204.	1.2	34