Jian-Young Wu

List of Publications by Year
in descending order

40 papers	2,204 citations	331670 21 h-index	361022 35 g-index
40 all docs	40 docs citations	40 times ranked	1558 citing authors

#	Article	IF	Citations
1	Spiral Waves in Disinhibited Mammalian Neocortex. Journal of Neuroscience, 2004, 24, 9897-9902.	3.6	355
2	Spiral Wave Dynamics in Neocortex. Neuron, 2010, 68, 978-990.	8.1	253
3	Compression and Reflection of Visually Evoked Cortical Waves. Neuron, 2007, 55, 119-129.	8.1	214
4	Propagating Waves of Activity in the Neocortex: What They Are, What They Do. Neuroscientist, 2008, 14, 487-502.	3.5	205
5	Propagating Activation during Oscillations and Evoked Responses in Neocortical Slices. Journal of Neuroscience, 1999, 19, 5005-5015.	3.6	149
6	Dynamical Evolution of Spatiotemporal Patterns in Mammalian Middle Cortex. Physical Review Letters, 2007, 98, 178102.	7.8	108
7	Methods for Voltage-Sensitive Dye Imaging of Rat Cortical Activity With High Signal-to-Noise Ratio. Journal of Neurophysiology, 2007, 98, 502-512.	1.8	106
8	Voltage-sensitive dye imaging of population neuronal activity in cortical tissue. Journal of Neuroscience Methods, 2002, 115, 13-27.	2.5	80
9	Initiation of Spontaneous Epileptiform Activity in the Neocortical Slice. Journal of Neurophysiology, 1998, 80, 978-982.	1.8	66
10	Propagating Wave and Irregular Dynamics: Spatiotemporal Patterns of Cholinergic Theta Oscillations in Neocortex In Vitro. Journal of Neurophysiology, 2003, 90, 333-341.	1.8	62
11	Voltage-sensitive dyes for monitoring multineuronal activity in the intact central nervous system. The Histochemical Journal, 1998, 30, 169-187.	0.6	58
12	Spatiotemporal Properties of an Evoked Population Activity in Rat Sensory Cortical Slices. Journal of Neurophysiology, 2001, 86, 2461-2474.	1.8	51
13	Epileptiform Activity Can Be Initiated in Various Neocortical Layers: An Optical Imaging Study. Journal of Neurophysiology, 1999, 82, 1965-1973.	1.8	50
14	Inhibitory Parvalbumin Basket Cell Activity is Selectively Reduced during Hippocampal Sharp Wave Ripples in a Mouse Model of Familial Alzheimer's Disease. Journal of Neuroscience, 2020, 40, 5116-5136.	3.6	47
15	Initiation of Spontaneous Epileptiform Events in the Rat Neocortex In Vivo. Journal of Neurophysiology, 2004, 91, 934-945.	1.8	44
16	Disruption of perineuronal nets increases the frequency of sharp wave ripple events. Hippocampus, 2018, 28, 42-52.	1.9	40
17	One neuron, many units?. Nature, 1990, 346, 108-109.	27.8	35
18	Crossmodal propagation of sensory-evoked and spontaneous activity in the rat neocortex. Neuroscience Letters, 2008, 431, 191-196.	2.1	35

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19	Measuring Sharp Waves and Oscillatory Population Activity With the Genetically Encoded Calcium Indicator GCaMP6f. Frontiers in Cellular Neuroscience, 2019, 13, 274.	3.7	34
20	High-frequency head impact causes chronic synaptic adaptation and long-term cognitive impairment in mice. Nature Communications, 2021, 12, 2613.	12.8	29
21	Spatiotemporal Patterns of an Evoked Network Oscillation in Neocortical Slices: Coupled Local Oscillators. Journal of Neurophysiology, 2006, 96, 2528-2538.	1.8	28
22	Flow detection of propagating waves with temporospatial correlation of activity. Journal of Neuroscience Methods, 2011, 200, 207-218.	2.5	24
23	Optical methods can be utilized to map the location and activity of putative motor neurons and interneurons during rhythmic patterns of activity in the buccal ganglion of Aplysia. Brain Research, 1991, 564, 45-55.	2.2	21
24	Initiation and Propagation of Neuronal Coactivation in the Developing Hippocampus. Journal of Neurophysiology, 2006, 95, 552-561.	1.8	19
25	5-HT3a Receptors Modulate Hippocampal Gamma Oscillations by Regulating Synchrony of Parvalbumin-Positive Interneurons. Cerebral Cortex, 2016, 26, bhu209.	2.9	15
26	The role of inhibition in oscillatory wave dynamics in the cortex. European Journal of Neuroscience, 2012, 36, 2201-2212.	2.6	13
27	Increased matrix metalloproteinase levels and perineuronal net proteolysis in the HIV-infected brain; relevance to altered neuronal population dynamics. Experimental Neurology, 2020, 323, 113077.	4.1	12
28	Evidence for glycinergic GluN1/GluN3 NMDA receptors in hippocampal metaplasticity. Neurobiology of Learning and Memory, 2015, 125, 265-273.	1.9	11
29	Monitoring Population Membrane Potential Signals from Neocortex. Advances in Experimental Medicine and Biology, 2015, 859, 171-196.	1.6	10
30	Dynamical evolution of spatiotemporal patterns in mammalian middle cortex. BMC Neuroscience, 2007, 8, .	1.9	7
31	Low-intensity electric fields induce two distinct response components in neocortical neuronal populations. Journal of Neurophysiology, 2014, 112, 2446-2456.	1.8	7
32	Fast Multisite Optical Measurement of Membrane Potential, with Two Examples. , 1999, , 222-237.		5
33	â€˜Blueâ€™ voltage-sensitive dyes for studying spatiotemporal dynamics in the brain: visualizing cortical waves. Neurophotonics, 2017, 4, 031207.	3.3	4
34	Emergence of dominant initiation sites for interictal spikes in rat neocortex. Journal of Neurophysiology, 2015, 114, 3315-3325.	1.8	3
35	Preparing Viable Hippocampal Slices from Adult Mice for the Study of Sharp Wave-ripples. Bio-protocol, 2020, 10, e3771.	0.4	2
36	Monitoring Population Membrane Potential Signals from Neocortex. , 2010, , 71-81.		1

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37	Transcranial Alternating Current Stimulation (tACS) as a Treatment for Insomnia. Canadian Journal of Neurological Sciences, 2023, 50, 446-449.	0.5	1
38	Now single spines: monitoring neuronal membrane potential with submicron and submillisecond resolution. Journal of Physiology, 2010, 588, 1191-1192.	2.9	0
39	In Vivo Dynamics of the Visual Cortex Measured with Voltage Sensitive Dyes. , 2009, , 177-221.		0
40	Transcallosal Pathway of Whisker Information Between Rat Primary Somatosensory Cortices*. Progress in Biochemistry and Biophysics, 2012, 39, 335-343.	0.3	0