Ko Matsui

List of Publications by Year
in descending order

35 papers	2,480 citations	257101 24 h-index	360668 35 g-index
39 all docs	39 docs citations	39 times ranked	3182 citing authors

#	Article	IF	Citations
1	Optogenetic stimulus-triggered acquisition of seizure resistance. Neurobiology of Disease, 2022, 163, 105602.	2.1	12
2	Exacerbation of Epilepsy by Astrocyte Alkalization and Gap Junction Uncoupling. Journal of Neuroscience, 2021, 41, 2106-2118.	1.7	27
3	Glial amplification of synaptic signals. Journal of Physiology, 2021, 599, 2085-2102.	1.3	17
4	Differential pial and penetrating arterial responses examined by optogenetic activation of astrocytes and neurons. Journal of Cerebral Blood Flow and Metabolism, 2021, 41, 2676-2689.	2.4	13
5	Region-Specific and State-Dependent Astrocyte Ca²⁺Dynamics during the Sleep-Wake Cycle in Mice. Journal of Neuroscience, 2021, 41, 5440-5452.	1.7	28
6	Intracellular ATP levels in mouse cortical excitatory neurons varies with sleepâ€“wake states. Communications Biology, 2020, 3, 491.	2.0	24
7	Targeted expression of step-function opsins in transgenic rats for optogenetic studies. Scientific Reports, 2018, 8, 5435.	1.6	14
8	Optogenetic astrocyte activation evokes BOLD fMRI response with oxygen consumption without neuronal activity modulation. Glia, 2018, 66, 2013-2023.	2.5	72
9	The number and distribution of AMPA receptor channels containing fast kinetic GluA3 and GluA4 subunits at auditory nerve synapses depend on the target cells. Brain Structure and Function, 2017, 222, 3375-3393.	1.2	25
10	Extending the Use of Optogenetics Beyond Neuroscience. Nippon Laser Igakkaishi, 2016, 36, 473-477.	0.0	0
11	Unveiling astrocytic control of cerebral blood flow with optogenetics. Scientific Reports, 2015, 5, 11455.	1.6	72
12	Nanoscale Distribution of Presynaptic Ca2+ Channels and Its Impact on Vesicular Release during Development. Neuron, 2015, 85, 145-158.	3.8	214
13	Na, K-ATPase Î±3 is a death target of Alzheimer patient amyloid-Î² assembly. Proceedings of the National Academy of Sciences of the United States of America, 2015, 112, E4465-74.	3.3	112
14	InÂVivo Visualization of Subtle, Transient, and Local Activity of Astrocytes Using an Ultrasensitive Ca2+ Indicator. Cell Reports, 2014, 8, 311-318.	2.9	158
15	Optogenetic Countering of Glial Acidosis Suppresses Glial Glutamate Release and Ischemic Brain Damage. Neuron, 2014, 81, 314-320.	3.8	154
16	Kv4.2 potassium channels segregate to extrasynaptic domains and influence intrasynaptic NMDA receptor NR2B subunit expression. Brain Structure and Function, 2013, 218, 1115-1132.	1.2	10
17	Evaluation of glutamate concentration transient in the synaptic cleft of the rat calyx of Held. Journal of Physiology, 2013, 591, 219-239.	1.3	45
18	Quantitative Localization of Ca_v2.1 (P/Q-Type) Voltage-Dependent Calcium Channels in Purkinje Cells: Somatodendritic Gradient and Distinct Somatic Coclustering with Calcium-Activated Potassium Channels. Journal of Neuroscience, 2013, 33, 3668-3678.	1.7	117

#	Article	IF	Citations
19	Application of an optogenetic byway for perturbing neuronal activity via glial photostimulation. Proceedings of the National Academy of Sciences of the United States of America, 2012, 109, 20720-20725.	3.3	139
20	Quantitative Regional and Ultrastructural Localization of the Ca_v2.3 Subunit of R-type Calcium Channel in Mouse Brain. Journal of Neuroscience, 2012, 32, 13555-13567.	1.7	78
21	Mechanisms Underlying Signal Filtering at a Multisynapse Contact. Journal of Neuroscience, 2012, 32, 2357-2376.	1.7	49
22	Expanding the Repertoire of Optogenetically Targeted Cells with an Enhanced Gene Expression System. Cell Reports, 2012, 2, 397-406.	2.9	159
23	Thin Dendrites of Cerebellar Interneurons Confer Sublinear Synaptic Integration and a Gradient of Short-Term Plasticity. Neuron, 2012, 73, 1159-1172.	3.8	114
24	Virusâ€mediated swapping of zolpidemâ€insensitive with zolpidemâ€sensitive GABA_A receptors in cortical pyramidal cells. Journal of Physiology, 2012, 590, 1517-1534.	1.3	8
25	Input-Specific Intrasynaptic Arrangements of Ionotropic Glutamate Receptors and Their Impact on Postsynaptic Responses. Journal of Neuroscience, 2009, 29, 12896-12908.	1.7	102
26	Bioimaging with Twoâ€Photonâ€Induced Luminescence from Triangular Nanoplates and Nanoparticle Aggregates of Gold. Advanced Materials, 2009, 21, 2309-2313.	11.1	67
27	The Great Escape of Glutamate from the Depth of Presynaptic Invaginations. Neuron, 2006, 50, 669-671.	3.8	3
28	Exocytosis unbound. Current Opinion in Neurobiology, 2006, 16, 305-311.	2.0	25
29	High-Concentration Rapid Transients of Glutamate Mediate Neural-Glial Communication via Ectopic Release. Journal of Neuroscience, 2005, 25, 7538-7547.	1.7	124
30	Differential Control of Synaptic and Ectopic Vesicular Release of Glutamate. Journal of Neuroscience, 2004, 24, 8932-8939.	1.7	79
31	Ectopic Release of Synaptic Vesicles. Neuron, 2003, 40, 1173-1183.	3.8	134
32	Modulation of Excitatory Synaptic Transmission by GABAC Receptor-Mediated Feedback in the Mouse Inner Retina. Journal of Neurophysiology, 2001, 86, 2285-2298.	0.9	57
33	Active Role of Glutamate Uptake in the Synaptic Transmission from Retinal Nonspiking Neurons. Journal of Neuroscience, 1999, 19, 6755-6766.	1.7	77
34	Excitatory Synaptic Transmission in the Inner Retina: Paired Recordings of Bipolar Cells and Neurons of the Ganglion Cell Layer. Journal of Neuroscience, 1998, 18, 4500-4510.	1.7	93
35	Two components of transmitter release in retinal bipolar cells: exocytosis and mobilization of synaptic vesicles. Neuroscience Research, 1997, 27, 357-370.	1.0	57