

Masanori Matsuzaki

List of Publications by Year in descending order

Source: <https://exaly.com/author-pdf/9035020/publications.pdf>

Version: 2024-02-01

52
papers

8,669
citations

147801

31
h-index

206112

48
g-index

58
all docs

58
docs citations

58
times ranked

8340
citing authors

#	ARTICLE	IF	CITATIONS
1	Silent microscopy to explore a brain that hears butterflies's wings. <i>Light: Science and Applications</i> , 2022, 11, 140.	16.6	0
2	Tb ³⁺ -doped fluorescent glass for biology. <i>Science Advances</i> , 2021, 7, .	10.3	9
3	Neuronal representations of reward-predicting cues and outcome history with movement in the frontal cortex. <i>Cell Reports</i> , 2021, 34, 108704.	6.4	15
4	A small-scale robotic manipulandum for motor control study with rodents. <i>Advanced Robotics</i> , 2021, 35, 898-906.	1.8	0
5	Optical deep-cortex exploration in behaving rhesus macaques. <i>Nature Communications</i> , 2021, 12, 4656.	12.8	2
6	Motor learning requires myelination to reduce asynchrony and spontaneity in neural activity. <i>Glia</i> , 2020, 68, 193-210.	4.9	55
7	Non-action Learning: Saving Action-Associated Cost Serves as a Covert Reward. <i>Frontiers in Behavioral Neuroscience</i> , 2020, 14, 141.	2.0	2
8	Common marmoset as a model primate for study of the motor control system. <i>Current Opinion in Neurobiology</i> , 2020, 64, 103-110.	4.2	8
9	Structural dynamics and stability of corticocortical and thalamocortical axon terminals during motor learning. <i>PLoS ONE</i> , 2020, 15, e0234930.	2.5	17
10	Two-photon Calcium Imaging of Axons Reveals Thalamocortical Neuronal Dynamics during Motor Learning. <i>The Brain & Neural Networks</i> , 2020, 27, 35-43.	0.1	0
11	Arm movements induced by noninvasive optogenetic stimulation of the motor cortex in the common marmoset. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2019, 116, 22844-22850.	7.1	40
12	Modular organization of cerebellar climbing fiber inputs during goal-directed behavior. <i>ELife</i> , 2019, 8, .	6.0	40
13	Silencing of FUS in the common marmoset (<i>Callithrix jacchus</i>) brain via stereotaxic injection of an adeno-associated virus encoding shRNA. <i>Neuroscience Research</i> , 2018, 130, 56-64.	1.9	14
14	Super-wide-field two-photon imaging with a micro-optical device moving in post-objective space. <i>Nature Communications</i> , 2018, 9, 3550.	12.8	44
15	Thalamocortical Axonal Activity in Motor Cortex Exhibits Layer-Specific Dynamics during Motor Learning. <i>Neuron</i> , 2018, 100, 244-258.e12.	8.1	63
16	Two-photon imaging of neuronal activity in motor cortex of marmosets during upper-limb movement tasks. <i>Nature Communications</i> , 2018, 9, 1879.	12.8	66
17	In vivo wide-field calcium imaging of mouse thalamocortical synapses with an 8K ultra-high-definition camera. <i>Scientific Reports</i> , 2018, 8, 8324.	3.3	20
18	Two-photon calcium imaging of the medial prefrontal cortex and hippocampus without cortical invasion. <i>ELife</i> , 2017, 6, .	6.0	63

#	ARTICLE	IF	CITATIONS
19	Neuronal processing of noxious thermal stimuli mediated by dendritic Ca ²⁺ influx in <i>Drosophila</i> somatosensory neurons. <i>ELife</i> , 2016, 5, .	6.0	39
20	Long-Term Two-Photon Calcium Imaging of Neuronal Populations with Subcellular Resolution in Adult Non-human Primates. <i>Cell Reports</i> , 2015, 13, 1989-1999.	6.4	124
21	Distinct Functional Modules for Discrete and Rhythmic Forelimb Movements in the Mouse Motor Cortex. <i>Journal of Neuroscience</i> , 2015, 35, 13311-13322.	3.6	63
22	Reward-timing-dependent bidirectional modulation of cortical microcircuits during optical single-neuron operant conditioning. <i>Nature Communications</i> , 2014, 5, 5551.	12.8	25
23	Two distinct layer-specific dynamics of cortical ensembles during learning of a motor task. <i>Nature Neuroscience</i> , 2014, 17, 987-994.	14.8	139
24	GABA promotes the competitive selection of dendritic spines by controlling local Ca ²⁺ signaling. <i>Nature Neuroscience</i> , 2013, 16, 1409-1416.	14.8	183
25	Spatiotemporal Dynamics of Functional Clusters of Neurons in the Mouse Motor Cortex during a Voluntary Movement. <i>Journal of Neuroscience</i> , 2013, 33, 1377-1390.	3.6	86
26	In vivo optogenetic tracing of functional corticocortical connections between motor forelimb areas. <i>Frontiers in Neural Circuits</i> , 2013, 7, 55.	2.8	57
27	Next-generation transgenic mice for optogenetic analysis of neural circuits. <i>Frontiers in Neural Circuits</i> , 2013, 7, 160.	2.8	62
28	Two-Photon Imaging and Photomanipulation of Multicellular Neural Activity in Awake Behaving Animals. <i>The Review of Laser Engineering</i> , 2013, 41, 86.	0.0	0
29	Reinforcing operandum: rapid and reliable learning of skilled forelimb movements by head-fixed rodents. <i>Journal of Neurophysiology</i> , 2012, 108, 1781-1792.	1.8	48
30	Simultaneous visualization of multiple neuronal properties with single-cell resolution in the living rodent brain. <i>Molecular and Cellular Neurosciences</i> , 2011, 48, 246-257.	2.2	39
31	<i>In vivo</i> two-photon uncaging of glutamate revealing the structure–function relationships of dendritic spines in the neocortex of adult mice. <i>Journal of Physiology</i> , 2011, 589, 2447-2457.	2.9	157
32	Two-Photon Uncaging Microscopy. <i>Cold Spring Harbor Protocols</i> , 2011, 2011, pdb.prot5620.	0.3	16
33	Simultaneous two-photon activation of presynaptic cells and calcium imaging in postsynaptic dendritic spines. <i>Neural Systems & Circuits</i> , 2011, 1, 2.	1.8	7
34	Spatial Distributions of GABA Receptors and Local Inhibition of Ca ²⁺ Transients Studied with GABA Uncaging in the Dendrites of CA1 Pyramidal Neurons. <i>PLoS ONE</i> , 2011, 6, e22652.	2.5	32
35	1-Acyl-5-methoxy-8-nitro-1,2-dihydroquinoline: a biologically useful photolabile precursor of carboxylic acids. <i>Tetrahedron Letters</i> , 2010, 51, 1642-1647.	1.4	12
36	Two-color, two-photon uncaging of glutamate and GABA. <i>Nature Methods</i> , 2010, 7, 123-125.	19.0	125

#	ARTICLE	IF	CITATIONS
37	Two-photon uncaging of \hat{I}^3 -aminobutyric acid in intact brain tissue. <i>Nature Chemical Biology</i> , 2010, 6, 255-257.	8.0	97
38	Transcranial optogenetic stimulation for functional mapping of the motor cortex. <i>Journal of Neuroscience Methods</i> , 2009, 179, 258-263.	2.5	97
39	Protein Synthesis and Neurotrophin-Dependent Structural Plasticity of Single Dendritic Spines. <i>Science</i> , 2008, 319, 1683-1687.	12.6	560
40	The Subspine Organization of Actin Fibers Regulates the Structure and Plasticity of Dendritic Spines. <i>Neuron</i> , 2008, 57, 719-729.	8.1	448
41	Principles of Long-Term Dynamics of Dendritic Spines. <i>Journal of Neuroscience</i> , 2008, 28, 13592-13608.	3.6	284
42	Three-Dimensional Mapping of Unitary Synaptic Connections by Two-Photon Macro Photolysis of Caged Glutamate. <i>Journal of Neurophysiology</i> , 2008, 99, 1535-1544.	1.8	58
43	High-speed mapping of synaptic connectivity using photostimulation in Channelrhodopsin-2 transgenic mice. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2007, 104, 8143-8148.	7.1	347
44	4-Carboxymethoxy-5,7-Dinitroindolyl-Glu: An Improved Caged Glutamate for Expedient Ultraviolet and Two-Photon Photolysis in Brain Slices. <i>Journal of Neuroscience</i> , 2007, 27, 6601-6604.	3.6	94
45	Factors critical for the plasticity of dendritic spines and memory storage. <i>Neuroscience Research</i> , 2007, 57, 1-9.	1.9	94
46	Number and Density of AMPA Receptors in Single Synapses in Immature Cerebellum. <i>Journal of Neuroscience</i> , 2005, 25, 799-807.	3.6	150
47	Spine-Neck Geometry Determines NMDA Receptor-Dependent Ca^{2+} Signaling in Dendrites. <i>Neuron</i> , 2005, 46, 609-622.	8.1	370
48	Genetically Encoded Bright Ca^{2+} Probe Applicable for Dynamic Ca^{2+} Imaging of Dendritic Spines. <i>Analytical Chemistry</i> , 2005, 77, 5861-5869.	6.5	119
49	Propagation of \hat{I}^3 PKC translocation along the dendrites of Purkinje cell in \hat{I}^3 PKC-GFP transgenic mice. <i>Genes To Cells</i> , 2004, 9, 945-957.	1.2	19
50	Structural basis of long-term potentiation in single dendritic spines. <i>Nature</i> , 2004, 429, 761-766.	27.8	2,081
51	Structureâ€“stabilityâ€“function relationships of dendritic spines. <i>Trends in Neurosciences</i> , 2003, 26, 360-368.	8.6	762
52	Dendritic spine geometry is critical for AMPA receptor expression in hippocampal CA1 pyramidal neurons. <i>Nature Neuroscience</i> , 2001, 4, 1086-1092.	14.8	1,413