List of Publications by Year in descending order

Source: https://exaly.com/author-pdf/9352305/publications.pdf Version: 2024-02-01



#	Article	IF	CITATIONS
1	Driving fast-spiking cells induces gamma rhythm and controls sensory responses. Nature, 2009, 459, 663-667.	27.8	2,250
2	Meditation experience is associated with increased cortical thickness. NeuroReport, 2005, 16, 1893-1897.	1.2	1,258
3	Targeted optogenetic stimulation and recording of neurons in vivo using cell-type-specific expression of Channelrhodopsin-2. Nature Protocols, 2010, 5, 247-254.	12.0	477
4	Neural mechanisms of transient neocortical beta rhythms: Converging evidence from humans, computational modeling, monkeys, and mice. Proceedings of the National Academy of Sciences of the United States of America, 2016, 113, E4885-94.	7.1	360
5	Spatio-Temporal Subthreshold Receptive Fields in the Vibrissa Representation of Rat Primary Somatosensory Cortex. Journal of Neurophysiology, 1998, 80, 2882-2892.	1.8	297
6	Selective optical drive of thalamic reticular nucleus generates thalamic bursts and cortical spindles. Nature Neuroscience, 2011, 14, 1118-1120.	14.8	248
7	Cued Spatial Attention Drives Functionally Relevant Modulation of the Mu Rhythm in Primary Somatosensory Cortex. Journal of Neuroscience, 2010, 30, 13760-13765.	3.6	234
8	The rate of transient beta frequency events predicts behavior across tasks and species. ELife, 2017, 6, .	6.0	220
9	Quantitative Analysis and Biophysically Realistic Neural Modeling of the MEG Mu Rhythm: Rhythmogenesis and Modulation of Sensory-Evoked Responses. Journal of Neurophysiology, 2009, 102, 3554-3572.	1.8	203
10	Mindfulness starts with the body: somatosensory attention and top-down modulation of cortical alpha rhythms in mindfulness meditation. Frontiers in Human Neuroscience, 2013, 7, 12.	2.0	202
11	The Hemo-Neural Hypothesis: On The Role of Blood Flow in Information Processing. Journal of Neurophysiology, 2008, 99, 2035-2047.	1.8	198
12	Embodied Information Processing: Vibrissa Mechanics and Texture Features Shape Micromotions in Actively Sensing Rats. Neuron, 2008, 57, 599-613.	8.1	185
13	Vibrissa Resonance as a Transduction Mechanism for Tactile Encoding. Journal of Neuroscience, 2003, 23, 6499-6509.	3.6	157
14	Segregation of Somatosensory Activation in the Human Rolandic Cortex Using fMRI. Journal of Neurophysiology, 2000, 84, 558-569.	1.8	156
15	Structural and functional plasticity in the somatosensory cortex of chronic stroke patients. Brain, 2006, 129, 2722-2733.	7.6	155
16	A somatotopic map of vibrissa motion direction within a barrel column. Nature Neuroscience, 2006, 9, 543-551.	14.8	149
17	Dynamics of neuronal processing in rat somatosensory cortex. Trends in Neurosciences, 1999, 22, 513-520.	8.6	143
18	Neural Correlates of Tactile Detection: A Combined Magnetoencephalography and Biophysically Based Computational Modeling Study. Journal of Neuroscience, 2007, 27, 10751-10764.	3.6	142

#	Article	IF	CITATIONS
19	Motion Aftereffects Transfer between Touch and Vision. Current Biology, 2009, 19, 745-750.	3.9	140
20	The flexDrive: an ultra-light implant for optical control and highly parallel chronic recording of neuronal ensembles in freely moving mice. Frontiers in Systems Neuroscience, 2013, 7, 8.	2.5	137
21	Gamma-range synchronization of fast-spiking interneurons can enhance detection of tactile stimuli. Nature Neuroscience, 2014, 17, 1371-1379.	14.8	137
22	A Pilot Study of Somatotopic Mapping After Cortical Infarct. Stroke, 2000, 31, 668-671.	2.0	134
23	Characterization of the Functional MRI Response Temporal Linearity via Optical Control of Neocortical Pyramidal Neurons. Journal of Neuroscience, 2011, 31, 15086-15091.	3.6	117
24	Neural Correlates of Vibrissa Resonance. Neuron, 2004, 42, 451-463.	8.1	116
25	Dysfunction of cortical GABAergic neurons leads to sensory hyper-reactivity in a Shank3 mouse model of ASD. Nature Neuroscience, 2020, 23, 520-532.	14.8	115
26	Wave-like dopamine dynamics as a mechanism for spatiotemporal credit assignment. Cell, 2021, 184, 2733-2749.e16.	28.9	112
27	Frequency-Dependent Processing in the Vibrissa Sensory System. Journal of Neurophysiology, 2004, 91, 2390-2399.	1.8	99
28	Effects of mindfulness meditation training on anticipatory alpha modulation in primary somatosensory cortex. Brain Research Bulletin, 2011, 85, 96-103.	3.0	99
29	Neocortical Interneurons: From Diversity, Strength. Cell, 2010, 142, 184-188.	28.9	95
30	Early Life Stress Drives Sex-Selective Impairment in Reversal Learning by Affecting Parvalbumin Interneurons in Orbitofrontal Cortex of Mice. Cell Reports, 2018, 25, 2299-2307.e4.	6.4	82
31	Band-Pass Response Properties of Rat SI Neurons. Journal of Neurophysiology, 2003, 90, 1379-1391.	1.8	80
32	Attention Drives Synchronization of Alpha and Beta Rhythms between Right Inferior Frontal and Primary Sensory Neocortex. Journal of Neuroscience, 2015, 35, 2074-2082.	3.6	79
33	Computational Modeling of Distinct Neocortical Oscillations Driven by Cell-Type Selective Optogenetic Drive: Separable Resonant Circuits Controlled by Low-Threshold Spiking and Fast-Spiking Interneurons. Frontiers in Human Neuroscience, 2010, 4, 198.	2.0	76
34	Human Neocortical Neurosolver (HNN), a new software tool for interpreting the cellular and network origin of human MEG/EEG data. ELife, 2020, 9, .	6.0	68
35	Temporal Modulation of Spatial Borders in Rat Barrel Cortex. Journal of Neurophysiology, 1998, 79, 464-470.	1.8	66
36	Temporal and Mosaic Tsc1 Deletion in the Developing Thalamus Disrupts Thalamocortical Circuitry, Neural Function, and Behavior. Neuron, 2013, 78, 895-909.	8.1	60

#	Article	IF	CITATIONS
37	Transformations in oscillatory activity and evoked responses in primary somatosensory cortex in middle age: A combined computational neural modeling and MEG study. NeuroImage, 2010, 52, 897-912.	4.2	44
38	For things needing your attention: the role of neocortical gamma in sensory perception. Current Opinion in Neurobiology, 2015, 31, 254-263.	4.2	39
39	A three-dimensional neural spheroid model for capillary-like network formation. Journal of Neuroscience Methods, 2018, 299, 55-63.	2.5	39
40	What do We Gain from Gamma? Local Dynamic Gain Modulation Drives Enhanced Efficacy and Efficiency of Signal Transmission. Frontiers in Human Neuroscience, 2010, 04, 185.	2.0	38
41	Activity in the Barrel Cortex During Active Behavior and Sleep. Journal of Neurophysiology, 2010, 103, 2074-2084.	1.8	35
42	Thalamic Bursts Down-regulate Cortical Theta and Nociceptive Behavior. Scientific Reports, 2017, 7, 2482.	3.3	32
43	Interactionist Neuroscience. Neuron, 2015, 88, 855-860.	8.1	29
44	Increase in Sensorimotor Cortex Response to Somatosensory Stimulation Over Subacute Poststroke Period Correlates With Motor Recovery in Hemiparetic Patients. Neurorehabilitation and Neural Repair, 2012, 26, 325-334.	2.9	28
45	Cortical Dynamics As A Therapeutic Mechanism for Touch Healing. Journal of Alternative and Complementary Medicine, 2007, 13, 59-66.	2.1	25
46	Cross-modal extinction in a boy with severely autistic behaviour and high verbal intelligence. Cognitive Neuropsychology, 2008, 25, 635-652.	1.1	25
47	Combined Optogenetic and Chemogenetic Control of Neurons. Methods in Molecular Biology, 2016, 1408, 207-225.	0.9	25
48	A Prospective Study of the Impact of Transcranial Alternating Current Stimulation on EEG Correlates of Somatosensory Perception. Frontiers in Psychology, 2018, 9, 2117.	2.1	21
49	Layer 6 ensembles can selectively regulate the behavioral impact and layer-specific representation of sensory deviants. ELife, 2020, 9, .	6.0	20
50	The BioLuminescentâ€OptoGenetic <i>in vivo</i> response to coelenterazine is proportional, sensitive, and specific in neocortex. Journal of Neuroscience Research, 2020, 98, 471-480.	2.9	18
51	Selective postnatal excitation of neocortical pyramidal neurons results in distinctive behavioral and circuit deficits in adulthood. IScience, 2021, 24, 102157.	4.1	18
52	Neocortical Correlates of Vibrotactile Detection in Humans. Journal of Cognitive Neuroscience, 2013, 25, 49-61.	2.3	14
53	Persistent Gamma Spiking in SI Nonsensory Fast Spiking Cells Predicts Perceptual Success. Neuron, 2019, 103, 1150-1163.e5.	8.1	14
54	Selective control of synaptically-connected circuit elements by all-optical synapses. Communications Biology, 2022, 5, 33.	4.4	14

#	Article	IF	CITATIONS
55	Chronically implanted hyperdrive for cortical recording and optogenetic control in behaving mice. , 2011, 2011, 7529-32.		12
56	Pinacidil induces vascular dilation and hyperemia in vivo and does not impact biophysical properties of neurons and astrocytes in vitro. Cleveland Clinic Journal of Medicine, 2009, 76, S80-S85.	1.3	12
57	What can crossmodal aftereffects reveal about neural representation and dynamics?. Communicative and Integrative Biology, 2009, 2, 479-481.	1.4	10
58	BLâ€OG: BioLuminescentâ€OptoGenetics. Journal of Neuroscience Research, 2020, 98, 469-470.	2.9	5
59	Cortical Circuits: Finding Balance in the Brain. Current Biology, 2011, 21, R956-R957.	3.9	4
60	Systematic Examination of the Impact of Depolarization Duration on Thalamic Reticular Nucleus Firing in vivo. Neuroscience, 2018, 368, 187-198.	2.3	3
61	Autism Overflows with Syntheses. Neuropsychology Review, 2009, 19, 273-274.	4.9	2
62	Cortical plasticity and LTP. Behavioral and Brain Sciences, 1997, 20, 623-624.	0.7	1
63	Response to Letter: Ritt etÂal., "Embodied Information Processing: Vibrissa Mechanics and Texture Features Shape Micromotions in Actively Sensing Rats.―Neuron 57, 599–613. Neuron, 2008, 60, 745-747.	8.1	0
64	Persistent Gamma Spiking in Non-Sensory Fast-Spiking Cells Predicts Perceptual Success. SSRN Electronic Journal, 0, , .	0.4	0