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List of Publications by Year
in descending order

35 papers	4,257 citations	361413 20 h-index	501196 28 g-index
49 all docs	49 docs citations	49 times ranked	4380 citing authors

#	Article	IF	Citations
1	Auditory activity is diverse and widespread throughout the central brain of Drosophila. Nature Neuroscience, 2021, 24, 93-104.	14.8	37
2	VolPy: Automated and scalable analysis pipelines for voltage imaging datasets. PLoS Computational Biology, 2021, 17, e1008806.	3.2	23
3	Online analysis of microendoscopic 1-photon calcium imaging data streams. PLoS Computational Biology, 2021, 17, e1008565.	3.2	27
4	Excitatory and Inhibitory Subnetworks Are Equally Selective during Decision-Making and Emerge Simultaneously during Learning. Neuron, 2020, 105, 165-179.e8.	8.1	82
5	Differential Emergence and Stability of Sensory and Temporal Representations in Context-Specific Hippocampal Sequences. Neuron, 2020, 108, 984-998.e9.	8.1	73
6	Phases of two-dimensional spinless lattice fermions with first-quantized deep neural-network quantum states. Physical Review B, 2020, 102, .	3.2	25
7	CaImAn an open source tool for scalable calcium imaging data analysis. ELife, 2019, 8, .	6.0	551
8	Analysis pipelines for calcium imaging data. Current Opinion in Neurobiology, 2019, 55, 15-21.	4.2	71
9	Reinforcement Learning Recruits Somata and Apical Dendrites across Layers of Primary Sensory Cortex. Cell Reports, 2019, 26, 2000-2008.e2.	6.4	59
10	A robotic multidimensional directed evolution approach applied to fluorescent voltage reporters. Nature Chemical Biology, 2018, 14, 352-360.	8.0	264
11	Anscombe Meets Hough: Noise Variance Stablization Via Parametric Model Estimation. , 2018, , .		2
12	Efficient and accurate extraction of in vivo calcium signals from microendoscopic video data. ELife, 2018, 7, .	6.0	489
13	Cerebellar granule cells acquire a widespread predictive feedback signal during motor learning. Nature Neuroscience, 2017, 20, 727-734.	14.8	182
14	NoRMCorre: An online algorithm for piecewise rigid motion correction of calcium imaging data. Journal of Neuroscience Methods, 2017, 291, 83-94.	2.5	650
15	Compressed sensing and optimal denoising of monotone signals. , 2017, , .		0
16	Population-Level Representation of a Temporal Sequence Underlying Song Production in the Zebra Finch. Neuron, 2016, 90, 866-876.	8.1	109
17	Simultaneous Multi-plane Imaging of Neural Circuits. Neuron, 2016, 89, 269-284.	8.1	209
18	Simultaneous Denoising, Deconvolution, and Demixing of Calcium Imaging Data. Neuron, 2016, 89, 285-299.	8.1	843

#	Article	IF	Citations
19	Primacy of Flexor Locomotor Pattern Revealed by Ancestral Reversion of Motor Neuron Identity. Cell, 2015, 162, 338-350.	28.9	54
20	Fast Kalman Filtering and Forwardâ€“Backward Smoothing via a Low-Rank Perturbative Approach. Journal of Computational and Graphical Statistics, 2014, 23, 316-339.	1.7	21
21	Spatiotemporal receptive fields of barrel cortex revealed by reverse correlation of synaptic input. Nature Neuroscience, 2014, 17, 866-875.	14.8	80
22	Age-Related Homeostatic Midchannel Proteolysis of Neuronal L-type Voltage-Gated Ca2+ Channels. Neuron, 2014, 82, 1045-1057.	8.1	30
23	The power of connectivity: Identity preserving transformations on visual streams in the spike domain. Neural Networks, 2013, 44, 22-35.	5.9	3
24	Bayesian spike inference from calcium imaging data. , 2013, , .		44
25	Fast Spatiotemporal Smoothing of Calcium Measurements in Dendritic Trees. PLoS Computational Biology, 2012, 8, e1002569.	3.2	10
26	Video Time Encoding Machines. IEEE Transactions on Neural Networks, 2011, 22, 461-473.	4.2	95
27	Encoding of multivariate stimuli with MIMO neural circuits. , 2011, , .		0
28	Encoding natural scenes with neural circuits with random thresholds. Vision Research, 2010, 50, 2200-2212.	1.4	22
29	Consistent Recovery of Sensory Stimuli Encoded with MIMO Neural Circuits. Computational Intelligence and Neuroscience, 2010, 2010, 1-13.	1.7	9
30	Consistent recovery of stimuli encoded with a neural ensemble. , 2009, , .		0
31	Reconstruction and classification of stimuli encoded with neural circuits with feedback. BMC Neuroscience, 2009, 10, .	1.9	0
32	Reconstruction of Sensory Stimuli Encoded with Integrate-and-Fire Neurons with Random Thresholds. Eurasip Journal on Advances in Signal Processing, 2009, 2009, 682930.	1.7	15
33	An inpainting system for automatic image structure - texture restoration with text removal. , 2008, , .		12
34	A video Time Encoding Machine. , 2008, , .		5
35	Faithful Representation of Stimuli with a Population of Integrate-and-Fire Neurons. Neural Computation, 2008, 20, 2715-2744.	2.2	57