Cristopher M Niell

List of Publications by Year
in descending order

40 papers	5,433 citations	236925 25 h-index	315739 38 g-index
50 all docs	50 docs citations	50 times ranked	5097 citing authors

#	Article	IF	Citations
1	Modulation of Visual Responses by Behavioral State in Mouse Visual Cortex. Neuron, 2010, 65, 472-479.	8.1	1,290
2	Highly Selective Receptive Fields in Mouse Visual Cortex. Journal of Neuroscience, 2008, 28, 7520-7536.	3.6	938
3	In vivo imaging of synapse formation on a growing dendritic arbor. Nature Neuroscience, 2004, 7, 254-260.	14.8	384
4	Diverse Visual Features Encoded in Mouse Lateral Geniculate Nucleus. Journal of Neuroscience, 2013, 33, 4642-4656.	3.6	303
5	What can mice tell us about how vision works?. Trends in Neurosciences, 2011, 34, 464-473.	8.6	278
6	Large-scale imaging of cortical dynamics during sensory perception and behavior. Journal of Neurophysiology, 2016, 115, 2852-2866.	1.8	261
7	Identification of a Brainstem Circuit Regulating Visual Cortical State in Parallel with Locomotion. Neuron, 2014, 83, 455-466.	8.1	254
8	Long-Term Optical Access to an Estimated One Million Neurons in the Live Mouse Cortex. Cell Reports, 2016, 17, 3385-3394.	6.4	209
9	Functional Imaging Reveals Rapid Development of Visual Response Properties in the Zebrafish Tectum. Neuron, 2005, 45, 941-951.	8.1	204
10	Vision Drives Accurate Approach Behavior during Prey Capture in Laboratory Mice. Current Biology, 2016, 26, 3046-3052.	3.9	181
11	Defined Cell Types in Superior Colliculus Make Distinct Contributions to Prey Capture Behavior in the Mouse. Current Biology, 2019, 29, 4130-4138.e5.	3.9	105
12	Layer-Specific Refinement of Visual Cortex Function after Eye Opening in the Awake Mouse. Journal of Neuroscience, 2015, 35, 3370-3383.	3.6	100
13	Movement-Related Signals in Sensory Areas: Roles in Natural Behavior. Trends in Neurosciences, 2020, 43, 581-595.	8.6	97
14	Selective Disruption of One Cartesian Axis of Cortical Maps and Receptive Fields by Deficiency inÂEphrin-As and Structured Activity. Neuron, 2008, 57, 511-523.	8.1	81
15	Dynamics of gaze control during prey capture in freely moving mice. ELife, 2020, 9, .	6.0	76
16	Cell Types, Circuits, and Receptive Fields in the Mouse Visual Cortex. Annual Review of Neuroscience, 2015, 38, 413-431.	10.7	70
17	Reduced Cortical Activity Impairs Development and Plasticity after Neonatal Hypoxia Ischemia. Journal of Neuroscience, 2015, 35, 11946-11959.	3.6	57
18	Natural behavior is the language of the brain. Current Biology, 2022, 32, R482-R493.	3.9	53

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19	Live Optical Imaging of Nervous System Development. Annual Review of Physiology, 2004, 66, 771-798.	13.1	52
20	How Cortical Circuits Implement Cortical Computations: Mouse Visual Cortex as a Model. Annual Review of Neuroscience, 2021, 44, 517-546.	10.7	51
21	A Hallucinogenic Serotonin-2A Receptor Agonist Reduces Visual Response Gain and Alters Temporal Dynamics in Mouse V1. Cell Reports, 2019, 26, 3475-3483.e4.	6.4	46
22	A Distinct Class of Bursting Neurons with Strong Gamma Synchronization and Stimulus Selectivity in Monkey V1. Neuron, 2020, 105, 180-197.e5.	8.1	45
23	Auditory Cortex Is Required for Fear Potentiation of Gap Detection. Journal of Neuroscience, 2014, 34, 15437-15445.	3.6	40
24	Cortical signatures of wakeful somatosensory processing. Scientific Reports, 2018, 8, 11977.	3.3	40
25	Rhythmic brain stimulation reduces anxiety-related behavior in a mouse model based on meditation training. Proceedings of the National Academy of Sciences of the United States of America, 2017, 114, 2532-2537.	7.1	37
26	Changes in white matter in mice resulting from low-frequency brain stimulation. Proceedings of the National Academy of Sciences of the United States of America, 2018, 115, E6339-E6346.	7.1	35
27	Refinement of Spatial Receptive Fields in the Developing Mouse Lateral Geniculate Nucleus Is Coordinated with Excitatory and Inhibitory Remodeling. Journal of Neuroscience, 2018, 38, 4531-4542.	3.6	19
28	Exploring the Next Frontier of Mouse Vision. Neuron, 2011, 72, 889-892.	8.1	18
29	Vision: More Than Expected in the Early Visual System. Current Biology, 2013, 23, R681-R684.	3.9	18
30	Behavioral Stateâ€"Getting â€œIn The Zoneâ€• Neuron, 2015, 87, 7-9.	8.1	14
31	How changes in white matter might underlie improved reaction time due to practice. Cognitive Neuroscience, 2017, 8, 112-118.	1.4	13
32	TU-Tagging: A Method for Identifying Layer-Enriched Neuronal Genes in Developing Mouse Visual Cortex. ENeuro, 2017, 4, ENEURO.0181-17.2017.	1.9	13
33	Differential Involvement of Three Brain Regions during Mouse Skill Learning. ENeuro, 2019, 6, ENEURO.0143-19.2019.	1.9	6
34	Decision Making as a Learned Skill in Mice and Humans. Frontiers in Neuroscience, 2022, 16, 834701.	2.8	6
35	Illuminating the Neural Circuits Underlying Orienting of Attention. Vision (Switzerland), 2019, 3, 4.	1.2	4
36	Controlled assembly of retinal cells on fractal and Euclidean electrodes. PLoS ONE, 2022, 17, e0265685.	2.5	4

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37	Precise levels of nectin-3 are required for proper synapse formation in postnatal visual cortex. Neural Development, 2020, 15, 13.	2.4	2
38	Seeing with a biased visual cortical map. Journal of Neurophysiology, 2018, 120, 272-273.	1.8	1
39	Visual Processing: Hungry Like the Mouse. Neuron, 2016, 91, 952-953.	8.1	0
40	White matter and reaction time: Reply to commentaries. Cognitive Neuroscience, 2017, 8, 137-140.	1.4	0