R Clay Reid

List of Publications by Year
in descending order

41	10,289	136950 32	276875 41
papers	citations	h-index	g-index

62	62	62	8132
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Functional imaging with cellular resolution reveals precise micro-architecture in visual cortex. Nature, 2005, 433, 597-603.	27.8	1,060
2	Transgenic Mice for Intersectional Targeting of Neural Sensors and Effectors with High Specificity and Performance. Neuron, 2015, 85, 942-958.	8.1	992
3	Network anatomy and in vivo physiology of visual cortical neurons. Nature, 2011, 471, 177-182.	27.8	797
4	Specificity of monosynaptic connections from thalamus to visual cortex. Nature, 1995, 378, 281-284.	27.8	640
5	Broadly Tuned Response Properties of Diverse Inhibitory Neuron Subtypes in Mouse Visual Cortex. Neuron, 2010, 67, 858-871.	8.1	549
6	The Koniocellular Pathway in Primate Vision. Annual Review of Neuroscience, 2000, 23, 127-153.	10.7	492
7	Anatomy and function of an excitatory network in the visual cortex. Nature, 2016, 532, 370-374.	27.8	447
8	Precisely correlated firing in cells of the lateral geniculate nucleus. Nature, 1996, 383, 815-819.	27.8	437
9	Temporal Coding of Visual Information in the Thalamus. Journal of Neuroscience, 2000, 20, 5392-5400.	3.6	404
10	Functional Specialization of Mouse Higher Visual Cortical Areas. Neuron, 2011, 72, 1025-1039.	8.1	378
11	Removable cranial windows for long-term imaging in awake mice. Nature Protocols, 2014, 9, 2515-2538.	12.0	336
12	SYNCHRONOUS ACTIVITY IN THE VISUAL SYSTEM. Annual Review of Physiology, 1999, 61, 435-456.	13.1	320
13	Cortico-cortical projections in mouse visual cortex are functionally target specific. Nature Neuroscience, 2013, 16, 219-226.	14.8	284
14	Survey of spiking in the mouse visual system reveals functional hierarchy. Nature, 2021, 592, 86-92.	27.8	284
15	A large-scale standardized physiological survey reveals functional organization of the mouse visual cortex. Nature Neuroscience, 2020, 23, 138-151.	14.8	232
16	Local Diversity and Fine-Scale Organization of Receptive Fields in Mouse Visual Cortex. Journal of Neuroscience, 2011, 31, 18506-18521.	3.6	229
17	Coding of visual information by precisely correlated spikes in the lateral geniculate nucleus. Nature Neuroscience, 1998, 1, 501-507.	14.8	220
18	Specificity and Strength of Retinogeniculate Connections. Journal of Neurophysiology, 1999, 82, 3527-3540.	1.8	216

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19	Paired-spike interactions and synaptic efficacy of retinal inputs to the thalamus. Nature, 1998, 395, 384-387.	27.8	204
20	A Comparison of Visual Response Properties in the Lateral Geniculate Nucleus and Primary Visual Cortex of Awake and Anesthetized Mice. Journal of Neuroscience, 2016, 36, 12144-12156.	3.6	134
21	Relationship between simultaneously recorded spiking activity and fluorescence signal in GCaMP6 transgenic mice. ELife, 2021, 10, .	6.0	114
22	Specificity and randomness in the visual cortex. Current Opinion in Neurobiology, 2007, 17, 401-407.	4.2	111
23	Diverse receptive fields in the lateral geniculate nucleus during thalamocortical development. Nature Neuroscience, 2000, 3, 608-616.	14.8	103
24	Observatories of the mind. Nature, 2012, 483, 397-398.	27.8	86
25	A petascale automated imaging pipeline for mapping neuronal circuits with high-throughput transmission electron microscopy. Nature Communications, 2020, 11, 4949.	12.8	85
26	Reconstruction of neocortex: Organelles, compartments, cells, circuits, and activity. Cell, 2022, 185, 1082-1100.e24.	28.9	84
27	Visual physiology of the layer 4 cortical circuit in silico. PLoS Computational Biology, 2018, 14, e1006535.	3.2	75
28	A mouse model of higher visual cortical function. Current Opinion in Neurobiology, 2014, 24, 28-33.	4.2	71
29	Mouse color and wavelength-specific luminance contrast sensitivity are non-uniform across visual space. ELife, 2018, 7, .	6.0	68
30	Visual physiology of the lateral geniculate nucleus in two species of New World monkey: Saimiri sciureus and Aotus trivirgatis. Journal of Physiology, 2000, 523, 755-769.	2.9	66
31	From Functional Architecture to Functional Connectomics. Neuron, 2012, 75, 209-217.	8.1	64
32	A hybrid open-top light-sheet microscope for versatile multi-scale imaging of cleared tissues. Nature Methods, 2022, 19, 613-619.	19.0	54
33	VIP interneurons in mouse primary visual cortex selectively enhance responses to weak but specific stimuli. ELife, 2020, 9, .	6.0	49
34	Structure and function of axo-axonic inhibition. ELife, 2021, 10, .	6.0	49
35	Spatial Organization of Chromatic Pathways in the Mouse Dorsal Lateral Geniculate Nucleus. Journal of Neuroscience, 2017, 37, 1102-1116.	3.6	45
36	Chromatic micromaps in primary visual cortex. Nature Communications, 2021, 12, 2315.	12.8	14

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37	Large-scale neuroanatomy using LASSO: Loop-based Automated Serial Sectioning Operation. PLoS ONE, 2018, 13, e0206172.	2.5	12
38	Laminar distribution and arbor density of two functional classes of thalamic inputs to primary visual cortex. Cell Reports, 2021, 37, 109826.	6.4	6
39	Reel-to-Reel Electron Microscopy: Latency-Free Continuous Imaging of Large Sample Volumes. Microscopy and Microanalysis, 2015, 21, 157-158.	0.4	4
40	Transport and trapping of nanosheets via hydrodynamic forces and curvature-induced capillary quadrupolar interactions. Journal of Colloid and Interface Science, 2018, 531, 352-359.	9.4	3
41	Capillary-Based and Stokes-Based Trapping of Serial Sections for Scalable 3D-EM Connectomics. ENeuro, 2020, 7, ENEURO.0328-19.2019.	1.9	1