Leon Lagnado

List of Publications by Year
in descending order

53 papers	3,422 citations	172457 29 h-index	182427 51 g-index
69 all docs	69 docs citations	69 times ranked	2773 citing authors

#	Article	IF	Citations
1	Opposite forms of adaptation in mouse visual cortex are controlled by distinct inhibitory microcircuits. Nature Communications, 2022, 13, 1031.	12.8	9
2	Diurnal changes in the efficiency of information transmission at a sensory synapse. Nature Communications, 2022, 13, 2613.	12.8	4
3	Î¼SPIM Toolset: A software platform for selective plane illumination microscopy. Journal of Neuroscience Methods, 2021, 347, 108952.	2.5	5
4	The Emergence of a Stable Neuronal Ensemble from a Wider Pool of Activated Neurons in the Dorsal Medial Prefrontal Cortex during Appetitive Learning in Mice. Journal of Neuroscience, 2020, 40, 395-410.	3.6	20
5	Motor Behavior Selectively Inhibits Hair Cells Activated by Forward Motion in the Lateral Line of Zebrafish. Current Biology, 2020, 30, 150-157.e3.	3.9	40
6	Arousal Modulates Retinal Output. Neuron, 2020, 107, 487-495.e9.	8.1	90
7	Correction of <i>z</i>â€motion artefacts to allow population imaging of synaptic activity in behaving mice. Journal of Physiology, 2020, 598, 1809-1827.	2.9	11
8	Extinction of cueâ€evoked foodâ€seeking recruits a GABAergic interneuron ensemble in the dorsal medial prefrontal cortex of mice. European Journal of Neuroscience, 2020, 52, 3723-3737.	2.6	1
9	An amplitude code transmits information at a visual synapse. Nature Neuroscience, 2019, 22, 1140-1147.	14.8	51
10	Dynamic assembly of ribbon synapses and circuit maintenance in a vertebrate sensory system. Nature Communications, 2019, 10, 2167.	12.8	24
11	A Retinal Circuit Generating a Dynamic Predictive Code for Oriented Features. Neuron, 2019, 102, 1211-1222.e3.	8.1	30
12	The Transfer Characteristics of Hair Cells Encoding Mechanical Stimuli in the Lateral Line of Zebrafish. Journal of Neuroscience, 2019, 39, 112-124.	3.6	28
13	Synaptic Convergence Patterns onto Retinal Ganglion Cells Are Preserved despite Topographic Variation in Pre- and Postsynaptic Territories. Cell Reports, 2018, 25, 2017-2026.e3.	6.4	31
14	Spikeling: A low-cost hardware implementation of a spiking neuron for neuroscience teaching and outreach. PLoS Biology, 2018, 16, e2006760.	5.6	4
15	A Novel Tool to Measure Extracellular Glutamate in the Zebrafish Nervous System <i>In Vivo</i>. Zebrafish, 2017, 14, 284-286.	1.1	13
16	Crossover Inhibition Generates Sustained Visual Responses in the Inner Retina. Neuron, 2016, 90, 308-319.	8.1	37
17	Ribbon Synapses and Visual Processing in the Retina. Annual Review of Vision Science, 2015, 1, 235-262.	4.4	58
18	General features of the retinal connectome determine the computation of motion anticipation. ELife, 2015, 4, .	6.0	32

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19	A Synaptic Mechanism for Temporal Filtering of Visual Signals. PLoS Biology, 2014, 12, e1001972.	5.6	44
20	Rapid mapping of visual receptive fields by filtered back projection: application to multiâ€neuronal electrophysiology and imaging. Journal of Physiology, 2014, 592, 4839-4854.	2.9	27
21	Spikes and ribbon synapses in early vision. Trends in Neurosciences, 2013, 36, 480-488.	8.6	56
22	Leon Lagnado. Current Biology, 2013, 23, R181-R183.	3.9	1
23	Olfactory Stimulation Selectively Modulates the OFF Pathway in the Retina of Zebrafish. Neuron, 2013, 79, 97-110.	8.1	38
24	Synaptic mechanisms of adaptation and sensitization in the retina. Nature Neuroscience, 2013, 16, 934-941.	14.8	88
25	Regulation of thalamocortical axon branching by BDNF and synaptic vesicle cycling. Frontiers in Neural Circuits, 2013, 7, 202.	2.8	17
26	Encoding of Luminance and Contrast by Linear and Nonlinear Synapses in the Retina. Neuron, 2012, 73, 758-773.	8.1	82
27	Optical reporters of synaptic activity in neural circuits. Experimental Physiology, 2011, 96, 4-12.	2.0	39
28	Spikes in Retinal Bipolar Cells Phase-Lock to Visual Stimuli with Millisecond Precision. Current Biology, 2011, 21, 1859-1869.	3.9	66
29	Endophilin Drives the Fast Mode of Vesicle Retrieval in a Ribbon Synapse. Journal of Neuroscience, 2011, 31, 8512-8519.	3.6	50
30	In vivo evidence that retinal bipolar cells generate spikes modulated by light. Nature Neuroscience, 2011, 14, 951-952.	14.8	56
31	Computational processing of optical measurements of neuronal and synaptic activity in networks. Journal of Neuroscience Methods, 2010, 188, 141-150.	2.5	91
32	A genetically encoded reporter of synaptic activity in vivo. Nature Methods, 2009, 6, 883-889.	19.0	202
33	Clathrin-Mediated Endocytosis Is the Dominant Mechanism of Vesicle Retrieval at Hippocampal Synapses. Neuron, 2006, 51, 773-786.	8.1	575
34	Ribbon Synapses: Anchors away for a Fishy Tale. Current Biology, 2005, 15, R102-R105.	3.9	1
35	Expansion of calcium microdomains regulates fast exocytosis at a ribbon synapse. Proceedings of the National Academy of Sciences of the United States of America, 2005, 102, 10700-10705.	7.1	64
36	Clathrin-Dependent and Clathrin-Independent Retrieval of Synaptic Vesicles in Retinal Bipolar Cells. Neuron, 2005, 46, 869-878.	8.1	113

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37	High Mobility of Vesicles Supports Continuous Exocytosis at a Ribbon Synapse. Current Biology, 2004, 14, 173-183.	3.9	124
38	Ribbon synapses. Current Biology, 2003, 13, R631.	3.9	17
39	Real-Time Measurement of Exocytosis and Endocytosis Using Interference of Light. Neuron, 2003, 40, 1075-1086.	8.1	64
40	Bulk Membrane Retrieval in the Synaptic Terminal of Retinal Bipolar Cells. Journal of Neuroscience, 2003, 23, 1329-1339.	3.6	161
41	Endogenous Calcium Buffers Regulate Fast Exocytosis in the Synaptic Terminal of Retinal Bipolar Cells. Neuron, 2002, 33, 101-112.	8.1	86
42	Signal Amplification: Let's Turn Down The Lights. Current Biology, 2002, 12, R215-R217.	3.9	12
43	The actions of barium and strontium on exocytosis and endocytosis in the synaptic terminal of goldfish bipolar cells. Journal of Physiology, 2001, 535, 809-824.	2.9	33
44	Visual Signals in the Retina: From Photons to Synapses. Experimental Physiology, 2000, 85, 1-15.	2.0	7
45	Synaptic Depression and the Kinetics of Exocytosis in Retinal Bipolar Cells. Journal of Neuroscience, 2000, 20, 568-578.	3.6	86
46	Visual signals in the retina: from photons to synapses. Experimental Physiology, 2000, 85, 1-15.	2.0	1
47	Two Actions of Calcium Regulate the Supply of Releasable Vesicles at the Ribbon Synapse of Retinal Bipolar Cells. Journal of Neuroscience, 1999, 19, 6309-6317.	3.6	117
48	The kinetics of exocytosis and endocytosis in the synaptic terminal of goldfish retinal bipolar cells. Journal of Physiology, 1999, 515, 181-202.	2.9	162
49	Calcium and Protein Kinase C Regulate the Actin Cytoskeleton in the Synaptic Terminal of Retinal Bipolar Cells. Journal of Cell Biology, 1998, 143, 1661-1672.	5.2	82
50	Electrical resonance and Ca2+influx in the synaptic terminal of depolarizing bipolar cells from the Goldfish retina. Journal of Physiology, 1997, 505, 571-584.	2.9	79
51	G-protein deactivation is rate-limiting for shut-off of the phototransduction cascade. Nature, 1997, 389, 392-395.	27.8	75
52	Continuous Vesicle Cycling in the Synaptic Terminal of Retinal Bipolar Cells. Neuron, 1996, 17, 957-967.	8.1	179
53	Modulation of the cGMP-gated channel by calcium. Behavioral and Brain Sciences, 1995, 18, 486-486.	0.7	0