Gautam B Awatramani

List of Publications by Year
in descending order

34 papers	2,706 citations	304743 22 h-index	434195 31 g-index
42 all docs	42 docs citations	42 times ranked	2410 citing authors

#	Article	IF	Citations
1	Parallel processing in active dendrites during periods of intense spiking activity. Cell Reports, 2022, 38, 110412.	6.4	6
2	Gain control by sparse, ultra-slow glycinergic synapses. Cell Reports, 2022, 38, 110410.	6.4	10
3	Rapid multi-directed cholinergic transmission in the central nervous system. Nature Communications, 2021, 12, 1374.	12.8	23
4	Direction selectivity. , 2021, , 200-229.		4
5	Neogenin neutralization prevents photoreceptor loss in inherited retinal degeneration. Journal of Clinical Investigation, 2020, 130, 2054-2068.	8.2	14
6	The functional organization of excitation and inhibition in the dendrites of mouse direction-selective ganglion cells. ELife, 2020, 9, .	6.0	22
7	Retinal direction selectivity in the absence of asymmetric starburst amacrine cell responses. ELife, 2019, 8, .	6.0	30
8	An Old Neuron Learns New Tricks: Redefining Motion Processing in the Primate Retina. Neuron, 2018, 97, 1205-1207.	8.1	5
9	Gap Junctions Contribute to Differential Light Adaptation across Direction-Selective Retinal Ganglion Cells. Neuron, 2018, 100, 216-228.e6.	8.1	47
10	Cholinergic excitation complements glutamate in coding visual information in retinal ganglion cells. Journal of Physiology, 2018, 596, 3709-3724.	2.9	12
11	â€œSilentâ€•NMDA Synapses Enhance Motion Sensitivity in a Mature Retinal Circuit. Neuron, 2017, 96, 1099-1111.e3.	8.1	25
12	A Central Role for Mixed Acetylcholine/GABA Transmission in Direction Coding in the Retina. Neuron, 2016, 90, 1243-1256.	8.1	80
13	Origins of spontaneous activity in the degenerating retina. Frontiers in Cellular Neuroscience, 2015, 9, 277.	3.7	79
14	Specific Wiring of Distinct Amacrine Cells in the Directionally Selective Retinal Circuit Permits Independent Coding of Direction and Size. Neuron, 2015, 86, 276-291.	8.1	63
15	Nonlinear dendritic integration of electrical and chemical synaptic inputs drives fine-scale correlations. Nature Neuroscience, 2014, 17, 1759-1766.	14.8	75
16	Rods in daylight act as relay cells for cone-driven horizontal cellâ€“mediated surround inhibition. Nature Neuroscience, 2014, 17, 1728-1735.	14.8	58
17	Post-Receptor Adaptation: Lighting Up the Details. Current Biology, 2014, 24, R608-R610.	3.9	0
18	Early remodeling of mÃ¼ller cells in the rd/rd mouse model of retinal dystrophy. Journal of Comparative Neurology, 2013, 521, 2439-2453.	1.6	30

#	Article	IF	Citations
19	Lag normalization in an electrically coupled neural network. Nature Neuroscience, 2013, 16, 154-156.	14.8	61
20	Dynamic Tuning of Electrical and Chemical Synaptic Transmission in a Network of Motion Coding Retinal Neurons. Journal of Neuroscience, 2013, 33, 14927-14938.	3.6	46
21	Intrinsic oscillatory activity arising within the electrically coupled AII amacrineâ€“ON cone bipolar cell network is driven by voltageâ€gated Na⁺ channels. Journal of Physiology, 2012, 590, 2501-2517.	2.9	85
22	Parallel Mechanisms Encode Direction in the Retina. Neuron, 2011, 71, 683-694.	8.1	117
23	An Intrinsic Neural Oscillator in the Degenerating Mouse Retina. Journal of Neuroscience, 2011, 31, 5000-5012.	3.6	107
24	Vsx1Regulates Terminal Differentiation of Type 7 ON Bipolar Cells. Journal of Neuroscience, 2011, 31, 13118-13127.	3.6	45
25	Genetically timed, activity-sensor and rainbow transsynaptic viral tools. Nature Methods, 2009, 6, 127-130.	19.0	85
26	Approach sensitivity in the retina processed by a multifunctional neural circuit. Nature Neuroscience, 2009, 12, 1308-1316.	14.8	290
27	Light-activated channels targeted to ON bipolar cells restore visual function in retinal degeneration. Nature Neuroscience, 2008, 11, 667-675.	14.8	522
28	Staggered Development of GABAergic and Glycinergic Transmission in the MNTB. Journal of Neurophysiology, 2005, 93, 819-828.	1.8	126
29	Modulation of Transmitter Release by Presynaptic Resting Potential and Background Calcium Levels. Neuron, 2005, 48, 109-121.	8.1	236
30	Inhibitory Control at a Synaptic Relay. Journal of Neuroscience, 2004, 24, 2643-2647.	3.6	74
31	Selective Reduction of Weak Synaptic Activity Awakens Dormant Synapses. Neuron, 2004, 44, 743-744.	8.1	0
32	Intensity-Dependent, Rapid Activation of Presynaptic Metabotropic Glutamate Receptors at a Central Synapse. Journal of Neuroscience, 2001, 21, 741-749.	3.6	73
33	Amacrine and ganglion cell contributions to the electroretinogram in amphibian retina. Visual Neuroscience, 2001, 18, 147-156.	1.0	41
34	Origin of Transient and Sustained Responses in Ganglion Cells of the Retina. Journal of Neuroscience, 2000, 20, 7087-7095.	3.6	200