

# Gautam B Awatramani

## List of Publications by Year in descending order

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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	Light-activated channels targeted to ON bipolar cells restore visual function in retinal degeneration. <i>Nature Neuroscience</i> , 2008, 11, 667-675.	14.8	522
2	Approach sensitivity in the retina processed by a multifunctional neural circuit. <i>Nature Neuroscience</i> , 2009, 12, 1308-1316.	14.8	290
3	Modulation of Transmitter Release by Presynaptic Resting Potential and Background Calcium Levels. <i>Neuron</i> , 2005, 48, 109-121.	8.1	236
4	Origin of Transient and Sustained Responses in Ganglion Cells of the Retina. <i>Journal of Neuroscience</i> , 2000, 20, 7087-7095.	3.6	200
5	Staggered Development of GABAergic and Glycinergic Transmission in the MNTB. <i>Journal of Neurophysiology</i> , 2005, 93, 819-828.	1.8	126
6	Parallel Mechanisms Encode Direction in the Retina. <i>Neuron</i> , 2011, 71, 683-694.	8.1	117
7	An Intrinsic Neural Oscillator in the Degenerating Mouse Retina. <i>Journal of Neuroscience</i> , 2011, 31, 5000-5012.	3.6	107
8	Genetically timed, activity-sensor and rainbow transsynaptic viral tools. <i>Nature Methods</i> , 2009, 6, 127-130.	19.0	85
9	Intrinsic oscillatory activity arising within the electrically coupled All amacrine-ON cone bipolar cell network is driven by voltage-gated Na <sup>+</sup> channels. <i>Journal of Physiology</i> , 2012, 590, 2501-2517.	2.9	85
10	A Central Role for Mixed Acetylcholine/GABA Transmission in Direction Coding in the Retina. <i>Neuron</i> , 2016, 90, 1243-1256.	8.1	80
11	Origins of spontaneous activity in the degenerating retina. <i>Frontiers in Cellular Neuroscience</i> , 2015, 9, 277.	3.7	79
12	Nonlinear dendritic integration of electrical and chemical synaptic inputs drives fine-scale correlations. <i>Nature Neuroscience</i> , 2014, 17, 1759-1766.	14.8	75
13	Inhibitory Control at a Synaptic Relay. <i>Journal of Neuroscience</i> , 2004, 24, 2643-2647.	3.6	74
14	Intensity-Dependent, Rapid Activation of Presynaptic Metabotropic Glutamate Receptors at a Central Synapse. <i>Journal of Neuroscience</i> , 2001, 21, 741-749.	3.6	73
15	Specific Wiring of Distinct Amacrine Cells in the Directionally Selective Retinal Circuit Permits Independent Coding of Direction and Size. <i>Neuron</i> , 2015, 86, 276-291.	8.1	63
16	Lag normalization in an electrically coupled neural network. <i>Nature Neuroscience</i> , 2013, 16, 154-156.	14.8	61
17	Rods in daylight act as relay cells for cone-driven horizontal cell-mediated surround inhibition. <i>Nature Neuroscience</i> , 2014, 17, 1728-1735.	14.8	58
18	Gap Junctions Contribute to Differential Light Adaptation across Direction-Selective Retinal Ganglion Cells. <i>Neuron</i> , 2018, 100, 216-228.e6.	8.1	47

#	ARTICLE	IF	CITATIONS
19	Dynamic Tuning of Electrical and Chemical Synaptic Transmission in a Network of Motion Coding Retinal Neurons. <i>Journal of Neuroscience</i> , 2013, 33, 14927-14938.	3.6	46
20	<i>Vsx1</i> Regulates Terminal Differentiation of Type 7 ON Bipolar Cells. <i>Journal of Neuroscience</i> , 2011, 31, 13118-13127.	3.6	45
21	Amacrine and ganglion cell contributions to the electroretinogram in amphibian retina. <i>Visual Neuroscience</i> , 2001, 18, 147-156.	1.0	41
22	Early remodeling of Müller cells in the <i>rd/rd</i> mouse model of retinal dystrophy. <i>Journal of Comparative Neurology</i> , 2013, 521, 2439-2453.	1.6	30
23	Retinal direction selectivity in the absence of asymmetric starburst amacrine cell responses. <i>ELife</i> , 2019, 8, .	6.0	30
24	Glutamate NMDA Synapses Enhance Motion Sensitivity in a Mature Retinal Circuit. <i>Neuron</i> , 2017, 96, 1099-1111.e3.	8.1	25
25	Rapid multi-directed cholinergic transmission in the central nervous system. <i>Nature Communications</i> , 2021, 12, 1374.	12.8	23
26	The functional organization of excitation and inhibition in the dendrites of mouse direction-selective ganglion cells. <i>ELife</i> , 2020, 9, .	6.0	22
27	Neogenin neutralization prevents photoreceptor loss in inherited retinal degeneration. <i>Journal of Clinical Investigation</i> , 2020, 130, 2054-2068.	8.2	14
28	Cholinergic excitation complements glutamate in coding visual information in retinal ganglion cells. <i>Journal of Physiology</i> , 2018, 596, 3709-3724.	2.9	12
29	Gain control by sparse, ultra-slow glycinergic synapses. <i>Cell Reports</i> , 2022, 38, 110410.	6.4	10
30	Parallel processing in active dendrites during periods of intense spiking activity. <i>Cell Reports</i> , 2022, 38, 110412.	6.4	6
31	An Old Neuron Learns New Tricks: Redefining Motion Processing in the Primate Retina. <i>Neuron</i> , 2018, 97, 1205-1207.	8.1	5
32	Direction selectivity. , 2021, , 200-229.		4
33	Selective Reduction of Weak Synaptic Activity Awakens Dormant Synapses. <i>Neuron</i> , 2004, 44, 743-744.	8.1	0
34	Post-Receptor Adaptation: Lighting Up the Details. <i>Current Biology</i> , 2014, 24, R608-R610.	3.9	0