Jonathan B Demb

List of Publications by Year
in descending order

60 papers	6,193 citations	109321 35 h-index	138484 58 g-index
63 all docs	63 docs citations	63 times ranked	5365 citing authors

#	Article	IF	Citations
1	Photoreceptive Ganglion Cells Drive Circuits for Local Inhibition in the Mouse Retina. Journal of Neuroscience, 2021, 41, 1489-1504.	3.6	10
2	Computational and Molecular Properties of Starburst Amacrine Cell Synapses Differ With Postsynaptic Cell Type. Frontiers in Cellular Neuroscience, 2021, 15, 660773.	3.7	9
3	Preservation of vision after CaMKII-mediated protection of retinal ganglion cells. Cell, 2021, 184, 4299-4314.e12.	28.9	75
4	Receptoral Mechanisms for Fast Cholinergic Transmission in Direction-Selective Retinal Circuitry. Frontiers in Cellular Neuroscience, 2020, 14, 604163.	3.7	8
5	Connectomic analysis reveals an interneuron with an integral role in the retinal circuit for night vision. ELife, 2020, 9, .	6.0	18
6	Selective synaptic connections in the retinal pathway for night vision. Journal of Comparative Neurology, 2019, 527, 117-132.	1.6	16
7	Convergence and Divergence of CRH Amacrine Cells in Mouse Retinal Circuitry. Journal of Neuroscience, 2018, 38, 3753-3766.	3.6	39
8	GABA release selectively regulates synapse development at distinct inputs on direction-selective retinal ganglion cells. Proceedings of the National Academy of Sciences of the United States of America, 2018, 115, E12083-E12090.	7.1	19
9	Restoration of vision after de novo genesis of rod photoreceptors in mammalian retinas. Nature, 2018, 560, 484-488.	27.8	234
10	Melanopsin Shows Its (Contrast-)Sensitive Side. Neuron, 2018, 99, 630-632.	8.1	1
11	These retinas are made for walkin'. Nature, 2017, 546, 476-477.	27.8	2
12	Mind the Gap Junctions: The Importance of Electrical Synapses to Visual Processing. Neuron, 2016, 90, 207-209.	8.1	4
13	Complexin 3 Increases the Fidelity of Signaling in a Retinal Circuit by Regulating Exocytosis at Ribbon Synapses. Cell Reports, 2016, 15, 2239-2250.	6.4	36
14	Parallel Computations in Insect and Mammalian Visual Motion Processing. Current Biology, 2016, 26, R1062-R1072.	3.9	64
15	Molecular features distinguish ten neuronal types in the mouse superficial superior colliculus. Journal of Comparative Neurology, 2016, 524, 2300-2321.	1.6	25
16	Divisive suppression explains high-precision firing and contrast adaptation in retinal ganglion cells. ELife, 2016, 5, .	6.0	27
17	Functional Circuitry of the Retina. Annual Review of Vision Science, 2015, 1, 263-289.	4.4	142
18	Function and Circuitry of VIP+ Interneurons in the Mouse Retina. Journal of Neuroscience, 2015, 35, 10685-10700.	3.6	60

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19	Developmental Changes in NMDA Receptor Subunit Composition at ON and OFF Bipolar Cell Synapses onto Direction-Selective Retinal Ganglion Cells. Journal of Neuroscience, 2014, 34, 1942-1948.	3.6	23
20	Adaptation to Background Light Enables Contrast Coding at Rod Bipolar Cell Synapses. Neuron, 2014, 81, 388-401.	8.1	69
21	Kainate Receptors Mediate Signaling in Both Transient and Sustained OFF Bipolar Cell Pathways in Mouse Retina. Journal of Neuroscience, 2014, 34, 6128-6139.	3.6	74
22	Excitatory Synaptic Inputs to Mouse On-Off Direction-Selective Retinal Ganglion Cells Lack Direction Tuning. Journal of Neuroscience, 2014, 34, 3976-3981.	3.6	75
23	NMDA and AMPA receptors contribute similarly to temporal processing in mammalian retinal ganglion cells. Journal of Physiology, 2014, 592, 4877-4889.	2.9	14
24	An optimized fluorescent probe for visualizing glutamate neurotransmission. Nature Methods, 2013, 10, 162-170.	19.0	827
25	Transsynaptic Tracing with Vesicular Stomatitis Virus Reveals Novel Retinal Circuitry. Journal of Neuroscience, 2013, 33, 35-51.	3.6	54
26	Two-Photon Imaging of Nonlinear Glutamate Release Dynamics at Bipolar Cell Synapses in the Mouse Retina. Journal of Neuroscience, 2013, 33, 10972-10985.	3.6	181
27	Form and Function of the M4 Cell, an Intrinsically Photosensitive Retinal Ganglion Cell Type Contributing to Geniculocortical Vision. Journal of Neuroscience, 2012, 32, 13608-13620.	3.6	208
28	Intrinsic properties and functional circuitry of the AII amacrine cell. Visual Neuroscience, 2012, 29, 51-60.	1.0	153
29	Delayed-Rectifier K Channels Contribute to Contrast Adaptation in Mammalian Retinal Ganglion Cells. Neuron, 2011, 71, 166-179.	8.1	30
30	Spectral and Temporal Sensitivity of Cone-Mediated Responses in Mouse Retinal Ganglion Cells. Journal of Neuroscience, 2011, 31, 7670-7681.	3.6	170
31	A Synaptic Mechanism for Retinal Adaptation to Luminance and Contrast. Journal of Neuroscience, 2011, 31, 11003-11015.	3.6	109
32	Neurons show their true colours. Nature, 2010, 467, 670-671.	27.8	3
33	NMDA Receptor Contributions to Visual Contrast Coding. Neuron, 2010, 67, 280-293.	8.1	49
34	Activity acts locally. Nature, 2009, 460, 961-963.	27.8	1
35	Distinct expressions of contrast gain control in parallel synaptic pathways converging on a retinal ganglion cell. Journal of Physiology, 2008, 586, 5487-5502.	2.9	44
36	Functional circuitry of visual adaptation in the retina. Journal of Physiology, 2008, 586, 4377-4384.	2.9	126

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37	Ultraweak Signals Can Cause Synaptic Depression and Adaptation. Neuron, 2008, 57, 802-804.	8.1	3
38	Disinhibition Combines with Excitation to Extend the Operating Range of the OFF Visual Pathway in Daylight. Journal of Neuroscience, 2008, 28, 4136-4150.	3.6	217
39	Cellular Basis for Contrast Gain Control over the Receptive Field Center of Mammalian Retinal Ganglion Cells. Journal of Neuroscience, 2007, 27, 2636-2645.	3.6	75
40	Functional Circuitry for Peripheral Suppression in Mammalian Y-Type Retinal Ganglion Cells. Journal of Neurophysiology, 2007, 97, 4327-4340.	1.8	48
41	Cellular Mechanisms for Direction Selectivity in the Retina. Neuron, 2007, 55, 179-186.	8.1	133
42	Presynaptic Mechanism for Slow Contrast Adaptation in Mammalian Retinal Ganglion Cells. Neuron, 2006, 50, 453-464.	8.1	101
43	Making selective 'cone-ections'. Nature Neuroscience, 2006, 9, 595-596.	14.8	0
44	Contrast Adaptation in Subthreshold and Spiking Responses of Mammalian Y-Type Retinal Ganglion Cells. Journal of Neuroscience, 2005, 25, 860-868.	3.6	78
45	Do We Know What the Early Visual System Does?. Journal of Neuroscience, 2005, 25, 10577-10597.	3.6	563
46	How Retinal Ganglion Cells Prevent Synaptic Noise From Reaching the Spike Output. Journal of Neurophysiology, 2004, 92, 2510-2519.	1.8	23
47	Retina. , 2004, , 217-270.		21
48	Different Circuits for ON and OFF Retinal Ganglion Cells Cause Different Contrast Sensitivities. Journal of Neuroscience, 2003, 23, 2645-2654.	3.6	210
49	Connexin36 Forms Synapses Essential for Night Vision. Neuron, 2002, 36, 551-553.	8.1	30
50	Multiple Mechanisms for Contrast Adaptation in the Retina. Neuron, 2002, 36, 781-783.	8.1	32
51	Cellular Basis for the Response to Second-Order Motion Cues in Y Retinal Ganglion Cells. Neuron, 2001, 32, 711-721.	8.1	69
52	Bipolar Cells Contribute to Nonlinear Spatial Summation in the Brisk-Transient (Y) Ganglion Cell in Mammalian Retina. Journal of Neuroscience, 2001, 21, 7447-7454.	3.6	176
53	Functional Circuitry of the Retinal Ganglion Cell's Nonlinear Receptive Field. Journal of Neuroscience, 1999, 19, 9756-9767.	3.6	165
54	Motion Opponency in Visual Cortex. Journal of Neuroscience, 1999, 19, 7162-7174.	3.6	284

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55	Neuronal basis of contrast discrimination. Vision Research, 1999, 39, 257-269.	1.4	355
56	Normal planum temporale asymmetry in dyslexics with a magnocellular pathway deficit. NeuroReport, 1999, 10, 607-612.	1.2	58
57	Psychophysical evidence for a magnocellular pathway deficit in dyslexia. Vision Research, 1998, 38, 1555-1559.	1.4	181
58	Functional Magnetic Resonance Imaging of Early Visual Pathways in Dyslexia. Journal of Neuroscience, 1998, 18, 6939-6951.	3.6	248
59	Implicit and explicit memory for compound words. Memory and Cognition, 1994, 22, 687-694.	1.6	30
60	Role of attention in face encoding.. Journal of Experimental Psychology: Learning Memory and Cognition, 1994, 20, 161-168.	0.9	91