W Rowland Taylor

List of Publications by Year
in descending order

69	3,936	109264	123376
papers	citations	35 h-index	61 g-index

70	70	70	2150
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Direction selectivity in the retina: symmetry and asymmetry in structure and function. Nature Reviews Neuroscience, 2012, 13, 194-208.	4.9	272
2	Diverse Synaptic Mechanisms Generate Direction Selectivity in the Rabbit Retina. Journal of Neuroscience, 2002, 22, 7712-7720.	1.7	181
3	High-affinity glutamate transporters in the rat retina: a major role of the glial glutamate transporter GLAST-1 in transmitter clearance. Cell and Tissue Research, 1997, 291, 19-31.	1.5	174
4	Receptive field properties of ON- and OFF-ganglion cells in the mouse retina. Visual Neuroscience, 2009, 26, 297-308.	0.5	173
5	Direction-Selective Dendritic Action Potentials in Rabbit Retina. Neuron, 2005, 47, 739-750.	3.8	158
6	Dendritic Computation of Direction Selectivity by Retinal Ganglion Cells. Science, 2000, 289, 2347-2350.	6.0	151
7	Concomitant activation of two types of glutamate receptor mediates excitation of salamander retinal ganglion cells.. Journal of Physiology, 1990, 428, 175-197.	1.3	134
8	Calcium Extrusion from Mammalian Photoreceptor Terminals. Journal of Neuroscience, 1998, 18, 2467-2474.	1.7	126
9	Photoreceptor calcium channels: Insight from night blindness. Visual Neuroscience, 2005, 22, 561-568.	0.5	115
10	Response characteristics and receptive field widths of onâ€bipolar cells in the mouse retina. Journal of Physiology, 2000, 524, 879-889.	1.3	112
11	Localization and properties of voltage-gated calcium channels in cone photoreceptors of Tupaia belangeri. Visual Neuroscience, 1998, 15, 541-52.	0.5	103
12	New directions in retinal research. Trends in Neurosciences, 2003, 26, 379-385.	4.2	97
13	Local Edge Detectors: A Substrate for Fine Spatial Vision at Low Temporal Frequencies in Rabbit Retina. Journal of Neuroscience, 2006, 26, 13250-13263.	1.7	97
14	The role of starburst amacrine cells in visual signal processing. Visual Neuroscience, 2012, 29, 73-81.	0.5	88
15	TTX attenuates surround inhibition in rabbit retinal ganglion cells. Visual Neuroscience, 1999, 16, 285-290.	0.5	83
16	Differential loss and preservation of glutamate receptor function in bipolar cells in the rd10 mouse model of retinitis pigmentosa. European Journal of Neuroscience, 2009, 29, 1533-1542.	1.2	81
17	Direction selectivity in a model of the starburst amacrine cell. Visual Neuroscience, 2004, 21, 611-625.	0.5	78
18	Receptive Field Properties of Starburst Cholinergic Amacrine Cells in the Rabbit Retina. European Journal of Neuroscience, 1995, 7, 2308-2321.	1.2	77

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19	Localization of the calciumâ€binding protein secretagogin in cone bipolar cells of the mammalian retina. Journal of Comparative Neurology, 2010, 518, 513-525.	0.9	77
20	Dendritic Spikes Amplify the Synaptic Signal to Enhance Detection of Motion in a Simulation of the Direction-Selective Ganglion Cell. PLoS Computational Biology, 2010, 6, e1000899.	1.5	77
21	Na_V1.1 Channels in Axon Initial Segments of Bipolar Cells Augment Input to Magnocellular Visual Pathways in the Primate Retina. Journal of Neuroscience, 2013, 33, 16045-16059.	1.7	77
22	Transmission of single photon signals through a binary synapse in the mammalian retina. Visual Neuroscience, 2004, 21, 693-702.	0.5	73
23	Molecular identity, synaptic localization, and physiology of calcium channels in retinal bipolar cells. Journal of Neuroscience Research, 2003, 71, 146-151.	1.3	72
24	Direction selectivity in the retina. Current Opinion in Neurobiology, 2002, 12, 405-410.	2.0	67
25	Characterization of spontaneous excitatory synaptic currents in salamander retinal ganglion cells.. Journal of Physiology, 1995, 486, 207-221.	1.3	66
26	Orientation Selectivity in Rabbit Retinal Ganglion Cells Is Mediated by Presynaptic Inhibition. Journal of Neuroscience, 2010, 30, 15664-15676.	1.7	64
27	Effects of Î³â€aminobutyric acid and (â€)â€baclofen on calcium and potassium currents in cat dorsal root ganglion neurones in vitro. British Journal of Pharmacology, 1986, 89, 661-672.	2.7	60
28	Kainate Receptors Mediate Synaptic Input to Transient and Sustained OFF Visual Pathways in Primate Retina. Journal of Neuroscience, 2014, 34, 7611-7621.	1.7	60
29	Tetrodotoxin-Resistant Sodium Channels Contribute to Directional Responses in Starburst Amacrine Cells. PLoS ONE, 2010, 5, e12447.	1.1	56
30	Rapid charge movements and photosensitivity of visual pigments in salamander rods and cones.. Journal of Physiology, 1991, 442, 761-780.	1.3	52
31	Conductance and kinetics of single cGMPâ€activated channels in salamander rod outer segments.. Journal of Physiology, 1995, 483, 567-582.	1.3	49
32	Molecular Fingerprinting of Onâ€“Off Direction-Selective Retinal Ganglion Cells Across Species and Relevance to Primate Visual Circuits. Journal of Neuroscience, 2019, 39, 78-95.	1.7	44
33	Response properties of long-range axon-bearing amacrine cells in the dark-adapted rabbit retina. Visual Neuroscience, 1996, 13, 599-604.	0.5	41
34	Synaptic inputs and timing underlying the velocity tuning of direction-selective ganglion cells in rabbit retina. Journal of Physiology, 2010, 588, 3243-3253.	1.3	41
35	Uniformity detector retinal ganglion cells fire complex spikes and receive only light-evoked inhibition. Proceedings of the National Academy of Sciences of the United States of America, 2010, 107, 5628-5633.	3.3	38
36	Synaptic pathways that shape the excitatory drive in an OFF retinal ganglion cell. Journal of Neurophysiology, 2012, 107, 1795-1807.	0.9	36

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37	Inhibitory mechanisms that generate centre and surround properties in ON and OFF briskâ€sustained ganglion cells in the rabbit retina. Journal of Physiology, 2013, 591, 303-325.	1.3	35
38	Time course of EPSCs in ONâ€type starburst amacrine cells is independent of dendritic location. Journal of Physiology, 2016, 594, 5685-5694.	1.3	35
39	Transmission of scotopic signals from the rod to rod-bipolar cell in the mammalian retina. Vision Research, 2004, 44, 3269-3276.	0.7	34
40	Immunohistochemical identification and synaptic inputs to the diffuse bipolar cell type DB1 in macaque retina. Journal of Comparative Neurology, 2011, 519, 3640-3656.	0.9	34
41	Postsynaptic calcium feedback between rods and rod bipolar cells in the mouse retina. Visual Neuroscience, 2004, 21, 913-924.	0.5	33
42	Functional Changes in Inner Retinal Neurons in Animal Models of Photoreceptor Degeneration. Advances in Experimental Medicine and Biology, 2010, 664, 525-532.	0.8	33
43	Synaptic Vesicle Exocytosis at the Dendritic Lobules of an Inhibitory Interneuron in the Mammalian Retina. Neuron, 2015, 87, 563-575.	3.8	31
44	Permeation of barium and cadmium through slowly inactivating calcium channels in cat sensory neurones.. Journal of Physiology, 1988, 407, 433-452.	1.3	28
45	Two-suction-electrode voltage-clamp analysis of the sustained calcium current in cat sensory neurones.. Journal of Physiology, 1988, 407, 405-432.	1.3	26
46	Inhibitory input to the direction-selective ganglion cell is saturated at low contrast. Journal of Neurophysiology, 2015, 114, 927-941.	0.9	25
47	Direction-Selective Ganglion Cells in the Retina. , 2001, , 14-57.		23
48	Passive electrical cable properties and synaptic excitation of tiger salamander retinal ganglion cells. Visual Neuroscience, 1996, 13, 979-990.	0.5	21
49	Color opponent retinal ganglion cells in the tammar wallaby retina. Journal of Vision, 2002, 2, 3.	0.1	21
50	A novel type of complex ganglion cell in rabbit retina. Journal of Comparative Neurology, 2011, 519, 3128-3138.	0.9	21
51	The Synaptic and Morphological Basis of Orientation Selectivity in a Polyaxonal Amacrine Cell of the Rabbit Retina. Journal of Neuroscience, 2015, 35, 13336-13350.	1.7	21
52	Synaptic Mechanisms Generating Orientation Selectivity in the ON Pathway of the Rabbit Retina. Journal of Neuroscience, 2016, 36, 3336-3349.	1.7	21
53	Distinct Roles for Inhibition in Spatial and Temporal Tuning of Local Edge Detectors in the Rabbit Retina. PLoS ONE, 2014, 9, e88560.	1.1	20
54	The unitary event amplitude of mouse retinal on-cone bipolar cells. Visual Neuroscience, 2003, 20, 621-626.	0.5	19

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55	Simulated Saccadic Stimuli Suppress ON-Type Direction-Selective Retinal Ganglion Cells via Glycinergic Inhibition. Journal of Neuroscience, 2019, 39, 4312-4322.	1.7	19
56	Directional excitatory input to directionâ€selective ganglion cells in the rabbit retina. Journal of Comparative Neurology, 2019, 527, 270-281.	0.9	18
57	Trigger features and excitation in the retina. Current Opinion in Neurobiology, 2011, 21, 672-678.	2.0	16
58	Gbx2 Identifies Two Amacrine Cell Subtypes with Distinct Molecular, Morphological, and Physiological Properties. Cell Reports, 2020, 33, 108382.	2.9	13
59	Selective activation of mGluR8 receptors modulates retinal ganglion cell light responses. Neuroscience, 2010, 166, 935-941.	1.1	9
60	Carbonic anhydraseâ€related protein VIII is expressed in rod bipolar cells and alters signaling at the rod bipolar to AIIâ€amacrine cell synapse in the mammalian retina. European Journal of Neuroscience, 2011, 34, 1419-1431.	1.2	8
61	Maximizing contrast resolution in the outer retina of mammals. Biological Cybernetics, 2010, 103, 57-77.	0.6	7
62	Bistratified starburst amacrine cells in Sox2 conditional knockout mouse retina display ON and OFF responses. Journal of Neurophysiology, 2018, 120, 2121-2129.	0.9	7
63	Differential effects of chloroquine on cardiolipin biosynthesis in hepatocytes and H9c2 cardiac cells. Molecular and Cellular Biochemistry, 2000, 207, 115-122.	1.4	5
64	Diverse inhibitory and excitatory mechanisms shape temporal tuning in transient OFF Î± ganglion cells in the rabbit retina. Journal of Physiology, 2018, 596, 477-495.	1.3	3
65	A novel type of complex ganglion cell in rabbit retina. Journal of Comparative Neurology, 2011, 519, Spc1-Spc1.	0.9	0
66	Immunohistochemical identification and synaptic inputs to the diffuse bipolar cell type DB1 in macaque retina. Journal of Comparative Neurology, 2011, 519, Spc1.	0.9	0
67	Dendritic Computation of Direction in Retinal Neurons. Springer Series in Computational Neuroscience, 2014, , 205-222.	0.3	0
68	Regulation of Cardiolipin Remodeling in Human Lymphoblasts. FASEB Journal, 2013, 27, 672.1.	0.2	0
69	Two-Suction Electrode Voltage-Clamp Recording. Methods in Neurosciences, 1991, , 61-77.	0.5	0