

# Richard H Masland

## List of Publications by Year in descending order

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82  
papers

10,957  
citations

47006

47  
h-index

69250

77  
g-index

125  
all docs

125  
docs citations

125  
times ranked

7356  
citing authors

#	ARTICLE	IF	CITATIONS
1	The Major Cell Populations of the Mouse Retina. <i>Journal of Neuroscience</i> , 1998, 18, 8936-8946.	3.6	1,220
2	The fundamental plan of the retina. <i>Nature Neuroscience</i> , 2001, 4, 877-886.	14.8	1,008
3	The Neuronal Organization of the Retina. <i>Neuron</i> , 2012, 76, 266-280.	8.1	831
4	The Types of Retinal Ganglion Cells: Current Status and Implications for Neuronal Classification. <i>Annual Review of Neuroscience</i> , 2015, 38, 221-246.	10.7	658
5	Axons of retinal ganglion cells are insulated in the optic nerve early in DBA/2J glaucoma. <i>Journal of Cell Biology</i> , 2007, 179, 1523-1537.	5.2	523
6	Extreme Diversity among Amacrine Cells: Implications for Function. <i>Neuron</i> , 1998, 20, 971-982.	8.1	479
7	Retinal ganglion cell degeneration is topological but not cell type specific in DBA/2J mice. <i>Journal of Cell Biology</i> , 2005, 171, 313-325.	5.2	342
8	Neuronal diversity in the retina. <i>Current Opinion in Neurobiology</i> , 2001, 11, 431-436.	4.2	289
9	Restoration of visual function in retinal degeneration mice by ectopic expression of melanopsin. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2008, 105, 16009-16014.	7.1	271
10	Neurite arborization and mosaic spacing in the mouse retina require DSCAM. <i>Nature</i> , 2008, 451, 470-474.	27.8	269
11	The Diversity of Ganglion Cells in a Mammalian Retina. <i>Journal of Neuroscience</i> , 2002, 22, 3831-3843.	3.6	262
12	The shapes and numbers of amacrine cells: Matching of photofilled with Golgi-stained cells in the rabbit retina and comparison with other mammalian species. <i>Journal of Comparative Neurology</i> , 1999, 413, 305-326.	1.6	243
13	Light-Evoked Responses of Bipolar Cells in a Mammalian Retina. <i>Journal of Neurophysiology</i> , 2000, 83, 1817-1829.	1.8	228
14	Diversity of ganglion cells in the mouse retina: Unsupervised morphological classification and its limits. <i>Journal of Comparative Neurology</i> , 2005, 489, 293-310.	1.6	218
15	Neuronal cell types. <i>Current Biology</i> , 2004, 14, R497-R500.	3.9	197
16	Development of outer segments and synapses in the rabbit retina. <i>Journal of Comparative Neurology</i> , 1977, 175, 253-273.	1.6	188
17	Maturation of function in the developing rabbit retina. <i>Journal of Comparative Neurology</i> , 1977, 175, 275-286.	1.6	170
18	A genetic and computational approach to structurally classify neuronal types. <i>Nature Communications</i> , 2014, 5, 3512.	12.8	164

#	ARTICLE	IF	CITATIONS
19	Retinal Ganglion Cell Type, Size, and Spacing Can Be Specified Independent of Homotypic Dendritic Contacts. <i>Neuron</i> , 2004, 43, 475-485.	8.1	156
20	The morphology and spatial arrangement of astrocytes in the optic nerve head of the mouse. <i>Journal of Comparative Neurology</i> , 2009, 516, 1-19.	1.6	149
21	Remodeling of cone photoreceptor cells after rod degeneration in rd mice. <i>Experimental Eye Research</i> , 2009, 88, 589-599.	2.6	143
22	Retinal direction selectivity after targeted laser ablation of starburst amacrine cells. <i>Nature</i> , 1997, 389, 378-382.	27.8	135
23	The tasks of amacrine cells. <i>Visual Neuroscience</i> , 2012, 29, 3-9.	1.0	128
24	Spatial scale and cellular substrate of contrast adaptation by retinal ganglion cells. <i>Nature Neuroscience</i> , 2001, 4, 44-51.	14.8	119
25	G protein subunit G $\beta$ 13 is coexpressed with G $\alpha$ , G $\beta$ 23, and G $\beta$ 24 in retinal ON bipolar cells. <i>Journal of Comparative Neurology</i> , 2003, 455, 1-10.	1.6	114
26	Structural Remodeling of Fibrous Astrocytes after Axonal Injury. <i>Journal of Neuroscience</i> , 2010, 30, 14008-14019.	3.6	109
27	The cholinergic amacrine cell. <i>Trends in Neurosciences</i> , 1986, 9, 218-223.	8.6	108
28	Physiological clustering of visual channels in the mouse retina. <i>Journal of Neurophysiology</i> , 2011, 105, 1516-1530.	1.8	98
29	Populations of wide-field amacrine cells in the mouse retina. <i>Journal of Comparative Neurology</i> , 2006, 499, 797-809.	1.6	93
30	Connections of indoleamine-accumulating cells in the rabbit retina. <i>Journal of Comparative Neurology</i> , 1989, 283, 303-313.	1.6	92
31	Confronting Complexity: Strategies for Understanding the Microcircuitry of the Retina. <i>Annual Review of Neuroscience</i> , 2000, 23, 249-284.	10.7	89
32	Biomechanical aspects of axonal damage in glaucoma: A brief review. <i>Experimental Eye Research</i> , 2017, 157, 13-19.	2.6	88
33	Action Potentials in the Dendrites of Retinal Ganglion Cells. <i>Journal of Neurophysiology</i> , 1999, 81, 1412-1417.	1.8	82
34	The population of bipolar cells in the rabbit retina. <i>Journal of Comparative Neurology</i> , 2004, 472, 73-86.	1.6	80
35	Receptive Field Microstructure and Dendritic Geometry of Retinal Ganglion Cells. <i>Neuron</i> , 2000, 27, 371-383.	8.1	75
36	The unsolved mystery of vision. <i>Current Biology</i> , 2007, 17, R577-R582.	3.9	69

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37	Shapes and distributions of the catecholamine-accumulating neurons in the rabbit retina. <i>Journal of Comparative Neurology</i> , 1990, 293, 178-189.	1.6	64
38	Amacrine, ganglion, and displaced amacrine cells in the rabbit retina express nicotinic acetylcholine receptors. <i>Visual Neuroscience</i> , 2000, 17, 743-752.	1.0	64
39	Cell Populations of the Retina: The Proctor Lecture. , 2011, 52, 4581.		63
40	Biological aspects of axonal damage in glaucoma: A brief review. <i>Experimental Eye Research</i> , 2017, 157, 5-12.	2.6	61
41	Spike train signatures of retinal ganglion cell types. <i>European Journal of Neuroscience</i> , 2007, 26, 367-380.	2.6	59
42	Pattern of synaptic excitation and inhibition upon direction-selective retinal ganglion cells. <i>Journal of Comparative Neurology</i> , 2002, 449, 195-205.	1.6	58
43	ON direction-selective ganglion cells in the rabbit retina: Dendritic morphology and pattern of fasciculation. <i>Visual Neuroscience</i> , 1998, 15, 369-375.	1.0	56
44	The Functional Architecture of the Retina. <i>Scientific American</i> , 1986, 255, 102-111.	1.0	55
45	Ontogenesis of receptive field characteristics of superior colliculus neurons in the rabbit. <i>Brain Research</i> , 1972, 45, 67-86.	2.2	52
46	Contextual tuning of direction-selective retinal ganglion cells. <i>Nature Neuroscience</i> , 2003, 6, 1251-1252.	14.8	52
47	Organotypic Culture of Physiologically Functional Adult Mammalian Retinas. <i>PLoS ONE</i> , 2007, 2, e221.	2.5	52
48	Different Functional Types of Bipolar Cells Use Different Gap-Junctional Proteins. <i>Journal of Neuroscience</i> , 2005, 25, 6696-6701.	3.6	49
49	The many roles of starburst amacrine cells. <i>Trends in Neurosciences</i> , 2005, 28, 395-396.	8.6	49
50	Costratification of a population of bipolar cells with the direction-selective circuitry of the rabbit retina. , 1999, 408, 97-106.		48
51	The spatial distribution of glutamatergic inputs to dendrites of retinal ganglion cells. <i>Journal of Comparative Neurology</i> , 2008, 510, 221-236.	1.6	48
52	Neuroprotection for glaucoma: Requirements for clinical translation. <i>Experimental Eye Research</i> , 2017, 157, 34-37.	2.6	48
53	Synaptic input of ONâ€bipolar cells onto the dopaminergic neurons of the mouse retina. <i>Journal of Comparative Neurology</i> , 2010, 518, 2035-2050.	1.6	47
54	Starburst Cells Nondirectionally Facilitate the Responses of Direction-Selective Retinal Ganglion Cells. <i>Journal of Neuroscience</i> , 2002, 22, 10509-10513.	3.6	44

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55	Expression of mRNA for glutamate receptor subunits distinguishes the major classes of retinal neurons, but is less specific for individual cell types. <i>Molecular Vision</i> , 2007, 13, 933-48.	1.1	42
56	The spatial filtering properties of local edge detectors and brisk-sustained retinal ganglion cells. <i>European Journal of Neuroscience</i> , 2005, 22, 2016-2026.	2.6	38
57	A population of wide-field bipolar cells in the rabbit's retina. <i>Journal of Comparative Neurology</i> , 1995, 360, 403-412.	1.6	36
58	Shape and distribution of an unusual retinal neuron. <i>Journal of Comparative Neurology</i> , 1989, 280, 489-497.	1.6	32
59	Processing and encoding of visual information in the retina. <i>Current Opinion in Neurobiology</i> , 1996, 6, 467-474.	4.2	32
60	Synaptic contacts between an identified type of ON cone bipolar cell and ganglion cells in the mouse retina. <i>European Journal of Neuroscience</i> , 2005, 21, 1257-1270.	2.6	32
61	Retinal-induced sensitization of light-adapted rabbit photoreceptors. <i>Brain Research</i> , 1978, 151, 194-200.	2.2	30
62	CD15 immunoreactive amacrine cells in the mouse retina. <i>Journal of Comparative Neurology</i> , 2003, 465, 361-371.	1.6	29
63	The Nondiscriminating Zone of Directionally Selective Retinal Ganglion Cells: Comparison with Dendritic Structure and Implications for Mechanism. <i>Journal of Neuroscience</i> , 1999, 19, 8049-8056.	3.6	27
64	The retina's fancy tricks. <i>Nature</i> , 2003, 423, 387-388.	27.8	27
65	Automated computation of arbor densities: a step toward identifying neuronal cell types. <i>Frontiers in Neuroanatomy</i> , 2014, 8, 139.	1.7	26
66	Inward rectifying currents stabilize the membrane potential in dendrites of mouse amacrine cells: patch-clamp recordings and single-cell RT-PCR. <i>Molecular Vision</i> , 2004, 10, 328-40.	1.1	26
67	Functional Inhibition in Direction-Selective Retinal Ganglion Cells: Spatiotemporal Extent and Intralaminar Interactions. <i>Journal of Neurophysiology</i> , 2002, 88, 1026-1039.	1.8	24
68	Dissociation of field potential from neuronal activity in the isolated retina: Failure of the b-wave with normal ganglion cell response. <i>Journal of Neurobiology</i> , 1975, 6, 305-312.	3.6	22
69	Image Processing: How the Retina Detects the Direction of Image Motion. <i>Current Biology</i> , 2007, 17, R63-R66.	3.9	21
70	Regular mosaic of synaptic contacts among three retinal neurons. <i>Journal of Comparative Neurology</i> , 2011, 519, 341-357.	1.6	20
71	Vision: Two Speeds in the Retina. <i>Current Biology</i> , 2017, 27, R303-R305.	3.9	10
72	Organotypic Culture of Adult Rabbit Retina. <i>Journal of Visualized Experiments</i> , 2007, , 190.	0.3	7

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73	Accurate maps of visual circuitry. <i>Nature</i> , 2013, 500, 154-155.	27.8	7
74	The shapes and numbers of amacrine cells: Matching of photofilled with Golgi-stained cells in the rabbit retina and comparison with other mammalian species. <i>Journal of Comparative Neurology</i> , 1999, 413, 305-326.	1.6	4
75	Sensory Systems: Fine-Tuning the Visual Scene. <i>Current Biology</i> , 2005, 15, R808-R810.	3.9	3
76	Another blue neuron in the retina. <i>Nature Neuroscience</i> , 2012, 15, 930-931.	14.8	2
77	Costratification of a population of bipolar cells with the direction-selective circuitry of the rabbit retina. <i>Journal of Comparative Neurology</i> , 1999, 408, 97-106.	1.6	2
78	The morphology and spatial arrangement of astrocytes in the optic nerve head of the mouse. <i>Journal of Comparative Neurology</i> , 2009, 516, spc1-spc1.	1.6	1
79	Diversity in sight. <i>Nature</i> , 2017, 542, 418-419.	27.8	1
80	The morphology and spatial arrangement of astrocytes in the optic nerve head of the mouse. <i>Journal of Comparative Neurology</i> , 2009, 516, spc1.	1.6	0
81	Restoring Visual Function After Photoreceptor Degeneration: Ectopic Expression of Photosensitive Proteins in Retinal Neurons. <i>Neuromethods</i> , 2011, , 147-164.	0.3	0
82	Aspects of Choline Metabolism in Photoreceptor Cells. , 1980, , 433-443.		0