Barry B Lee

List of Publications by Year
in descending order

66 papers	3,927 citations	186265 28 h-index	155660 55 g-index
66 all docs	66 docs citations	66 times ranked	1741 citing authors

#	Article	IF	Citations
1	The 'blue-on' opponent pathway in primate retina originates from a distinct bistratified ganglion cell type. Nature, 1994, 367, 731-735.	27.8	658
2	Luminance and chromatic modulation sensitivity of macaque ganglion cells and human observers. Journal of the Optical Society of America A: Optics and Image Science, and Vision, 1990, 7, 2223.	1.5	432
3	Receptive field structure in the primate retina. Vision Research, 1996, 36, 631-644.	1.4	189
4	Chromatic sensitivity of ganglion cells in the peripheral primate retina. Nature, 2001, 410, 933-936.	27.8	170
5	Responses to pulses and sinusoids in macaque ganglion cells. Vision Research, 1994, 34, 3081-3096.	1.4	157
6	Rod inputs to macaque ganglion cells. Vision Research, 1997, 37, 2813-2828.	1.4	137
7	Topography of ganglion cells and photoreceptors in the retina of a New World monkey: The marmoset <i>Callithrix jacchus</i>. Visual Neuroscience, 1996, 13, 335-352.	1.0	132
8	Retinal connectivity and primate vision. Progress in Retinal and Eye Research, 2010, 29, 622-639.	15.5	126
9	Suppressive Surrounds and Contrast Gain in Magnocellular-Pathway Retinal Ganglion Cells of Macaque. Journal of Neuroscience, 2006, 26, 8715-8726.	3.6	116
10	Responses of macaque ganglion cells and human observers to compound periodic waveforms. Vision Research, 1993, 33, 1997-2011.	1.4	114
11	Specificity of Cone Inputs to Macaque Retinal Ganglion Cells. Journal of Neurophysiology, 2006, 95, 837-849.	1.8	109
12	Receptive fields of primate retinal ganglion cells studied with a novel technique. Visual Neuroscience, 1998, 15, 161-175.	1.0	105
13	An examination of physiological mechanisms underlying the frequency-doubling illusion. Investigative Ophthalmology and Visual Science, 2002, 43, 3590-9.	3.3	100
14	Chromatic Organization of Ganglion Cell Receptive Fields in the Peripheral Retina. Journal of Neuroscience, 2005, 25, 4527-4539.	3.6	97
15	The time course of adaptation in macaque retinal ganglion cells. Vision Research, 1996, 36, 913-931.	1.4	85
16	Responses of Primate Retinal Ganglion Cells to Perimetric Stimuli. , 2011, 52, 764.		84
17	The temporal properties of the response of macaque ganglion cells and central mechanisms of flicker detection. Journal of Vision, 2007, 7, 1.	0.3	73
18	Visual pathways and psychophysical channels in the primate. Journal of Physiology, 2011, 589, 41-47.	2.9	72

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19	Morphology and physiology of primate M- and P-cells. Progress in Brain Research, 2004, 144, 21-46.	1.4	69
20	Primate Horizontal Cell Dynamics: An Analysis of Sensitivity Regulation in the Outer Retina. Journal of Neurophysiology, 2001, 85, 545-558.	1.8	66
21	The spatial precision of macaque ganglion cell responses in relation to vernier acuity of human observers. Vision Research, 1995, 35, 2743-2758.	1.4	64
22	Ganglion cells of a short-wavelength-sensitive cone pathway in New World monkeys: Morphology and physiology. Visual Neuroscience, 1999, 16, 333-343.	1.0	60
23	Modulation sensitivity of ganglion cells in peripheral retina of macaque. Vision Research, 2002, 42, 2893-2898.	1.4	51
24	Paths to colour in the retina. Australasian journal of optometry, The, 2004, 87, 239-248.	1.3	45
25	Spatial distributions of cone inputs to cells of the parvocellular pathway investigated with cone-isolating gratings. Journal of the Optical Society of America A: Optics and Image Science, and Vision, 2012, 29, A223.	1.5	44
26	Visual responses of ganglion cells of a Newâ€World primate, the capuchin monkey, Cebus apella. Journal of Physiology, 2000, 528, 573-590.	2.9	43
27	The spatiotemporal precision of ganglion cell signals: a comparison of physiological and psychophysical performance with moving gratings. Vision Research, 2004, 44, 19-33.	1.4	42
28	Sequential processing in vision: The interaction of sensitivity regulation and temporal dynamics. Vision Research, 2008, 48, 2649-2656.	1.4	36
29	Dynamics of sensitivity regulation in primate outer retina: The horizontal cell network. Journal of Vision, 2003, 3, 5.	0.3	33
30	Distribution and specificity of S-cone (â€œblue coneâ€) signals in subcortical visual pathways. Visual Neuroscience, 2014, 31, 177-187.	1.0	31
31	Do magnocellular and parvocellular ganglion cells avoid short-wavelength cone input?. Visual Neuroscience, 2006, 23, 441-446.	1.0	28
32	The chromatic input to cells of the magnocellular pathway of primates. Journal of Vision, 2009, 9, 15-15.	0.3	27
33	Mixing of Chromatic and Luminance Retinal Signals in Primate Area V1. Cerebral Cortex, 2015, 25, 1920-1937.	2.9	27
34	Segregation of chromatic and luminance signals using a novel grating stimulus. Journal of Physiology, 2011, 589, 59-73.	2.9	26
35	Simultaneous chromatic and luminance human electroretinogram responses. Journal of Physiology, 2012, 590, 3141-3154.	2.9	26
36	Transient cells can be neurometrically sustained: the positional accuracy of retinal signals to moving targets. Journal of Vision, 2002, 2, 3-3.	0.3	23

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37	Chromatic temporal integration and retinal eccentricity: Psychophysics, neurometric analysis and cortical pooling. Vision Research, 2008, 48, 2657-2662.	1.4	22
38	Psychophysical and physiological responses to gratings with luminance and chromatic components of different spatial frequencies. Journal of the Optical Society of America A: Optics and Image Science, and Vision, 2012, 29, A314.	1.5	19
39	Color coding in the primate visual pathway: a historical view. Journal of the Optical Society of America A: Optics and Image Science, and Vision, 2014, 31, A103.	1.5	16
40	Eye Movements and the Neural Basis of Context Effects on Visual Sensitivity. Journal of Neuroscience, 2014, 34, 8119-8129.	3.6	13
41	Comparative Anatomy and Physiology of the Primate Retina. , 2006, , 127-160.		12
42	Neural models and physiological reality. Visual Neuroscience, 2008, 25, 231-241.	1.0	12
43	Dependence of chromatic responses in V1 on visual field eccentricity and spatial frequency: an fMRI study. Journal of the Optical Society of America A: Optics and Image Science, and Vision, 2016, 33, A53.	1.5	12
44	Chromatic and luminance contributions to a hyperacuity task. Vision Research, 2000, 40, 817-832.	1.4	11
45	Lichtenberg's Letter to Goethe on ?Fï¿½rbige Schatten?: G. C. Lichtenberg. Color Research and Application, 2002, 27, 300-303.	1.6	11
46	Chromatic input to cells of the magnocellular pathway: Mean chromaticity and the relative phase of modulated lights. Visual Neuroscience, 2004, 21, 309-314.	1.0	10
47	Alouatta Trichromatic Color Vision: Cone Spectra and Physiological Responses Studied with Microspectrophotometry and Single Unit Retinal Electrophysiology. PLoS ONE, 2014, 9, e113321.	2.5	10
48	On the Relation between Cellular Sensitivity and Psychophysical Detection. , 1991, , 105-115.		9
49	A single mechanism for both luminance and chromatic grating vernier tasks: Evidence from temporal summation. Visual Neuroscience, 2004, 21, 315-320.	1.0	8
50	Macaque retinal ganglion cell responses to visual patterns: harmonic composition, noise, and psychophysical detectability. Journal of Neurophysiology, 2016, 115, 2976-2988.	1.8	7
51	The spatial structure of cone-opponent receptive fields in macaque retina. Vision Research, 2018, 151, 141-151.	1.4	7
52	A quantitative description of macaque ganglion cell responses to natural scenes: the interplay of time and space. Journal of Physiology, 2021, 599, 3169-3193.	2.9	7
53	Coding of Position of Achromatic and Chromatic Edges by Retinal Ganglion Cells. , 2003, , 79-88.		7
54	The evolution of concepts of color vision. NeurociÃªncias, 2008, 4, 209-224.	0.0	7

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55	Comparison of Ganglion Cell Signals and Psychophysical Localization of Moving Targets Can Help Define Central Motion Mechanisms. Perception, 2005, 34, 975-981.	1.2	6
56	Luminance and chromatic contributions to a hyperacuity task: Isolation by contrast polarity and target separation. Vision Research, 2012, 56, 28-37.	1.4	6
57	Sensitivity to chromatic and luminance contrast and its neuronal substrates. Current Opinion in Behavioral Sciences, 2019, 30, 156-162.	3.9	6
58	Author Response: Frequency-Doubling Technology and Parasol Cells. , 2011, 52, 3759.		5
59	Structure of Receptive Field Centers of Midget Retinal Ganglion Cells. , 2003, , 63-70.		3
60	Colour science in Gï¿½ttingen in the 18th Century. Color Research and Application, 2001, 26, S25-S27.	1.6	1
61	Independence and interaction of luminance and chromatic contributions to spatial hyperacuity performance. Journal of the Optical Society of America A: Optics and Image Science, and Vision, 2014, 31, A394.	1.5	1
62	Cone Opponency: An Efficient Way of Transmitting Chromatic Information. , 2016, , 105-132.		1
63	Detection and discrimination of achromatic contrast: A ganglion cell perspective. Journal of Vision, 2022, 22, 11.	0.3	1
64	Chromatic adaptation in redâ€“green cone-opponent retinal ganglion cells of the macaque. Vision Research, 2008, 48, 2625-2632.	1.4	0
65	Guest Editors' Foreword: Proceedings of the 19th Biennial Symposium of the International Colour Vision Society. Held July 2007 BelÃ©m, Brazil. Visual Neuroscience, 2008, 25, 229-230.	1.0	0
66	Macaque ganglion cell responses to probe stimuli on modulated backgrounds. Journal of Vision, 2010, 10, 26-26.	0.3	0