Jay Neitz

List of Publications by Year
in descending order

122 papers	7,489 citations	61857 43 h-index	60497 81 g-index
129 all docs	129 docs citations	129 times ranked	4167 citing authors

#	Article	IF	Citations
1	S-cone circuits in the primate retina for non-image-forming vision. Seminars in Cell and Developmental Biology, 2022, 126, 66-70.	2.3	3
2	Limitation of standard pseudoisochromatic plates in identifying colour vision deficiencies when compared with genetic testing. Acta Ophthalmologica, 2022, , .	0.6	1
3	Potential value of color vision aids for varying degrees of color vision deficiency. Optics Express, 2022, 30, 8857.	1.7	6
4	Conserved circuits for direction selectivity in the primate retina. Current Biology, 2022, 32, 2529-2538.e4.	1.8	14
5	Insight from OPN1LW Gene Haplotypes into the Cause and Prevention of Myopia. Genes, 2022, 13, 942.	1.0	8
6	Restoring Color Perception to the Blind. Ophthalmology, 2021, 128, 453-462.	2.5	11
7	Revealing How Color Vision Phenotype and Genotype Manifest in Individual Cone Cells. , 2021, 62, 8.		19
8	Synaptic inputs to broad thorny ganglion cells in macaque retina. Journal of Comparative Neurology, 2021, 529, 3098-3111.	0.9	8
9	Intermixing the OPN1LW and OPN1MW Genes Disrupts the Exonic Splicing Code Causing an Array of Vision Disorders. Genes, 2021, 12, 1180.	1.0	15
10	Comparing Retinal Structure in Patients with Achromatopsia and Blue Cone Monochromacy Using OCT. Ophthalmology Science, 2021, 1, 100047.	1.0	4
11	Wideâ€field amacrine cell inputs to ON parasol ganglion cells in macaque retina. Journal of Comparative Neurology, 2020, 528, 1588-1598.	0.9	11
12	Another Blue-ON ganglion cell in the primate retina. Current Biology, 2020, 30, R1409-R1410.	1.8	17
13	A Color Vision Circuit for Non-Image-Forming Vision in the Primate Retina. Current Biology, 2020, 30, 1269-1274.e2.	1.8	50
14	Effect of cone spectral topography on chromatic detection sensitivity. Journal of the Optical Society of America A: Optics and Image Science, and Vision, 2020, 37, A244.	0.8	12
15	The Genetics of Cone Opsin Based Vision Disorders. , 2020, , 493-507.		0
16	Reconciling Color Vision Models With Midget Ganglion Cell Receptive Fields. Frontiers in Neuroscience, 2019, 13, 865.	1.4	27
17	An S-cone circuit for edge detection in the primate retina. Scientific Reports, 2019, 9, 11913.	1.6	26
18	The association between L:M cone ratio, cone opsin genes and myopia susceptibility. Vision Research, 2019, 162, 20-28.	0.7	26

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19	Photopigment genes, cones, and color update: disrupting the splicing code causes a diverse array of vision disorders. Current Opinion in Behavioral Sciences, 2019, 30, 60-66.	2.0	13
20	Synaptic inputs from identified bipolar and amacrine cells to a sparsely branched ganglion cell in rabbit retina. Visual Neuroscience, 2019, 36, E004.	0.5	12
21	Residual Cone Structure in Patients With X-Linked Cone Opsin Mutations. , 2018, 59, 4238.		29
22	Sensations from a single M-cone depend on the activity of surrounding S-cones. Scientific Reports, 2018, 8, 8561.	1.6	29
23	Evolution of the circuitry for conscious color vision in primates. Eye, 2017, 31, 286-300.	1.1	47
24	Transplantation of Human Embryonic Stem Cell-Derived Retinal Cells into the Subretinal Space of a Non-Human Primate. Translational Vision Science and Technology, 2017, 6, 4.	1.1	72
25	Role of a Dual Splicing and Amino Acid Code in Myopia, Cone Dysfunction and Cone Dystrophy Associated with <i>L</i>/<i>M</i> Opsin Interchange Mutations. Translational Vision Science and Technology, 2017, 6, 2.	1.1	35
26	The best of both worlds: A Maxwellian view visual stimulator incorporating a DLP spatiotemporal light driver with a programmable tunable spectrum source for studying human color vision. Journal of Vision, 2017, 17, 45.	0.1	0
27	Differences between the S-OFF and L/M-OFF contacts inform the role of OFF midget bipolar cells in the perception of yellow. Journal of Vision, 2017, 17, 15.	0.1	1
28	Circuitry to explain how the relative number of L and M cones shapes color experience. Journal of Vision, 2016, 16, 18.	0.1	15
29	Genetic Testing as a New Standard for Clinical Diagnosis of Color Vision Deficiencies. Translational Vision Science and Technology, 2016, 5, 2.	1.1	31
30	Correlated Evolution of Short Wavelength Sensitive Photoreceptor Sensitivity and Color Pattern in Lake Malawi Cichlids. Frontiers in Ecology and Evolution, 2016, 4, .	1.1	4
31	Cone Photoreceptor Structure in Patients With X-Linked Cone Dysfunction and Red-Green Color Vision Deficiency. , 2016, 57, 3853.		36
32	Distinctive receptive field and physiological properties of a wide-field amacrine cell in the macaque monkey retina. Journal of Neurophysiology, 2015, 114, 1606-1616.	0.9	25
33	Effects of Long-Wavelength Lighting on Refractive Development in Infant Rhesus Monkeys. , 2015, 56, 6490.		105
34	Geographic mapping of choroidal thickness in myopic eyes using 1050-nm spectral domain optical coherence tomography. Journal of Innovative Optical Health Sciences, 2015, 08, 1550012.	0.5	19
35	Broad Thorny Ganglion Cells: A Candidate for Visual Pursuit Error Signaling in the Primate Retina. Journal of Neuroscience, 2015, 35, 5397-5408.	1.7	44
36	Synaptic Elements for GABAergic Feed-Forward Signaling between HII Horizontal Cells and Blue Cone Bipolar Cells Are Enriched beneath Primate S-Cones. PLoS ONE, 2014, 9, e88963.	1.1	26

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37	Specialized synaptic pathway for chromatic signals beneath S-cone photoreceptors is common to human, Old and New World primates. Journal of the Optical Society of America A: Optics and Image Science, and Vision, 2014, 31, A189.	0.8	9
38	Cone-isolating ONâ€“OFF electroretinogram for studying chromatic pathways in the retina. Journal of the Optical Society of America A: Optics and Image Science, and Vision, 2014, 31, A208.	0.8	10
39	Neurobiological hypothesis of color appearance and hue perception. Journal of the Optical Society of America A: Optics and Image Science, and Vision, 2014, 31, A195.	0.8	39
40	S-opsin knockout mice with the endogenous M-opsin gene replaced by an L-opsin variant. Visual Neuroscience, 2014, 31, 25-37.	0.5	19
41	Curing Color Blindness--Mice and Nonhuman Primates. Cold Spring Harbor Perspectives in Medicine, 2014, 4, a017418-a017418.	2.9	24
42	Spectral Tuning of Ultraviolet Cone Pigments: An Interhelical Lock Mechanism. Journal of the American Chemical Society, 2013, 135, 19064-19067.	6.6	24
43	New Genetic Technology May Help Pilots, Aviation Employees, and Color Vision Researchers. Aviation, Space, and Environmental Medicine, 2013, 84, 1218-1220.	0.6	3
44	The Effect of Cone Opsin Mutations on Retinal Structure and the Integrity of the Photoreceptor Mosaic. , 2012, 53, 8006.		85
45	Changes in the colour of light cue circadian activity. Animal Behaviour, 2012, 83, 1143-1151.	0.8	41
46	The Genetic Basis for Normal Vision and Vision Disorders. FASEB Journal, 2012, 26, 458.2.	0.2	1
47	Gene therapy as a cure for color blindness. FASEB Journal, 2012, 26, 458.3.	0.2	0
48	The genetics of normal and defective color vision. Vision Research, 2011, 51, 633-651.	0.7	278
49	Color Vision. , 2011, , 648-654.		3
50	Deletion of the X-linked opsin gene array locus control region (LCR) results in disruption of the cone mosaic. Vision Research, 2010, 50, 1989-1999.	0.7	56
51	Color-deficient cone mosaics associated with Xq28 opsin mutations: A stop codon versus gene deletions. Vision Research, 2010, 50, 2396-2402.	0.7	26
52	Color vision defects. , 2010, , 478-485.		0
53	A Multi-Stage Color Model Revisited: Implications for a Gene Therapy Cure for Red-Green Colorblindness. Advances in Experimental Medicine and Biology, 2010, 664, 631-638.	0.8	10
54	Cone photoreceptor mosaic disruption associated with Cys203Arg mutation in the M-cone opsin. Proceedings of the National Academy of Sciences of the United States of America, 2009, 106, 20948-20953.	3.3	65

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55	Gene therapy for redâ€“green colour blindness in adult primates. Nature, 2009, 461, 784-787.	13.7	282
56	Colour Vision: The Wonder of Hue. Current Biology, 2008, 18, R700-R702.	1.8	20
57	Modeling of region-specific fMRI BOLD neurovascular response functions in rat brain reveals residual differences that correlate with the differences in regional evoked potentials. NeuroImage, 2008, 41, 525-534.	2.1	52
58	Topography of the long- to middle-wavelength sensitive cone ratio in the human retina assessed with a wide-field color multifocal electroretinogram. Visual Neuroscience, 2008, 25, 301-306.	0.5	23
59	Longitudinal evaluation of expression of virally delivered transgenes in gerbil cone photoreceptors. Visual Neuroscience, 2008, 25, 273-282.	0.5	8
60	A study of unusual Rayleigh matches in deutan deficiency. Visual Neuroscience, 2008, 25, 507-516.	0.5	47
61	Nucleotide polymorphisms upstream of the X-chromosome opsin gene array tune L:M cone ratio. Visual Neuroscience, 2008, 25, 265-271.	0.5	13
62	The L:M cone ratio in males of African descent with normal color vision. Journal of Vision, 2008, 8, 5.	0.1	23
63	Recombinant adeno-associated virus targets passenger gene expression to cones in primate retina. Journal of the Optical Society of America A: Optics and Image Science, and Vision, 2007, 24, 1411.	0.8	26
64	Topography of long- and middle-wavelength sensitive cone opsin gene expression in human and Old World monkey retina. Visual Neuroscience, 2006, 23, 379-385.	0.5	19
65	An urn model of the development of L/M cone ratios in human and macaque retinas. Visual Neuroscience, 2006, 23, 387-394.	0.5	17
66	A novel mutation in the short-wavelength-sensitive cone pigment gene associated with a tritan color vision defect. Visual Neuroscience, 2006, 23, 403-409.	0.5	26
67	An adaptation of the Cambridge Colour Test for use with animals. Visual Neuroscience, 2006, 23, 695-701.	0.5	24
68	Organization of the Human Trichromatic Cone Mosaic. Journal of Neuroscience, 2005, 25, 9669-9679.	1.7	446
69	Evaluating the human X-chromosome pigment gene promoter sequences as predictors of L:M cone ratio variation. Journal of Vision, 2004, 4, 7.	0.1	13
70	Functional photoreceptor loss revealed with adaptive optics: An alternate cause of color blindness. Proceedings of the National Academy of Sciences of the United States of America, 2004, 101, 8461-8466.	3.3	267
71	Evaluation of an updated HRR color vision test. Visual Neuroscience, 2004, 21, 431-436.	0.5	56
72	Variety of genotypes in males diagnosed as dichromatic on a conventional clinical anomaloscope. Visual Neuroscience, 2004, 21, 205-216.	0.5	64

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73	Characterization of a novel form of X-linked incomplete achromatopsia. Visual Neuroscience, 2004, 21, 197-203.	0.5	32
74	Topographical cone photopigment gene expression in deutan-type redâ€"green color vision defects. Vision Research, 2004, 44, 135-145.	0.7	12
75	Estimates of L:M cone ratio from ERG flicker photometry and genetics. Journal of Vision, 2002, 2, 1-1.	0.1	133
76	Color Perception Is Mediated by a Plastic Neural Mechanism that Is Adjustable in Adults. Neuron, 2002, 35, 783-792.	3.8	260
77	Color Vision: Almost Reason Enough for Having Eyes. Optics and Photonics News, 2001, 12, 26.	0.4	43
78	Local cellular sources of apolipoprotein E in the human retina and retinal pigmented epithelium: implications for the process of drusen formation. American Journal of Ophthalmology, 2001, 131, 767-781.	1.7	229
79	The uncommon retina of the common house mouse. Trends in Neurosciences, 2001, 24, 248-249.	4.2	32
80	The importance of deleterious mutations of M pigment genes as a cause of color vision defects. Color Research and Application, 2001, 26, S100-S105.	0.8	12
81	Testing hypotheses about visual pigments underlying deutan color vision. Color Research and Application, 2001, 26, S106-S111.	0.8	2
82	A new mass screening test for color-vision deficiencies in children. Color Research and Application, 2001, 26, S239-S249.	0.8	45
83	A new mass screening test for color-vision deficiencies in children. , 2001, 26, S239.		3
84	Flicker-photometric electroretinogram estimates of L:M cone photoreceptor ratio in men with photopigment spectra derived from genetics. Journal of the Optical Society of America A: Optics and Image Science, and Vision, 2000, 17, 499.	0.8	82
85	Cone pigment gene expression in individual photoreceptors and the chromatic topography of the retina. Journal of the Optical Society of America A: Optics and Image Science, and Vision, 2000, 17, 527.	0.8	48
86	Functional consequences of the relative numbers of L and M cones. Journal of the Optical Society of America A: Optics and Image Science, and Vision, 2000, 17, 607.	0.8	203
87	Trichromatic color vision with only two spectrally distinct photopigments. Nature Neuroscience, 1999, 2, 884-888.	7.1	74
88	Molecular genetic detection of female carriers of protan defects. Vision Research, 1998, 38, 3365-3369.	0.7	21
89	L-cone pigment genes expressed in normal colour vision. Vision Research, 1998, 38, 3213-3219.	0.7	47
90	Spectra of human L cones. Vision Research, 1998, 38, 3663-3670.	0.7	33

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91	Relating color discrimination to photopigment genes in deutan observers. Vision Research, 1998, 38, 3371-3376.	0.7	37
92	Pigment gene expression in protan color vision defects. Vision Research, 1998, 38, 3359-3364.	0.7	7
93	Expression of L cone pigment gene subtypes in females. Vision Research, 1998, 38, 3221-3225.	0.7	28
94	Recent evolution of uniform trichromacy in a New World monkey. Vision Research, 1998, 38, 3315-3320.	0.7	64
95	Variations in cone populations for redâ€"green color vision examined by analysis of mRNA. NeuroReport, 1998, 9, 1963-1967.	0.6	101
96	Photopigment basis for dichromatic color vision in cows, goats, and sheep. Visual Neuroscience, 1998, 15, 581-4.	0.5	104
97	Electroretinogram flicker photometry and its applications. Journal of the Optical Society of America A: Optics and Image Science, and Vision, 1996, 13, 641.	0.8	99
98	Trichromatic colour vision in New World monkeys. Nature, 1996, 382, 156-158.	13.7	316
99	Genetic basis of photopigment variations in human dichromats. Vision Research, 1995, 35, 2095-2103.	0.7	63
100	Polymorphism in the number of genes encoding long-wavelength-sensitive cone pigments among males with normal color vision. Vision Research, 1995, 35, 2395-2407.	0.7	60
101	Functional magnetic resonance imaging (FMRI) of the human brain. Journal of Neuroscience Methods, 1994, 54, 171-187.	1.3	375
102	More than three different cone pigments among people with normal color vision. Vision Research, 1993, 33, 117-122.	0.7	193
103	Genetic basis of polymorphism in the color vision of platyrrhine monkeys. Vision Research, 1993, 33, 269-274.	0.7	77
104	Photopigments and color vision in the nocturnal monkey,Aotus. Vision Research, 1993, 33, 1773-1783.	0.7	168
105	Macular Phototoxicity Caused by Fiberoptic Endoillumination During Pars Plana Vitrectomy. American Journal of Ophthalmology, 1992, 114, 287-296.	1.7	94
106	Retinal receptors in rodents maximally sensitive to ultraviolet light. Nature, 1991, 353, 655-656.	13.7	380
107	Spectral sensitivity of vervet monkeys (Cercopithecus aethiops sabaeus) and the issue of catarrhine trichromacy. American Journal of Primatology, 1991, 23, 185-195.	0.8	11
108	Polymorphism in normal human color vision and its mechanism. Vision Research, 1990, 30, 621-636.	0.7	127

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109	Spectral sensitivity of cones in an ungulate. Visual Neuroscience, 1989, 2, 97-100.	0.5	55
110	Color vision in the dog. Visual Neuroscience, 1989, 3, 119-125.	0.5	152
111	Analysis of fusion gene and encoded photopigment of colour-blind humans. Nature, 1989, 342, 679-682.	13.7	65
112	Spectral mechanisms in the tree squirrel retina. Journal of Comparative Physiology A: Neuroethology, Sensory, Neural, and Behavioral Physiology, 1988, 162, 773-780.	0.7	34
113	Tunicamycin-induced degeneration in cone photoreceptors. Visual Neuroscience, 1988, 1, 153-158.	0.5	14
114	Early color deprivation and subsequent color vision in a dichromatic monkey. Vision Research, 1987, 27, 2009-2013.	0.7	47
115	Color vision polymorphism and its photopigment basis in a callitrichid monkey (Saguinus fuscicollis). Vision Research, 1987, 27, 2089-2100.	0.7	82
116	Polymorphism of the middle wavelength cone in two species of south american monkey: Cebus apella and callicebus moloch. Vision Research, 1987, 27, 1263-1268.	0.7	66
117	Action spectrum of the retinal mechanism mediating nocturnal light-induced suppression of rat pineal gland N-acetyltransferase. Brain Research, 1987, 406, 352-356.	1.1	27
118	Spectral mechanisms and color vision in the tree shrew (Tupaia belangeri). Vision Research, 1986, 26, 291-298.	0.7	57
119	Polymorphism of the long-wavelength cone in normal human colour vision. Nature, 1986, 323, 623-625.	13.7	244
120	Spectral sensitivity of ground squirrel cones measured with ERG flicker photometry. Journal of Comparative Physiology A: Neuroethology, Sensory, Neural, and Behavioral Physiology, 1985, 156, 503-509.	0.7	40
121	Color vision in squirrel monkeys: Sex-related differences suggest the mode of inheritance. Vision Research, 1985, 25, 141-143.	0.7	56
122	How We See Black and White: The Role of Midget Ganglion Cells. Frontiers in Neuroanatomy, 0, 16, .	0.9	1