Erica L Fletcher

List of Publications by Year
in descending order

146 papers	6,223 citations	71097 41 h-index	106340 65 g-index
149 all docs	149 docs citations	149 times ranked	5464 citing authors

#	Article	IF	Citations
1	Glycine and GABA receptors in the mammalian retina. Vision Research, 1998, 38, 1411-1430.	1.4	237
2	Immunocytochemical Localization of the Postsynaptic Density Protein PSD-95 in the Mammalian Retina. Journal of Neuroscience, 1998, 18, 10136-10149.	3.6	213
3	Neuronal and Glial Cell Abnormality as Predictors of Progression of Diabetic Retinopathy. Current Pharmaceutical Design, 2007, 13, 2699-2712.	1.9	182
4	Synaptic localization of NMDA receptor subunits in the rat retina. , 2000, 420, 98-112.		172
5	Subthreshold Nanosecond Laser Intervention in Age-Related Macular Degeneration. Ophthalmology, 2019, 126, 829-838.	5.2	151
6	Immunocytochemical localization of the amino acid neurotransmitters in the chicken retina. Journal of Comparative Neurology, 1993, 336, 174-193.	1.6	144
7	Early Inner Retinal Astrocyte Dysfunction during Diabetes and Development of Hypoxia, Retinal Stress, and Neuronal Functional Loss. , 2011, 52, 9316.		140
8	Paired-Flash Identification of Rod and Cone Dysfunction in the Diabetic Rat. , 2004, 45, 4592.		134
9	The reninâ€"angiotensin system in retinal health and disease: Its influence on neurons, glia and the vasculature. Progress in Retinal and Eye Research, 2010, 29, 284-311.	15.5	123
10	GABAA and GABAC receptors on mammalian rod bipolar cells. , 1998, 396, 351-365.		117
11	Purines in the eye: Recent evidence for the physiological and pathological role of purines in the RPE, retinal neurons, astrocytes, MÃ¼ller cells, lens, trabecular meshwork, cornea and lacrimal gland. Experimental Eye Research, 2014, 127, 270-279.	2.6	111
12	Correlation of Histologic Features with InÂVivo Imaging of Reticular Pseudodrusen. Ophthalmology, 2016, 123, 1320-1331.	5.2	107
13	Dysfunction of retinal neurons and glia during diabetes. Australasian journal of optometry, The, 2005, 88, 132-145.	1.3	100
14	Characterization of retinal function and glial cell response in a mouse model of oxygenâ€induced retinopathy. Journal of Comparative Neurology, 2011, 519, 506-527.	1.6	99
15	Localisation of amino acid neurotransmitters during postnatal development of the rat retina. , 1997, 380, 449-471.		97
16	Synaptic localization of P2X7 receptors in the rat retina. Journal of Comparative Neurology, 2004, 472, 13-23.	1.6	92
17	Nanosecond laser therapy reverses pathologic and molecular changes in ageâ€related macular degeneration without retinal damage. FASEB Journal, 2015, 29, 696-710.	0.5	91
18	Animal Models of Retinal Disease. Progress in Molecular Biology and Translational Science, 2011, 100, 211-286.	1.7	89

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19	AT₁ receptor inhibition prevents astrocyte degeneration and restores vascular growth in oxygenâ€induced retinopathy. Glia, 2008, 56, 1076-1090.	4.9	88
20	Neurochemical architecture of the normal and degenerating rat retina. Journal of Comparative Neurology, 1996, 376, 343-360.	1.6	87
21	Synaptic distribution of ionotropic glutamate receptors in the inner plexiform layer of the primate retina. Journal of Comparative Neurology, 2002, 447, 138-151.	1.6	86
22	Retinitis pigmentosa: understanding the clinical presentation, mechanisms and treatment options. Australasian journal of optometry, The, 2004, 87, 65-80.	1.3	85
23	Studying Age-Related Macular Degeneration Using Animal Models. Optometry and Vision Science, 2014, 91, 878-886.	1.2	78
24	Glutamate uptake in retinal glial cells during diabetes. Diabetologia, 2005, 48, 351-360.	6.3	74
25	Extracellular ATP induces retinal photoreceptor apoptosis through activation of purinoceptors in rodents. Journal of Comparative Neurology, 2009, 513, 430-440.	1.6	71
26	Functional remodeling of glutamate receptors by inner retinal neurons occurs from an early stage of retinal degeneration. Journal of Comparative Neurology, 2009, 514, 473-491.	1.6	69
27	Evidence for the involvement of purinergic P2X7receptors in outer retinal processing. European Journal of Neuroscience, 2006, 24, 7-19.	2.6	67
28	Rod Photoreceptor Dysfunction in Diabetes: Activation, Deactivation, and Dark Adaptation. , 2006, 47, 3187.		64
29	Distribution of two splice variants of the glutamate transporter GLT1 in the retinas of humans, monkeys, rabbits, rats, cats, and chickens. Journal of Comparative Neurology, 2002, 445, 1-12.	1.6	63
30	Rod and Cone Pathway Signalling Is Altered in the P2X7 Receptor Knock Out Mouse. PLoS ONE, 2012, 7, e29990.	2.5	63
31	Neurochemical development of the degenerating rat retina. Journal of Comparative Neurology, 1997, 388, 1-22.	1.6	61
32	RILLKKMPSV Influences the Vasculature, Neurons and Glia, and (Pro)Renin Receptor Expression in the Retina. Hypertension, 2010, 55, 1454-1460.	2.7	61
33	A rare functional haplotype of the<i>P2RX4</i>and<i>P2RX7</i>genes leads to loss of innate phagocytosis and confers increased risk of ageâ€related macular degeneration. FASEB Journal, 2013, 27, 1479-1487.	0.5	61
34	Functional and neurochemical development in the normal and degenerating mouse retina. Journal of Comparative Neurology, 2013, 521, 1251-1267.	1.6	60
35	Using the rd1 mouse to understand functional and anatomical retinal remodelling and treatment implications in retinitis pigmentosa: A review. Experimental Eye Research, 2016, 150, 106-121.	2.6	59
36	Retinal Dysfunction in Diabetic Ren-2 Rats Is Ameliorated by Treatment with Valsartan but Not Atenolol. , 2007, 48, 927.		57

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37	Neuronal and glial cell changes are determined by retinal vascularization in retinopathy of prematurity. Journal of Comparative Neurology, 2007, 504, 404-417.	1.6	57
38	Neuronal and glial cell expression of angiotensin II type 1 (AT1) and type 2 (AT2) receptors in the rat retina. Neuroscience, 2009, 161, 195-213.	2.3	56
39	How Azobenzene Photoswitches Restore Visual Responses to the Blind Retina. Neuron, 2016, 92, 100-113.	8.1	56
40	Reticular pseudodrusen: A critical phenotype in age-related macular degeneration. Progress in Retinal and Eye Research, 2022, 88, 101017.	15.5	56
41	Localization and expression of the glutamate transporter, excitatory amino acid transporter 4, within astrocytes of the rat retina. Cell and Tissue Research, 2004, 315, 305-310.	2.9	55
42	The significance of neuronal and glial cell changes in the rat retina during oxygen-induced retinopathy. Documenta Ophthalmologica, 2010, 120, 67-86.	2.2	53
43	Ccl2/Cx3cr1 Knockout Mice Have Inner Retinal Dysfunction but Are Not an Accelerated Model of AMD. , 2012, 53, 7833.		53
44	Neuronal expression of P2X3 purinoceptors in the rat retina. Neuroscience, 2007, 146, 403-414.	2.3	51
45	Neuronal and glial localization of GABA transporter immunoreactivity in the myenteric plexus. Cell and Tissue Research, 2002, 308, 339-346.	2.9	49
46	Connexin43 Mimetic Peptide Improves Retinal Function and Reduces Inflammation in a Light-Damaged Albino Rat Model. , 2016, 57, 3961.		47
47	A Naturally Occurring Mouse Model of Achromatopsia: Characterization of the Mutation in Cone Transducin and Subsequent Retinal Phenotype. , 2013, 54, 3350.		45
48	Restorative retinal laser therapy: Present state and future directions. Survey of Ophthalmology, 2018, 63, 307-328.	4.0	45
49	Fractalkine-induced microglial vasoregulation occurs within the retina and is altered early in diabetic retinopathy. Proceedings of the National Academy of Sciences of the United States of America, 2021, 118, .	7.1	45
50	Angiotensin and Bradykinin: Targets for the Treatment of Vascular and Neuro-Glial Pathology in Diabetic Retinopathy. Current Pharmaceutical Design, 2004, 10, 3313-3330.	1.9	44
51	Angiotensin typeâ€1 receptor inhibition is neuroprotective to amacrine cells in a rat model of retinopathy of prematurity. Journal of Comparative Neurology, 2010, 518, 41-63.	1.6	44
52	Vesicular expression and release of ATP from dopaminergic neurons of the mouse retina and midbrain. Frontiers in Cellular Neuroscience, 2015, 9, 389.	3.7	44
53	Indoleamine-accumulating amacrine cells are presynaptic to rod bipolar cells through GABAC receptors. , 1999, 413, 155-167.		43
54	Rod Photoreceptor Activation Alone Defines the Release of Dopamine in the Retina. Current Biology, 2019, 29, 763-774.e5.	3.9	43

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55	P2X2 receptors on ganglion and amacrine cells in cone pathways of the rat retina. Journal of Comparative Neurology, 2006, 496, 595-609.	1.6	41
56	In Vivo Quantification of Retinal Changes Associated With Drusen in Age-Related Macular Degeneration. Investigative Ophthalmology and Visual Science, 2015, 56, 1689-1700.	3.3	40
57	Innate phagocytosis by peripheral blood monocytes is altered in Alzheimerâ€™s disease. Acta Neuropathologica, 2016, 132, 377-389.	7.7	40
58	Characterization of the Circumlimbal Suture Model of Chronic IOP Elevation in Mice and Assessment of Changes in Gene Expression of Stretch Sensitive Channels. Frontiers in Neuroscience, 2017, 11, 41.	2.8	39
59	Relationship between the Magnitude of Intraocular Pressure during an Episode of Acute Elevation and Retinal Damage Four Weeks later in Rats. PLoS ONE, 2013, 8, e70513.	2.5	38
60	Early markers of retinal degeneration in rd/rd mice. Molecular Vision, 2005, 11, 717-28.	1.1	38
61	Retinal dysfunction, photoreceptor protein dysregulation and neuronal remodelling in the R6/1 mouse model of Huntington's disease. Neurobiology of Disease, 2012, 45, 887-896.	4.4	37
62	A review of the role of glial cells in understanding retinal disease. Australasian journal of optometry, The, 2008, 91, 67-77.	1.3	36
63	A Role for Omega-3 Polyunsaturated Fatty Acid Supplements in Diabetic Neuropathy. , 2010, 51, 1755.		36
64	Diamond Devices for High Acuity Prosthetic Vision. Advanced Biology, 2017, 1, e1600003.	3.0	35
65	Micro-CT and Histological Evaluation of an Neural Interface Implanted Within a Blood Vessel. IEEE Transactions on Biomedical Engineering, 2017, 64, 928-934.	4.2	35
66	Localization and possible function of P2Y4 receptors in the rodent retina. Neuroscience, 2008, 155, 1262-1274.	2.3	34
67	Loss of Function of P2X7 Receptor Scavenger Activity in Aging Mice. American Journal of Pathology, 2017, 187, 1670-1685.	3.8	34
68	The Role of the Microglial Cx3cr1 Pathway in the Postnatal Maturation of Retinal Photoreceptors. Journal of Neuroscience, 2018, 38, 4708-4723.	3.6	34
69	Expression, distribution and ultrastructural localization of the synapse-organizing molecule agrin in the mature avian retina. European Journal of Neuroscience, 1999, 11, 4188-4196.	2.6	33
70	Amyloid Precursor Protein Is Required for Normal Function of the Rod and Cone Pathways in the Mouse Retina. PLoS ONE, 2012, 7, e29892.	2.5	33
71	ATP-Induced Photoreceptor Death in a Feline Model of Retinal Degeneration. Investigative Ophthalmology and Visual Science, 2014, 55, 8319-8329.	3.3	33
72	Adenosine triphosphateâ€induced photoreceptor death and retinal remodeling in rats. Journal of Comparative Neurology, 2014, 522, 2928-2950.	1.6	33

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73	The role of pili in the attachment ofPseudomonas aeruginosato unworn hydrogel contact lenses. Current Eye Research, 1993, 12, 1067-1071.	1.5	32
74	The effect of photoreceptor degeneration on ganglion cell morphology. Journal of Comparative Neurology, 2014, 522, 1155-1170.	1.6	32
75	Assessment of Retinal Function and Morphology in Aging Ccl2 Knockout Mice. Investigative Ophthalmology and Visual Science, 2015, 56, 1238-1252.	3.3	32
76	Retinal amino acid neurochemistry in health and disease. Australasian journal of optometry, The, 2013, 96, 310-332.	1.3	30
77	Early remodeling of mÃ¼ller cells in the <i>rd/rd</i> mouse model of retinal dystrophy. Journal of Comparative Neurology, 2013, 521, 2439-2453.	1.6	30
78	Changes in ganglion cells during retinal degeneration. Neuroscience, 2016, 329, 1-11.	2.3	30
79	Failure of Autophagyâ€"Lysosomal Pathways in Rod Photoreceptors Causes the Early Retinal Degeneration Phenotype Observed in<i>Cln6^{nclf}</i>Mice. , 2018, 59, 5082.		27
80	Retinal Prosthesis Safety: Alterations in Microglia Morphology due to Thermal Damage and Retinal Implant Contact. , 2012, 53, 7802.		26
81	Immunolocalization of the P2X4 receptor on neurons and glia in the mammalian retina. Neuroscience, 2014, 277, 55-71.	2.3	26
82	The renin-angiotensin system and the retinal neurovascular unit: A role in vascular regulation and disease. Experimental Eye Research, 2019, 187, 107753.	2.6	26
83	Sildenafil alters retinal function in mouse carriers of Retinitis Pigmentosa. Experimental Eye Research, 2014, 128, 43-56.	2.6	25
84	Transcriptomic Profiling of Human Pluripotent Stem Cell-derived Retinal Pigment Epithelium over Time. Genomics, Proteomics and Bioinformatics, 2021, 19, 223-242.	6.9	25
85	Contribution of microglia and monocytes to the development and progression of age related macular degeneration. Ophthalmic and Physiological Optics, 2020, 40, 128-139.	2.0	25
86	Subsets of retinal neurons and glia express P2Y1 receptors. Neuroscience, 2009, 160, 555-566.	2.3	23
87	Gene expression and localization of GABAC receptors in neurons of the rat gastrointestinal tract. Neuroscience, 2001, 107, 181-189.	2.3	22
88	Localization and possible function of the glutamate transporter, EAAC1, in the rat retina. Cell and Tissue Research, 2002, 310, 31-40.	2.9	22
89	Retinal metabolic state of the proline-23-histidine rat model of retinitis pigmentosa. American Journal of Physiology - Cell Physiology, 2010, 298, C764-C774.	4.6	22
90	Design, development and characterization of synthetic Bruchâ€™s membranes. Acta Biomaterialia, 2017, 64, 357-376.	8.3	22

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91	The Role of Angiotensin II/AT1 Receptor Signaling in Regulating Retinal Microglial Activation. , 2018, 59, 487.		22
92	Mechanisms of Photoreceptor Death During Retinal Degeneration. Optometry and Vision Science, 2010, 87, 269-275.	1.2	22
93	Targeting P2X7 receptors as a means for treating retinal disease. Drug Discovery Today, 2019, 24, 1598-1605.	6.4	21
94	Alterations in neurochemistry during retinal degeneration. Microscopy Research and Technique, 2000, 50, 89-102.	2.2	20
95	Characterization of histamine projections and their potential cellular targets in the mouse retina. Neuroscience, 2009, 158, 932-944.	2.3	20
96	Mapping cation entry in photoreceptors and inner retinal neurons during early degeneration in the P23H-3 rat retina. Visual Neuroscience, 2013, 30, 65-75.	1.0	20
97	Stimulation of a Suprachoroidal Retinal Prosthesis Drives Cortical Responses in a Feline Model of Retinal Degeneration. , 2016, 57, 5216.		20
98	Retinal Anatomy and Function of the Transthyretin Null Mouse. Experimental Eye Research, 2001, 73, 651-659.	2.6	19
99	Electronic restoration of vision in those with photoreceptor degenerations. Australasian journal of optometry, The, 2012, 95, 473-483.	1.3	18
100	Topographic Rod Recovery Profiles after a Prolonged Dark Adaptation in Subjects with Reticular Pseudodrusen. Ophthalmology Retina, 2018, 2, 1206-1217.	2.4	18
101	Mapping kainate activation of inner neurons in the rat retina. Journal of Comparative Neurology, 2013, 521, 2416-2438.	1.6	17
102	Retinal Changes in an ATP-Induced Model of Retinal Degeneration. Frontiers in Neuroanatomy, 2016, 10, 46.	1.7	17
103	Reversibility of Retinal Ganglion Cell Dysfunction From Chronic IOP Elevation. , 2019, 60, 3878.		17
104	Localization and Possible Function of P2X Receptors in Normal and Diseased Retinae. Journal of Ocular Pharmacology and Therapeutics, 2016, 32, 509-517.	1.4	16
105	The Role of Purinergic Receptors in Retinal Function and Disease. Advances in Experimental Medicine and Biology, 2010, 664, 385-391.	1.6	16
106	Alternative pathways in the development of diabetic retinopathy: the reninâ€angiotensin and kallikreinâ€kinin systems. Australasian journal of optometry, The, 2012, 95, 282-289.	1.3	15
107	The Vasoneuronal Effects of AT₁Receptor Blockade in a Rat Model of Retinopathy of Prematurity. , 2014, 55, 3957.		15
108	Potential mechanisms of retinal ganglion cell typeâ€specific vulnerability in glaucoma. Australasian journal of optometry, The, 2020, 103, 562-571.	1.3	15

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109	The Contribution of Microglia to the Development and Maturation of the Visual System. Frontiers in Cellular Neuroscience, 2021, 15, 659843.	3.7	15
110	Changes in morphology of retinal ganglion cells with eccentricity in retinal degeneration. Cell and Tissue Research, 2016, 364, 263-271.	2.9	14
111	Nanosecond Laser Treatment for Age-Related Macular Degeneration Does Not Induce Focal Vision Loss or New Vessel Growth in the Retina. , 2018, 59, 731.		14
112	Treatments targeting autophagy ameliorate the age-related macular degeneration phenotype in mice lacking APOE (apolipoprotein E). Autophagy, 2022, 18, 2368-2384.	9.1	14
113	Prorenin and the pro renin receptor do they have a pathogenic role in the retina. Frontiers in Bioscience - Elite, 2010, E2, 1054-1064.	1.8	13
114	Inner retinal change in a novel rd1-FTL mouse model of retinal degeneration. Frontiers in Cellular Neuroscience, 2015, 9, 293.	3.7	13
115	Uteroplacental insufficiency leads to hypertension, but not glucose intolerance or impaired skeletal muscle mitochondrial biogenesis, in 12-month-old rats. Physiological Reports, 2015, 3, e12556.	1.7	12
116	Photoreceptor Degeneration in Pro23His Transgenic Rats (Line 3) Involves Autophagic and Necroptotic Mechanisms. Frontiers in Neuroscience, 2020, 14, 581579.	2.8	12
117	Increased MÃ¼ller cell density during diabetes is ameliorated by aminoguanidine and ramipril. Australasian journal of optometry, The, 2001, 84, 276-281.	1.3	11
118	The Role of Histamine in the Retina: Studies on the Hdc Knockout Mouse. PLoS ONE, 2014, 9, e116025.	2.5	11
119	Retinal ganglion cell dysfunction in mice following acute intraocular pressure is exacerbated by P2X7 receptor knockout. Scientific Reports, 2021, 11, 4184.	3.3	10
120	Deficits in Monocyte Function in Age Related Macular Degeneration: A Novel Systemic Change Associated With the Disease. Frontiers in Medicine, 2021, 8, 634177.	2.6	10
121	Prophylactic laser in age-related macular degeneration: the past, the present and the future. Eye, 2018, 32, 972-980.	2.1	9
122	Seizure-Related Gene 6 (Sez-6) in Amacrine Cells of the Rodent Retina and the Consequence of Gene Deletion. PLoS ONE, 2009, 4, e6546.	2.5	9
123	Fluorescent Labeling and Quantification of Vesicular ATP Release Using Live Cell Imaging. Methods in Molecular Biology, 2020, 2041, 209-221.	0.9	8
124	Advances in understanding the mechanisms of retinal degenerations. Australasian journal of optometry, The, 2020, 103, 723-732.	1.3	7
125	Subthreshold Nano-Second Laser Treatment and Age-Related Macular Degeneration. Journal of Clinical Medicine, 2021, 10, 484.	2.4	7
126	The Role of the P2X7 Receptor in the Retina: Cell Signalling and Dysfunction. Advances in Experimental Medicine and Biology, 2012, 723, 813-819.	1.6	7

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127	Age-Related Macular Degeneration. Optometry and Vision Science, 2014, 91, 816-818.	1.2	5
128	X-ray fluorescence microscopic measurement of elemental distribution in the mouse retina with age. Metallomics, 2016, 8, 1110-1121.	2.4	5
129	Transcriptomic analysis of choroidal neovascularization reveals dysregulation of immune and fibrosis pathways that are attenuated by a novel anti-fibrotic treatment. Scientific Reports, 2022, 12, 859.	3.3	5
130	Nonâ€ulcerative infiltrative keratitis in RGP daily wear â€" a case report. Australasian journal of optometry, The, 1990, 73, 178-183.	1.3	4
131	Viability of the inner retina in a novel mouse model of retinitis pigmentosa. , 2010, 2010, 553-6.		3
132	Neurochemical architecture of the normal and degenerating rat retina. Journal of Comparative Neurology, 1996, 376, 343-360.	1.6	3
133	Retinal degeneration: challenge and opportunity. Australasian journal of optometry, The, 2005, 88, 265-266.	1.3	2
134	Electronic restoration of vision: science fiction or reality?. Australasian journal of optometry, The, 2010, 93, 59-60.	1.3	2
135	2016 Glenn A. Fry Award Lecture: Mechanisms and Potential Treatments of Early Age-Related Macular Degeneration. Optometry and Vision Science, 2017, 94, 939-945.	1.2	2
136	Ganglion Cell Assessment in Rodents with Retinal Degeneration. Methods in Molecular Biology, 2018, 1753, 261-273.	0.9	1
137	Genetics of reticular pseudodrusen in age-related macular degeneration. Trends in Genetics, 2022, 38, 312-316.	6.7	1
138	Understanding neurochemical changes during retinal diseases. Clinical and Experimental Ophthalmology, 2004, 32, 455-456.	2.6	0
139	Reply to â€œLetter to the editor: â€˜Comments on retinal metabolic state in P23H and normal retinasâ€™â€. American Journal of Physiology - Cell Physiology, 2010, 299, C186-C187.	4.6	0
140	Research in diabetes and the eye: evolution or revolution?. Australasian journal of optometry, The, 2012, 95, 251-253.	1.3	0
141	What neurochemistry tells us about the retina. Australasian journal of optometry, The, 2013, 96, 257-258.	1.3	0
142	Glutamate Transport in Retinal Glial Cells during Diabetes. , 2008, , 355-371.		0
143	Rod Photoreceptor Activation Alone Defines the Release of Dopamine in the Retina. SSRN Electronic Journal, 0, , .	0.4	0
144	Neuronal TrkB Drives Oligodendrocyte Production and Central Myelination. SSRN Electronic Journal, 0, , .	0.4	0

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145	Animal Models of Diseases of the Retinal Pigment Epithelium. , 2020, , 325-347.		0
146	Animal and Human Models of Retinal Diseases. , 2020, , 590-613.		0