Eric A Newman

List of Publications by Year
in descending order

75 papers	12,890 citations	57758 44 h-index	88630 70 g-index
75 all docs	75 docs citations	75 times ranked	9863 citing authors

#	Article	IF	Citations
1	Dilation of cortical capillaries is not related to astrocyte calcium signaling. Glia, 2022, 70, 508-521.	4.9	19
2	Astrocyte regulation of cerebral blood flow during hypoglycemia. Journal of Cerebral Blood Flow and Metabolism, 2022, 42, 1534-1546.	4.3	9
3	Cellular mechanisms mediating activityâ€dependent extracellular space shrinkage in the retina. Glia, 2022, 70, 1927-1937.	4.9	3
4	Regulation of blood flow in diabetic retinopathy. Visual Neuroscience, 2020, 37, E004.	1.0	15
5	Spatial Organization and Dynamics of the Extracellular Space in the Mouse Retina. Journal of Neuroscience, 2020, 40, 7785-7794.	3.6	11
6	Mechanisms Mediating Functional Hyperemia in the Brain. Neuroscientist, 2018, 24, 73-83.	3.5	88
7	Keeping the Brain Well Fed: The Role of Capillaries and Arterioles in Orchestrating Functional Hyperemia. Neuron, 2018, 99, 248-250.	8.1	9
8	Ischemia-induced spreading depolarization in the retina. Journal of Cerebral Blood Flow and Metabolism, 2016, 36, 1579-1591.	4.3	12
9	Light adaptation does not prevent early retinal abnormalities in diabetic rats. Scientific Reports, 2016, 6, 21075.	3.3	13
10	Glial Cell Calcium Signaling Mediates Capillary Regulation of Blood Flow in the Retina. Journal of Neuroscience, 2016, 36, 9435-9445.	3.6	121
11	Measurement of Retinal Blood Flow Using Fluorescently Labeled Red Blood Cells. ENeuro, 2015, 2, ENEURO.0005-15.2015.	1.9	33
12	Glial cell regulation of neuronal activity and blood flow in the retina by release of gliotransmitters. Philosophical Transactions of the Royal Society B: Biological Sciences, 2015, 370, 20140195.	4.0	146
13	Astrocyte Regulation of Blood Flow in the Brain. Cold Spring Harbor Perspectives in Biology, 2015, 7, a020388.	5.5	249
14	Purinergic control of vascular tone in the retina. Journal of Physiology, 2014, 592, 491-504.	2.9	58
15	Regulation of Blood Flow in the Retinal Trilaminar Vascular Network. Journal of Neuroscience, 2014, 34, 11504-11513.	3.6	153
16	Functional Hyperemia and Mechanisms of Neurovascular Coupling in the Retinal Vasculature. Journal of Cerebral Blood Flow and Metabolism, 2013, 33, 1685-1695.	4.3	181
17	Cellular and physiological mechanisms underlying blood flow regulation in the retina and choroid in health and disease. Progress in Retinal and Eye Research, 2012, 31, 377-406.	15.5	514
18	Assessment of Glial Function in the In Vivo Retina. Methods in Molecular Biology, 2012, 814, 499-514.	0.9	10

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19	A micro-advancer device for vitreal injection and retinal recording and stimulation. Experimental Eye Research, 2011, 93, 767-770.	2.6	2
20	Oxygen modulation of neurovascular coupling in the retina. Proceedings of the National Academy of Sciences of the United States of America, 2011, 108, 17827-17831.	7.1	78
21	Aminoguanidine Reverses the Loss of Functional Hyperemia in a Rat Model of Diabetic Retinopathy. Frontiers in Neuroenergetics, 2011, 3, 10.	5.3	29
22	Mechanisms and Distribution of Ion Channels in Retinal Ganglion Cells: Using Temperature as an Independent Variable. Journal of Neurophysiology, 2010, 103, 1357-1374.	1.8	80
23	Inhibition of inducible nitric oxide synthase reverses the loss of functional hyperemia in diabetic retinopathy. Glia, 2010, 58, 1996-2004.	4.9	95
24	Glial and neuronal control of brain blood flow. Nature, 2010, 468, 232-243.	27.8	2,003
25	Imaging retinal blood flow with laser speckle flowmetry. Frontiers in Neuroenergetics, 2010, 2, .	5.3	66
26	Adenosine-Evoked Hyperpolarization of Retinal Ganglion Cells Is Mediated by G-Protein-Coupled Inwardly Rectifying K⁺and Small Conductance Ca²⁺-Activated K⁺Channel Activation. Journal of Neuroscience, 2009, 29, 11237-11245.	3.6	39
27	Spontaneous Glial Calcium Waves in the Retina Develop over Early Adulthood. Journal of Neuroscience, 2009, 29, 11339-11346.	3.6	46
28	Regulation of potassium by glial cells in the centralnervous system. , 2009, , 151-175.		4
29	Neurovascular Coupling Is Not Mediated by Potassium Siphoning from Glial Cells. Journal of Neuroscience, 2007, 27, 2468-2471.	3.6	78
30	Signalling within the neurovascular unit in the mammalian retina. Experimental Physiology, 2007, 92, 635-640.	2.0	139
31	Glial Cells Dilate and Constrict Blood Vessels: A Mechanism of Neurovascular Coupling. Journal of Neuroscience, 2006, 26, 2862-2870.	3.6	547
32	Calcium signaling in specialized glial cells. Glia, 2006, 54, 650-655.	4.9	89
33	A purinergic dialogue between glia and neurons in the retina. Novartis Foundation Symposium, 2006, 276, 193-202; discussion 202-7, 233-7, 275-81.	1.1	12
34	Calcium Increases in Retinal Glial Cells Evoked by Light-Induced Neuronal Activity. Journal of Neuroscience, 2005, 25, 5502-5510.	3.6	170
35	A dialogue between glia and neurons in the retina: modulation of neuronal excitability. Neuron Glia Biology, 2004, 1, 245-252.	1.6	44
36	Glial modulation of synaptic transmission in the retina. Glia, 2004, 47, 268-274.	4.9	127

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37	Potassium buffering in the central nervous system. Neuroscience, 2004, 129, 1043-1054.	2.3	700
38	New roles for astrocytes: Regulation of synaptic transmission. Trends in Neurosciences, 2003, 26, 536-542.	8.6	543
39	D-serine and serine racemase are present in the vertebrate retina and contribute to the physiological activation of NMDA receptors. Proceedings of the National Academy of Sciences of the United States of America, 2003, 100, 6789-6794.	7.1	250
40	Glial Cell Inhibition of Neurons by Release of ATP. Journal of Neuroscience, 2003, 23, 1659-1666.	3.6	410
41	Propagation of Intercellular Calcium Waves in Retinal Astrocytes and MÃ¼ller Cells. Journal of Neuroscience, 2001, 21, 2215-2223.	3.6	429
42	Electrical coupling between glial cells in the rat retina. Glia, 2001, 35, 1-13.	4.9	32
43	Calcium signaling in retinal glial cells and its effect on neuronal activity. Progress in Brain Research, 2001, 132, 241-254.	1.4	30
44	Genetic Inactivation of an Inwardly Rectifying Potassium Channel (Kir4.1 Subunit) in Mice: Phenotypic Impact in Retina. Journal of Neuroscience, 2000, 20, 5733-5740.	3.6	404
45	An eyecup preparation for the rat and mouse. Journal of Neuroscience Methods, 1999, 93, 169-175.	2.5	23
46	Sodium-bicarbonate cotransport in retinal astrocytes and Mï¿½ller cells of the rat. , 1999, 26, 302-308.		32
47	Modulation of Neuronal Activity by Glial Cells in the Retina. Journal of Neuroscience, 1998, 18, 4022-4028.	3.6	341
48	Calcium Waves in Retinal Glial Cells. Science, 1997, 275, 844-847.	12.6	437
49	Asymmetric gap junctional coupling between glial cells in the rat retina. , 1997, 20, 10-22.		89
50	Asymmetric gap junctional coupling between glial cells in the rat retina. Glia, 1997, 20, 10-22.	4.9	38
51	The MÃ¼ller cell: a functional element of the retina. Trends in Neurosciences, 1996, 19, 307-312.	8.6	713
52	Acid efflux from retinal glial cells generated by sodium bicarbonate cotransport. Journal of Neuroscience, 1996, 16, 159-168.	3.6	93
53	A physiological measure of carbonic anhydrase in mÃ¼ller cells. Glia, 1994, 11, 291-299.	4.9	42
54	Inward-rectifying potassium channels in retinal glial (Muller) cells. Journal of Neuroscience, 1993, 13, 3333-3345.	3.6	276

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55	Sodium-bicarbonate cotransport in retinal Muller (glial) cells of the salamander. Journal of Neuroscience, 1991, 11, 3972-3983.	3.6	79
56	Spatial Buffering of Light-Evoked Potassium Increases by Retinal MÃ¼ller (Glial) Cells. Science, 1989, 244, 578-580.	12.6	204
57	Potassium conductance block by barium in amphibian MuÂ¨ller cells. Brain Research, 1989, 498, 308-314.	2.2	56
58	Potassium conductance in MÃ¼ller cells of fish. Glia, 1988, 1, 275-281.	4.9	22
59	Electrophysiology of retinal glial cells. Progress in Retinal and Eye Research, 1988, 8, 153-171.	0.8	15
60	Does the release of potassium from astrocyte endfeet regulate cerebral blood flow?. Science, 1987, 237, 896-898.	12.6	391
61	Distribution of potassium conductance in mammalian MÃ¼ller (glial) cells: a comparative study. Journal of Neuroscience, 1987, 7, 2423-32.	3.6	157
62	Regional Specialization of the Membrane of Retinal Glial Cells and Its Importance to K+Spatial Buffering. Annals of the New York Academy of Sciences, 1986, 481, 273-286.	3.8	50
63	Physiological properties and possible functions of muller cells. Neuroscience Research Supplement: the Official Journal of the Japan Neuroscience Society, 1986, 4, S209-S220.	0.0	1
64	Physiological properties and possible functions of Muller cells. Neuroscience Research, 1986, 4, S209-S220.	1.9	6
65	High potassium conductance in astrocyte endfeet. Science, 1986, 233, 453-454.	12.6	283
66	THE MÃœLLER CELL. , 1986, , 149-171.		27
67	Voltage-dependent calcium and potassium channels in retinal glial cells. Nature, 1985, 317, 809-811.	27.8	213
68	Light-evoked increases in extracellular K+ in the plexiform layers of amphibian retinas.. Journal of General Physiology, 1985, 86, 189-213.	1.9	80
69	Regulation of potassium levels by glial cells in the retina. Trends in Neurosciences, 1985, 8, 156-159.	8.6	64
70	Model of electroretinogram b-wave generation: a test of the K+ hypothesis. Journal of Neurophysiology, 1984, 51, 164-182.	1.8	191
71	Control of Extracellular Potassium Levels by Retinal Glial Cell K ⁺ Siphoning. Science, 1984, 225, 1174-1175.	12.6	449
72	Regional specialization of retinal glial cell membrane. Nature, 1984, 309, 155-157.	27.8	266

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73	Current source-density analysis of the b-wave of frog retina.. Journal of Neurophysiology, 1980, 43, 1355-1366.	1.8	100
74	B-wave currents in the frog retina. Vision Research, 1979, 19, 227-234.	1.4	41
75	A Purinergic Dialogue between Glia and Neurons in the Retina. Novartis Foundation Symposium, 0, , 193-207.	1.1	21