

# Bruce R Ransom

## List of Publications by Citations

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47  
papers

3,478  
citations

27  
h-index

49  
g-index

49  
ext. papers

3,775  
ext. citations

6.1  
avg, IF

5.09  
L-index

#	Paper	IF	Citations
47	Functional hemichannels in astrocytes: a novel mechanism of glutamate release. <i>Journal of Neuroscience</i> , <b>2003</b> , 23, 3588-96	6.6	584
46	Astrocytic glycogen influences axon function and survival during glucose deprivation in central white matter. <i>Journal of Neuroscience</i> , <b>2000</b> , 20, 6804-10	6.6	300
45	Glycogen regulation and functional role in mouse white matter. <i>Journal of Physiology</i> , <b>2003</b> , 549, 501-12	3.9	193
44	Na(+)-Ca2+ exchanger mediates Ca2+ influx during anoxia in mammalian central nervous system white matter. <i>Annals of Neurology</i> , <b>1991</b> , 30, 375-80	9.4	186
43	Compound action potential of nerve recorded by suction electrode: a theoretical and experimental analysis. <i>Brain Research</i> , <b>1991</b> , 546, 18-32	3.7	163
42	Activity-dependent extracellular K+ accumulation in rat optic nerve: the role of glial and axonal Na+ pumps. <i>Journal of Physiology</i> , <b>2000</b> , 522 Pt 3, 427-42	3.9	156
41	Thrombin-induced activation of cultured rodent microglia. <i>Journal of Neurochemistry</i> , <b>2000</b> , 75, 1539-47	6	143
40	Visualization of oligodendrocytes and astrocytes in the intact rat optic nerve by intracellular injection of lucifer yellow and horseradish peroxidase. <i>Glia</i> , <b>1989</b> , 2, 470-5	9	139
39	Morphology of astrocytes and oligodendrocytes during development in the intact rat optic nerve. <i>Journal of Comparative Neurology</i> , <b>1993</b> , 338, 141-58	3.4	118
38	Gap junctions equalize intracellular Na+ concentration in astrocytes. <i>Glia</i> , <b>1997</b> , 20, 299-307	9	107
37	Excitotoxic mechanisms of ischemic injury in myelinated white matter. <i>Journal of Cerebral Blood Flow and Metabolism</i> , <b>2007</b> , 27, 1540-52	7.3	103
36	White matter vulnerability to ischemic injury increases with age because of enhanced excitotoxicity. <i>Journal of Neuroscience</i> , <b>2008</b> , 28, 1479-89	6.6	102
35	Effects of osmotically driven cell volume changes on diffusion-weighted imaging of the rat optic nerve. <i>Magnetic Resonance in Medicine</i> , <b>1996</b> , 35, 162-7	4.4	95
34	Astrocytes: multitasking stars of the central nervous system. <i>Methods in Molecular Biology</i> , <b>2012</b> , 814, 3-7	1.4	92
33	Effects of CO2 on excitatory transmission apparently caused by changes in intracellular pH in the rat hippocampal slice. <i>Brain Research</i> , <b>1996</b> , 706, 210-6	3.7	84
32	Anoxic injury of rat optic nerve: ultrastructural evidence for coupling between Na+ influx and Ca(2+)-mediated injury in myelinated CNS axons. <i>Brain Research</i> , <b>1994</b> , 644, 197-204	3.7	82
31	Schwann cell glycogen selectively supports myelinated axon function. <i>Annals of Neurology</i> , <b>2012</b> , 72, 406-18	9.4	74

30	Protecting white matter from stroke injury. <i>Stroke</i> , <b>2013</b> , 44, 1204-11	6.7	70
29	Metabolic substrates other than glucose support axon function in central white matter. <i>Journal of Neuroscience Research</i> , <b>2001</b> , 66, 839-43	4.4	69
28	Axon conduction and survival in CNS white matter during energy deprivation: a developmental study. <i>Journal of Neurophysiology</i> , <b>1998</b> , 79, 95-105	3.2	68
27	A depolarization-stimulated, bafilomycin-inhibitable H <sup>+</sup> pump in hippocampal astrocytes. <i>Glia</i> , <b>1993</b> , 9, 280-91	9	57
26	Ultrastructural identification of HRP-injected oligodendrocytes in the intact rat optic nerve. <i>Glia</i> , <b>1991</b> , 4, 37-45	9	53
25	Activation, permeability, and inhibition of astrocytic and neuronal large pore (hemi)channels. <i>Journal of Biological Chemistry</i> , <b>2014</b> , 289, 26058-26073	5.4	38
24	Anoxic injury of mammalian central white matter: decreased susceptibility in myelin-deficient optic nerve. <i>Annals of Neurology</i> , <b>1990</b> , 28, 335-40	9.4	36
23	Ionic mechanisms of aglycemic axon injury in mammalian central white matter. <i>Journal of Cerebral Blood Flow and Metabolism</i> , <b>2001</b> , 21, 385-95	7.3	35
22	Dual pathways mediate amyloid stimulated glutathione release from astrocytes. <i>Glia</i> , <b>2015</b> , 63, 2208-19		34
21	Ischemic Preconditioning in White Matter: Magnitude and Mechanism. <i>Journal of Neuroscience</i> , <b>2015</b> , 35, 15599-611	6.6	28
20	Emerging Roles for Glycogen in the CNS. <i>Frontiers in Molecular Neuroscience</i> , <b>2017</b> , 10, 73	6.1	27
19	Connexin Hemichannels in Astrocytes: An Assessment of Controversies Regarding Their Functional Characteristics. <i>Neurochemical Research</i> , <b>2017</b> , 42, 2537-2550	4.6	25
18	Type II sodium channels in spinal cord astrocytes in situ: immunocytochemical observations. <i>Glia</i> , <b>1994</b> , 12, 219-27	9	25
17	The role of AQP4 in neuromyelitis optica: More answers, more questions. <i>Journal of Neuroimmunology</i> , <b>2016</b> , 298, 63-70	3.5	25
16	Oligodendrocyte lineage cells and depression. <i>Molecular Psychiatry</i> , <b>2021</b> , 26, 103-117	15.1	25
15	Anaerobic function of CNS white matter declines with age. <i>Journal of Cerebral Blood Flow and Metabolism</i> , <b>2011</b> , 31, 996-1002	7.3	24
14	Novel hypoglycemic injury mechanism: N-methyl-D-aspartate receptor-mediated white matter damage. <i>Annals of Neurology</i> , <b>2014</b> , 75, 492-507	9.4	23
13	Pharmacological characterization of Na <sup>+</sup> influx via voltage-gated Na <sup>+</sup> channels in spinal cord astrocytes. <i>Journal of Neurophysiology</i> , <b>1997</b> , 78, 3249-58	3.2	20

12	Autoprotective mechanisms in the CNS: some new lessons from white matter. <i>Molecular and Chemical Neuropathology</i> , <b>1996</b> , 27, 107-29		18
11	Anoxia effects on CNS function and survival: regional differences. <i>Neurochemical Research</i> , <b>2004</b> , 29, 2163-9	4.6	17
10	(1R,3S)-1-Aminocyclopentane-1,3-dicarboxylic acid (RS-ACPD) reduces intracellular glutamate levels in astrocytes. <i>Journal of Neurochemistry</i> , <b>2001</b> , 79, 756-66	6	12
9	Molecular Pathophysiology of White Matter Anoxic-Ischemic Injury <b>2011</b> , 122-137		6
8	The Concept of Neuroglia: A Historical Perspective <b>2004</b> , 1-16		6
7	Metabolism of Glycogen in Brain White Matter. <i>Advances in Neurobiology</i> , <b>2019</b> , 23, 187-207	2.1	2
6	A method for reducing animal use whilst maintaining statistical power in electrophysiological recordings from rodent nerves. <i>Heliyon</i> , <b>2020</b> , 6, e04143	3.6	1
5	Energy Metabolism in Mouse Sciatic Nerve A Fibres during Increased Energy Demand. <i>Metabolites</i> , <b>2022</b> , 12, 505	5.6	1
4	Hypothermic neuroprotection during reperfusion following exposure to aglycemia in central white matter is mediated by acidification. <i>Physiological Reports</i> , <b>2019</b> , 7, e14007	2.6	
3	Studying Human Glial Cells: Where Are We Today?. <i>Glia</i> , <b>2020</b> , 68, 683-684	9	
2	White Matter Pathophysiology <b>2016</b> , 113-128		
1	White Matter Pathophysiology <b>2022</b> , 103-116.e4		