

# Bruce R Ransom

## List of Publications by Year in descending order

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49  
papers

4,033  
citations

159585  
30  
h-index

265206  
42  
g-index

49  
all docs

49  
docs citations

49  
times ranked

3734  
citing authors

#	ARTICLE	IF	CITATIONS
1	Functional Hemichannels in Astrocytes: A Novel Mechanism of Glutamate Release. <i>Journal of Neuroscience</i> , 2003, 23, 3588-3596.	3.6	652
2	Astrocytic Glycogen Influences Axon Function and Survival during Glucose Deprivation in Central White Matter. <i>Journal of Neuroscience</i> , 2000, 20, 6804-6810.	3.6	329
3	Glycogen Regulation and Functional Role in Mouse White Matter. <i>Journal of Physiology</i> , 2003, 549, 501-512.	2.9	212
4	Na <sup>+</sup> -Ca <sup>2+</sup> exchanger mediates Ca <sup>2+</sup> influx during anoxia in mammalian central nervous system white matter. <i>Annals of Neurology</i> , 1991, 30, 375-380.	5.3	196
5	Compound action potential of nerve recorded by suction electrode: a theoretical and experimental analysis. <i>Brain Research</i> , 1991, 546, 18-32.	2.2	179
6	Activity-dependent extracellular K <sup>+</sup> accumulation in rat optic nerve: the role of glial and axonal Na <sup>+</sup> pumps. <i>Journal of Physiology</i> , 2000, 522, 427-442.	2.9	179
7	Thrombin-Induced Activation of Cultured Rodent Microglia. <i>Journal of Neurochemistry</i> , 2002, 75, 1539-1547.	3.9	161
8	Visualization of oligodendrocytes and astrocytes in the intact rat optic nerve by intracellular injection of lucifer yellow and horseradish peroxidase. <i>Glia</i> , 1989, 2, 470-475.	4.9	146
9	Morphology of astrocytes and oligodendrocytes during development in the intact rat optic nerve. <i>Journal of Comparative Neurology</i> , 1993, 338, 141-158.	1.6	127
10	Gap junctions equalize intracellular Na <sup>+</sup> concentration in astrocytes. , 1997, 20, 299-307.		122
11	Excitotoxic Mechanisms of Ischemic Injury in Myelinated White Matter. <i>Journal of Cerebral Blood Flow and Metabolism</i> , 2007, 27, 1540-1552.	4.3	122
12	White Matter Vulnerability to Ischemic Injury Increases with Age Because of Enhanced Excitotoxicity. <i>Journal of Neuroscience</i> , 2008, 28, 1479-1489.	3.6	119
13	Astrocytes: Multitalented Stars of the Central Nervous System. <i>Methods in Molecular Biology</i> , 2012, 814, 3-7.	0.9	118
14	Oligodendrocyte lineage cells and depression. <i>Molecular Psychiatry</i> , 2021, 26, 103-117.	7.9	105
15	Effects of osmotically driven cell volume changes on diffusion-weighted imaging of the rat optic nerve. <i>Magnetic Resonance in Medicine</i> , 1996, 35, 162-167.	3.0	104
16	Effects of CO <sub>2</sub> on excitatory transmission apparently caused by changes in intracellular pH in the rat hippocampal slice. <i>Brain Research</i> , 1996, 706, 210-216.	2.2	100
17	Schwann cell glycogen selectively supports myelinated axon function. <i>Annals of Neurology</i> , 2012, 72, 406-418.	5.3	93
18	Anoxic injury of rat optic nerve: ultrastructural evidence for coupling between Na <sup>+</sup> influx and Ca <sup>2+</sup> -mediated injury in myelinated CNS axons. <i>Brain Research</i> , 1994, 644, 197-204.	2.2	92

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19	Protecting White Matter From Stroke Injury. <i>Stroke</i> , 2013, 44, 1204-1211.	2.0	83
20	Axon Conduction and Survival in CNS White Matter During Energy Deprivation: A Developmental Study. <i>Journal of Neurophysiology</i> , 1998, 79, 95-105.	1.8	76
21	Metabolic substrates other than glucose support axon function in central white matter. <i>Journal of Neuroscience Research</i> , 2001, 66, 839-843.	2.9	73
22	Ultrastructural identification of HRP-injected oligodendrocytes in the intact rat optic nerve. <i>Glia</i> , 1991, 4, 37-45.	4.9	63
23	A depolarization-stimulated, bafilomycin-inhibitable H <sup>+</sup> pump in hippocampal astrocytes. <i>Glia</i> , 1993, 9, 280-291.	4.9	62
24	Activation, Permeability, and Inhibition of Astrocytic and Neuronal Large Pore (Hemi)channels. <i>Journal of Biological Chemistry</i> , 2014, 289, 26058-26073.	3.4	45
25	Dual pathways mediate Î²-amyloid stimulated glutathione release from astrocytes. <i>Glia</i> , 2015, 63, 2208-2219.	4.9	44
26	Emerging Roles for Glycogen in the CNS. <i>Frontiers in Molecular Neuroscience</i> , 2017, 10, 73.	2.9	42
27	Ionic Mechanisms of Aglycemic Axon Injury in Mammalian Central White Matter. <i>Journal of Cerebral Blood Flow and Metabolism</i> , 2001, 21, 385-395.	4.3	41
28	Ischemic Preconditioning in White Matter: Magnitude and Mechanism. <i>Journal of Neuroscience</i> , 2015, 35, 15599-15611.	3.6	39
29	Anoxic injury of mammalian central white matter: Decreased susceptibility in myelin-deficient optic nerve. <i>Annals of Neurology</i> , 1990, 28, 335-340.	5.3	38
30	The role of AQP4 in neuromyelitis optica: More answers, more questions. <i>Journal of Neuroimmunology</i> , 2016, 298, 63-70.	2.3	37
31	Connexin Hemichannels in Astrocytes: An Assessment of Controversies Regarding Their Functional Characteristics. <i>Neurochemical Research</i> , 2017, 42, 2537-2550.	3.3	30
32	Anaerobic Function of CNS White Matter Declines with Age. <i>Journal of Cerebral Blood Flow and Metabolism</i> , 2011, 31, 996-1002.	4.3	29
33	Type II sodium channels in spinal cord astrocytes in situ: Immunocytochemical observations. <i>Glia</i> , 1994, 12, 219-227.	4.9	27
34	Novel hypoglycemic injury mechanism: N <sup>α</sup> -methyl-DL-aspartate receptor-mediated white matter damage. <i>Annals of Neurology</i> , 2014, 75, 492-507.	5.3	26
35	Anoxia Effects on CNS Function and Survival: Regional Differences. <i>Neurochemical Research</i> , 2004, 29, 2163-2169.	3.3	22
36	Autoprotective mechanisms in the CNS. <i>Molecular and Chemical Neuropathology</i> , 1996, 27, 107-129.	1.0	20

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37	Pharmacological Characterization of Na <sup>+</sup> Influx via Voltage-Gated Na <sup>+</sup> Channels in Spinal Cord Astrocytes. <i>Journal of Neurophysiology</i> , 1997, 78, 3249-3258.	1.8	20
38	(1R,3S)-1-Aminocyclopentane-1,3-dicarboxylic acid (RS-ACPD) reduces intracellular glutamate levels in astrocytes. <i>Journal of Neurochemistry</i> , 2008, 79, 756-766.	3.9	13
39	Axons get excited to death. <i>Annals of Neurology</i> , 2009, 65, 120-121.	5.3	12
40	The Concept of Neuroglia: A Historical Perspective. , 2004, , 1-16.		9
41	Microglial depletion abolishes ischemic preconditioning in white matter. <i>Glia</i> , 2022, 70, 661-674.	4.9	8
42	Molecular Pathophysiology of White Matter Anoxic-Ischemic Injury. , 2011, , 122-137.		7
43	Metabolism of Glycogen in Brain White Matter. <i>Advances in Neurobiology</i> , 2019, 23, 187-207.	1.8	7
44	A method for reducing animal use whilst maintaining statistical power in electrophysiological recordings from rodent nerves. <i>Heliyon</i> , 2020, 6, e04143.	3.2	2
45	Studying Human Glial Cells: Where Are We Today?. <i>Glia</i> , 2020, 68, 683-684.	4.9	1
46	Energy Metabolism in Mouse Sciatic Nerve A Fibres during Increased Energy Demand. <i>Metabolites</i> , 2022, 12, 505.	2.9	1
47	White Matter Pathophysiology. , 2016, , 113-128.		0
48	Hypothermic neuroprotection during reperfusion following exposure to aglycemia in central white matter is mediated by acidification. <i>Physiological Reports</i> , 2019, 7, e14007.	1.7	0
49	White Matter Pathophysiology. , 2022, , 103-116.e4.		0