# Bruce R Ransom

List of Publications by Year
in descending order



| | | | |
|---|---|---|---|
| 49 papers | 4,033 citations | 159573 30 h-index | 265191 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. Journal of Neuroscience, 2003, 23, 3588-3596. | 3.6 | 652 |
| 2 | Astrocytic Glycogen Influences Axon Function and Survival during Glucose Deprivation in Central White Matter. Journal of Neuroscience, 2000, 20, 6804-6810. | 3.6 | 329 |
| 3 | Glycogen Regulation and Functional Role in Mouse White Matter. Journal of Physiology, 2003, 549, 501-512. | 2.9 | 212 |
| 4 | Na+-Ca2+ exchanger mediates Ca2+ influx during anoxia in mammalian central nervous system white matter. Annals of Neurology, 1991, 30, 375-380. | 5.3 | 196 |
| 5 | Compound action potential of nerve recorded by suction electrode: a theoretical and experimental analysis. Brain Research, 1991, 546, 18-32. | 2.2 | 179 |
| 6 | Activityâ€dependent extracellular K + accumulation in rat optic nerve: the role of glial and axonal Na + pumps. Journal of Physiology, 2000, 522, 427-442. | 2.9 | 179 |
| 7 | Thrombin-Induced Activation of Cultured Rodent Microglia. Journal of Neurochemistry, 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. Glia, 1989, 2, 470-475. | 4.9 | 146 |
| 9 | Morphology of astrocytes and oligodendrocytes during development in the intact rat optic nerve. Journal of Comparative Neurology, 1993, 338, 141-158. | 1.6 | 127 |
| 10 | Gap junctions equalize intracellular Na+ concentration in astrocytes. , 1997, 20, 299-307. | | 122 |
| 11 | Excitotoxic Mechanisms of Ischemic Injury in Myelinated White Matter. Journal of Cerebral Blood Flow and Metabolism, 2007, 27, 1540-1552. | 4.3 | 122 |
| 12 | White Matter Vulnerability to Ischemic Injury Increases with Age Because of Enhanced Excitotoxicity. Journal of Neuroscience, 2008, 28, 1479-1489. | 3.6 | 119 |
| 13 | Astrocytes: Multitalented Stars of the Central Nervous System. Methods in Molecular Biology, 2012, 814, 3-7. | 0.9 | 118 |
| 14 | Oligodendrocyte lineage cells and depression. Molecular Psychiatry, 2021, 26, 103-117. | 7.9 | 105 |
| 15 | Effects of osmotically driven cell volume changes on diffusion-weighted imaging of the rat optic nerve. Magnetic Resonance in Medicine, 1996, 35, 162-167. | 3.0 | 104 |
| 16 | Effects of C02 on excitatory transmission apparently caused by changes in intracellular pH in the rat hippocampal slice. Brain Research, 1996, 706, 210-216. | 2.2 | 100 |
| 17 | Schwann cell glycogen selectively supports myelinated axon function. Annals of Neurology, 2012, 72, 406-418. | 5.3 | 93 |
| 18 | Anoxic injury of rat optic nerve: ultrastructural evidence for coupling between Na+ influx and Ca2+-mediated injury in myelinated CNS axons. Brain Research, 1994, 644, 197-204. | 2.2 | 92 |

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

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|---|---|---|---|
| 37 | Pharmacological Characterization of Na+ Influx via Voltage-Gated Na+ Channels in Spinal Cord Astrocytes. Journal of Neurophysiology, 1997, 78, 3249-3258. | 1.8 | 20 |
| 38 | (1R,3S)-1-Aminocyclopentane-1,3-dicarboxylic acid (RS-ACPD) reduces intracellular glutamate levels in astrocytes. Journal of Neurochemistry, 2008, 79, 756-766. | 3.9 | 13 |
| 39 | Axons get excited to death. Annals of Neurology, 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. Glia, 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. Advances in Neurobiology, 2019, 23, 187-207. | 1.8 | 7 |
| 44 | A method for reducing animal use whilst maintaining statistical power in electrophysiological recordings from rodent nerves. Heliyon, 2020, 6, e04143. | 3.2 | 2 |
| 45 | Studying Human Glial Cells: Where Are We Today?. Glia, 2020, 68, 683-684. | 4.9 | 1 |
| 46 | Energy Metabolism in Mouse Sciatic Nerve A Fibres during Increased Energy Demand. Metabolites, 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. Physiological Reports, 2019, 7, e14007. | 1.7 | 0 |
| 49 | White Matter Pathophysiology. , 2022, , 103-116.e4. | | 0 |