

Brian A. MacVicar

List of Publications by Year in descending order

Source: <https://exaly.com/author-pdf/9381973/publications.pdf>

Version: 2024-02-01

156
papers

18,142
citations

11651

70
h-index

13379

130
g-index

160
all docs

160
docs citations

160
times ranked

15571
citing authors

| # | ARTICLE | IF | CITATIONS |
|----|---|------|-----------|
| 1 | Glial and neuronal control of brain blood flow. <i>Nature</i> , 2010, 468, 232-243. | 27.8 | 2,003 |
| 2 | Reactive astrocyte nomenclature, definitions, and future directions. <i>Nature Neuroscience</i> , 2021, 24, 312-325. | 14.8 | 1,098 |
| 3 | Calcium transients in astrocyte endfeet cause cerebrovascular constrictions. <i>Nature</i> , 2004, 431, 195-199. | 27.8 | 789 |
| 4 | Brain metabolism dictates the polarity of astrocyte control over arterioles. <i>Nature</i> , 2008, 456, 745-749. | 27.8 | 642 |
| 5 | Microglia: Dynamic Mediators of Synapse Development and Plasticity. <i>Trends in Immunology</i> , 2015, 36, 605-613. | 6.8 | 537 |
| 6 | Ischemia Opens Neuronal Gap Junction Hemichannels. <i>Science</i> , 2006, 312, 924-927. | 12.6 | 499 |
| 7 | Voltage-dependent calcium channels in glial cells. <i>Science</i> , 1984, 226, 1345-1347. | 12.6 | 340 |
| 8 | Activation of Pannexin-1 Hemichannels Augments Aberrant Bursting in the Hippocampus. <i>Science</i> , 2008, 322, 1555-1559. | 12.6 | 328 |
| 9 | Electrotonic coupling between pyramidal cells: a direct demonstration in rat hippocampal slices. <i>Science</i> , 1981, 213, 782-785. | 12.6 | 318 |
| 10 | Pannexin channels are not gap junction hemichannels. <i>Channels</i> , 2011, 5, 193-197. | 2.8 | 305 |
| 11 | Astrocyte control of the cerebrovasculature. <i>Glia</i> , 2007, 55, 1214-1221. | 4.9 | 280 |
| 12 | Imaging of synaptically evoked intrinsic optical signals in hippocampal slices. <i>Journal of Neuroscience</i> , 1991, 11, 1458-1469. | 3.6 | 279 |
| 13 | Imaging cell volume changes and neuronal excitation in the hippocampal slice. <i>Neuroscience</i> , 1994, 62, 371-383. | 2.3 | 272 |
| 14 | Recording, analysis, and interpretation of spreading depolarizations in neurointensive care: Review and recommendations of the COSBID research group. <i>Journal of Cerebral Blood Flow and Metabolism</i> , 2017, 37, 1595-1625. | 4.3 | 255 |
| 15 | Astrocyte Regulation of Blood Flow in the Brain. <i>Cold Spring Harbor Perspectives in Biology</i> , 2015, 7, a020388. | 5.5 | 249 |
| 16 | Non-junction functions of pannexin-1 channels. <i>Trends in Neurosciences</i> , 2010, 33, 93-102. | 8.6 | 237 |
| 17 | Activation of Neuronal NMDA Receptors Triggers Transient ATP-Mediated Microglial Process Outgrowth. <i>Journal of Neuroscience</i> , 2014, 34, 10511-10527. | 3.6 | 229 |
| 18 | Metabolic Communication between Astrocytes and Neurons via Bicarbonate-Responsive Soluble Adenylyl Cyclase. <i>Neuron</i> , 2012, 75, 1094-1104. | 8.1 | 225 |

| # | ARTICLE | IF | CITATIONS |
|----|---|------|-----------|
| 19 | Local synaptic circuits in rat hippocampus: interactions between pyramidal cells. <i>Brain Research</i> , 1980, 184, 220-223. | 2.2 | 214 |
| 20 | P2X7-Like Receptor Activation in Astrocytes Increases Chemokine Monocyte Chemoattractant Protein-1 Expression via Mitogen-Activated Protein Kinase. <i>Journal of Neuroscience</i> , 2001, 21, 7135-7142. | 3.6 | 212 |
| 21 | Dye-coupling between CA3 pyramidal cells in slices of rat hippocampus. <i>Brain Research</i> , 1980, 196, 494-497. | 2.2 | 199 |
| 22 | Microglial CR3 Activation Triggers Long-Term Synaptic Depression in the Hippocampus via NADPH Oxidase. <i>Neuron</i> , 2014, 82, 195-207. | 8.1 | 199 |
| 23 | Adrenergic calcium signaling in astrocyte networks within the hippocampal slice. <i>Journal of Neuroscience</i> , 1995, 15, 5535-5550. | 3.6 | 198 |
| 24 | The Cellular Mechanisms of Neuronal Swelling Underlying Cytotoxic Edema. <i>Cell</i> , 2015, 161, 610-621. | 28.9 | 197 |
| 25 | Imaging Spreading Depression and Associated Intracellular Calcium Waves in Brain Slices. <i>Journal of Neuroscience</i> , 1998, 18, 7189-7199. | 3.6 | 195 |
| 26 | Astrocyte-Mediated Distributed Plasticity at Hypothalamic Glutamate Synapses. <i>Neuron</i> , 2009, 64, 391-403. | 8.1 | 189 |
| 27 | GABA-activated Cl ⁻ channels in astrocytes of hippocampal slices. <i>Journal of Neuroscience</i> , 1989, 9, 3577-3583. | 3.6 | 183 |
| 28 | Cholinergic-Dependent Plateau Potential in Hippocampal CA1 Pyramidal Neurons. <i>Journal of Neuroscience</i> , 1996, 16, 4113-4128. | 3.6 | 182 |
| 29 | Dye transfer through gap junctions between neuroendocrine cells of rat hypothalamus. <i>Science</i> , 1981, 211, 1187-1189. | 12.6 | 181 |
| 30 | ATP Released From Astrocytes During Swelling Activates Chloride Channels. <i>Journal of Neurophysiology</i> , 2003, 89, 1870-1877. | 1.8 | 176 |
| 31 | Tumor-Suppressive Effects of Pannexin 1 in C6 Glioma Cells. <i>Cancer Research</i> , 2007, 67, 1545-1554. | 0.9 | 172 |
| 32 | Microglia processes block the spread of damage in the brain and require functional chloride channels. <i>Glia</i> , 2009, 57, 1610-1618. | 4.9 | 166 |
| 33 | Electrotonic coupling between granule cells of rat dentate gyrus: physiological and anatomical evidence.. <i>Journal of Neurophysiology</i> , 1982, 47, 579-592. | 1.8 | 161 |
| 34 | Intrinsic optical signals in the rat optic nerve: Role for K ⁺ uptake via NKCC1 and swelling of astrocytes. <i>Glia</i> , 2002, 37, 114-123. | 4.9 | 152 |
| 35 | Mitogen-Activated Protein and Tyrosine Kinases in the Activation of Astrocyte Volume-Activated Chloride Current. <i>Journal of Neuroscience</i> , 1998, 18, 1196-1206. | 3.6 | 150 |
| 36 | Nanoscale Surveillance of the Brain by Microglia via cAMP-Regulated Filopodia. <i>Cell Reports</i> , 2019, 27, 2895-2908.e4. | 6.4 | 149 |

| # | ARTICLE | IF | CITATIONS |
|----|--|------|-----------|
| 37 | Local neuronal circuitry underlying cholinergic rhythmical slow activity in CA3 area of rat hippocampal slices.. Journal of Physiology, 1989, 417, 197-212. | 2.9 | 148 |
| 38 | Microglial metabolic flexibility supports immune surveillance of the brain parenchyma. Nature Communications, 2020, 11, 1559. | 12.8 | 139 |
| 39 | Calcium activated potassium channels in cultured astrocytes. Neuroscience, 1986, 19, 29-41. | 2.3 | 138 |
| 40 | GABAA/benzodiazepine receptors in acutely isolated hippocampal astrocytes. Journal of Neuroscience, 1995, 15, 2720-2732. | 3.6 | 137 |
| 41 | Glutamate Release through Volume-Activated Channels during Spreading Depression. Journal of Neuroscience, 1999, 19, 6439-6445. | 3.6 | 129 |
| 42 | Activation of Presynaptic P2X ₇ -Like Receptors Depresses Mossy Fiber-CA3 Synaptic Transmission through p38 Mitogen-Activated Protein Kinase. Journal of Neuroscience, 2002, 22, 5938-5945. | 3.6 | 128 |
| 43 | In vitro ischemia promotes calcium influx and intracellular calcium release in hippocampal astrocytes. Journal of Neuroscience, 1996, 16, 71-81. | 3.6 | 127 |
| 44 | Lipid Nanoparticle Delivery of siRNA to Silence Neuronal Gene Expression in the Brain. Molecular Therapy - Nucleic Acids, 2013, 2, e136. | 5.1 | 127 |
| 45 | Transient Swelling, Acidification, and Mitochondrial Depolarization Occurs in Neurons but not Astrocytes during Spreading Depression. Cerebral Cortex, 2010, 20, 2614-2624. | 2.9 | 123 |
| 46 | Ca ²⁺ transients in astrocyte fine processes occur via Ca ²⁺ influx in the adult mouse hippocampus. Glia, 2016, 64, 2093-2103. | 4.9 | 120 |
| 47 | Expression of voltage-gated Ca ²⁺ channel subtypes in cultured astrocytes. Glia, 2003, 41, 347-353. | 4.9 | 119 |
| 48 | Prevention of LPS-Induced Microglia Activation, Cytokine Production and Sickness Behavior with TLR4 Receptor Interfering Peptides. PLoS ONE, 2013, 8, e60388. | 2.5 | 116 |
| 49 | Voltage-activated K ⁺ currents in acutely isolated hippocampal astrocytes. Journal of Neuroscience, 1992, 12, 1781-1788. | 3.6 | 115 |
| 50 | Neurotrophin Modulation of NMDA Receptors in Cultured Murine and Isolated Rat Neurons. Journal of Neurophysiology, 1997, 78, 2363-2371. | 1.8 | 113 |
| 51 | Anion channels in astrocytes: Biophysics, pharmacology, and function. Glia, 2006, 54, 747-757. | 4.9 | 110 |
| 52 | Immunometabolism in the Brain: How Metabolism Shapes Microglial Function. Trends in Neurosciences, 2020, 43, 854-869. | 8.6 | 110 |
| 53 | Astrocytic GABA receptors. Glia, 1994, 11, 83-93. | 4.9 | 107 |
| 54 | Mapping synaptic glutamate transporter dysfunction in vivo to regions surrounding A β plaques by iGluSnFR two-photon imaging. Nature Communications, 2016, 7, 13441. | 12.8 | 105 |

| # | ARTICLE | IF | CITATIONS |
|----|---|-----|-----------|
| 55 | Polyethylene glycol embedding: a technique compatible with immunocytochemistry, enzyme histochemistry, histofluorescence and intracellular staining. <i>Journal of Neuroscience Methods</i> , 1983, 7, 27-41. | 2.5 | 102 |
| 56 | D1 Receptors Physically Interact with N-Type Calcium Channels to Regulate Channel Distribution and Dendritic Calcium Entry. <i>Neuron</i> , 2008, 58, 557-570. | 8.1 | 101 |
| 57 | Low-threshold transient calcium current in rat hippocampal lacunosum- moleculare interneurons: kinetics and modulation by neurotransmitters. <i>Journal of Neuroscience</i> , 1991, 11, 2812-2820. | 3.6 | 98 |
| 58 | Norepinephrine and cyclic adenosine 3':5'-cyclic monophosphate enhance a nifedipine-sensitive calcium current in cultured rat astrocytes. <i>Glia</i> , 1988, 1, 359-365. | 4.9 | 97 |
| 59 | Arachidonic acid inhibits sodium currents and synaptic transmission in cultured striatal neurons. <i>Neuron</i> , 1993, 11, 633-644. | 8.1 | 95 |
| 60 | Potassium-dependent calcium influx in acutely isolated hippocampal astrocytes. <i>Neuroscience</i> , 1994, 61, 51-61. | 2.3 | 91 |
| 61 | A novel tetrodotoxin-insensitive, slow sodium current in striatal and hippocampal neurons. <i>Neuron</i> , 1993, 10, 543-552. | 8.1 | 88 |
| 62 | Neurone-glia interactions in the hypothalamus and pituitary. <i>Trends in Neurosciences</i> , 1996, 19, 363-367. | 8.6 | 88 |
| 63 | Connexin and pannexin hemichannels of neurons and astrocytes. <i>Channels</i> , 2008, 2, 81-86. | 2.8 | 88 |
| 64 | 3DMorph Automatic Analysis of Microglial Morphology in Three Dimensions from <i>Ex Vivo</i> and <i>In Vivo</i> Imaging. <i>ENeuro</i> , 2018, 5, ENEURO.0266-18.2018. | 1.9 | 87 |
| 65 | Regenerative Glutamate Release by Presynaptic NMDA Receptors Contributes to Spreading Depression. <i>Journal of Cerebral Blood Flow and Metabolism</i> , 2013, 33, 1582-1594. | 4.3 | 85 |
| 66 | Modulation of intracellular Ca ⁺⁺ in cultured astrocytes by influx through voltage-activated Ca ⁺⁺ channels. <i>Glia</i> , 1991, 4, 448-455. | 4.9 | 84 |
| 67 | Bidirectional control of arteriole diameter by astrocytes. <i>Experimental Physiology</i> , 2011, 96, 393-399. | 2.0 | 82 |
| 68 | Dye-coupling between pyramidal cells of rat hippocampus in vivo. <i>Brain Research</i> , 1982, 238, 239-244. | 2.2 | 81 |
| 69 | Topiramate Inhibits the Initiation of Plateau Potentials in CA1 Neurons by Depressing R-type Calcium Channels. <i>Epilepsia</i> , 2005, 46, 481-489. | 5.1 | 81 |
| 70 | Microglial modulation of neuronal activity in the healthy brain. <i>Developmental Neurobiology</i> , 2018, 78, 593-603. | 3.0 | 80 |
| 71 | Glutathione Restores the Mechanism of Synaptic Plasticity in Aged Mice to That of the Adult. <i>PLoS ONE</i> , 2011, 6, e20676. | 2.5 | 77 |
| 72 | Mapping patterns of neuronal activity and seizure propagation by imaging intrinsic optical signals in the isolated whole brain of the guinea-pig. <i>Neuroscience</i> , 1994, 58, 461-480. | 2.3 | 76 |

| # | ARTICLE | IF | CITATIONS |
|----|--|-----|-----------|
| 73 | Cognitive flexibility and long-term depression (LTD) are impaired following $\hat{\gamma}^2$ -catenin stabilization in vivo. Proceedings of the National Academy of Sciences of the United States of America, 2014, 111, 8631-8636. | 7.1 | 75 |
| 74 | Increased 20-HETE Synthesis Explains Reduced Cerebral Blood Flow But Not Impaired Neurovascular Coupling after Cortical Spreading Depression in Rat Cerebral Cortex. Journal of Neuroscience, 2013, 33, 2562-2570. | 3.6 | 73 |
| 75 | Nitric oxide promotes intracellular calcium release from mitochondria in striatal neurons. FASEB Journal, 2002, 16, 1611-1622. | 0.5 | 71 |
| 76 | Synaptic modulation by dopamine of calcium currents in rat pars intermedia. Journal of Neuroscience, 1990, 10, 757-763. | 3.6 | 67 |
| 77 | Infrared video microscopy to visualize neurons in the in vitro brain slice preparation. Journal of Neuroscience Methods, 1984, 12, 133-139. | 2.5 | 65 |
| 78 | Contribution of calcium-dependent facilitation to synaptic plasticity revealed by migraine mutations in the P/Q-type calcium channel. Proceedings of the National Academy of Sciences of the United States of America, 2010, 107, 18694-18699. | 7.1 | 64 |
| 79 | Plasma membrane insertion of TRPC5 channels contributes to the cholinergic plateau potential in hippocampal CA1 pyramidal neurons. Hippocampus, 2011, 21, 958-967. | 1.9 | 63 |
| 80 | Cyclic Nucleotide-Gated Channels Contribute to the Cholinergic Plateau Potential in Hippocampal CA1 Pyramidal Neurons. Journal of Neuroscience, 2001, 21, 8707-8714. | 3.6 | 61 |
| 81 | Intracellular recordings from the paraventricular nucleus in slices of rat hypothalamus.. Journal of Physiology, 1980, 301, 101-114. | 2.9 | 58 |
| 82 | A Critical Role for Astrocytes in Hypercapnic Vasodilation in Brain. Journal of Neuroscience, 2017, 37, 2403-2414. | 3.6 | 58 |
| 83 | Depolarizing prepotentials are Na ⁺ dependent in CA1 pyramidal neurons. Brain Research, 1985, 333, 378-381. | 2.2 | 57 |
| 84 | Multiple types of calcium channels in acutely isolated rat neostriatal neurons. Journal of Neuroscience, 1993, 13, 1244-1257. | 3.6 | 56 |
| 85 | A dopaminergic inhibitory postsynaptic potential mediated by an increased potassium conductance. Neuroscience, 1989, 31, 673-681. | 2.3 | 55 |
| 86 | Muscarinic Enhancement of R-Type Calcium Currents in Hippocampal CA1 Pyramidal Neurons. Journal of Neuroscience, 2006, 26, 6249-6258. | 3.6 | 55 |
| 87 | Postsynaptic potentials mediated by GABA and dopamine evoked in stellate glial cells of the pituitary pars intermedia. Journal of Neuroscience, 1993, 13, 4660-4668. | 3.6 | 53 |
| 88 | Imaging the induction and spread of seizure activity in the isolated brain of the guinea pig: the roles of GABA and glutamate receptors. Journal of Neurophysiology, 1996, 76, 3471-3492. | 1.8 | 53 |
| 89 | In vivo imaging reveals that pregabalin inhibits cortical spreading depression and propagation to subcortical brain structures. Proceedings of the National Academy of Sciences of the United States of America, 2017, 114, 2401-2406. | 7.1 | 53 |
| 90 | Uncoupling of CA3 pyramidal neurons by propionate. Brain Research, 1985, 330, 141-145. | 2.2 | 52 |

| # | ARTICLE | IF | CITATIONS |
|-----|---|------|-----------|
| 91 | Membrane conductance oscillations in astrocytes induced by phorbol ester. <i>Nature</i> , 1987, 329, 242-243. | 27.8 | 49 |
| 92 | Electrophysiological properties of neuroendocrine cells of the intact rat pars intermedia: multiple calcium currents. <i>Journal of Neuroscience</i> , 1990, 10, 748-756. | 3.6 | 44 |
| 93 | p38 Mitogen-Activated Protein Kinase Contributes to Adenosine A1 Receptor-Mediated Synaptic Depression in Area CA1 of the Rat Hippocampus. <i>Journal of Neuroscience</i> , 2006, 26, 12427-12438. | 3.6 | 44 |
| 94 | Morphological differentiation of cultured astrocytes is blocked by cadmium or cobalt. <i>Brain Research</i> , 1987, 420, 175-177. | 2.2 | 42 |
| 95 | Pannexin1 knockout and blockade reduces ischemic stroke injury in female, but not in male mice. <i>Oncotarget</i> , 2017, 8, 36973-36983. | 1.8 | 39 |
| 96 | Neuroinflammatory inhibition of synaptic long-term potentiation requires immunometabolic reprogramming of microglia. <i>Glia</i> , 2021, 69, 567-578. | 4.9 | 38 |
| 97 | Ca _v 3.2 drives sustained burst firing, which is critical for absence seizure propagation in reticular thalamic neurons. <i>Epilepsia</i> , 2018, 59, 778-791. | 5.1 | 36 |
| 98 | Inhibition of synaptic transmission in the hippocampus by cholecystokinin (CCK) and its antagonism by a CCK analog (CCK2 ⁶⁻³³). <i>Brain Research</i> , 1987, 406, 130-135. | 2.2 | 34 |
| 99 | VRACs CARVe a Path for Novel Mechanisms of Communication in the CNS. <i>Science's STKE: Signal Transduction Knowledge Environment</i> , 2006, 2006, pe42-pe42. | 3.9 | 33 |
| 100 | A reliable method for immunocytochemical identification of Lucifer Yellow injected, peptide-containing mammalian central neurons. <i>Journal of Neuroscience Methods</i> , 1984, 10, 59-69. | 2.5 | 32 |
| 101 | Development of Ca ²⁺ hotspots between Lymnaea neurons during synaptogenesis. <i>Journal of Physiology</i> , 2002, 539, 53-65. | 2.9 | 32 |
| 102 | Kainic acid evokes a potassium efflux from astrocytes. <i>Neuroscience</i> , 1988, 25, 721-725. | 2.3 | 31 |
| 103 | Biophysical and Pharmacological Characterization of Voltage-Dependent Ca ²⁺ Channels in Neurons Isolated From Rat Nucleus Accumbens. <i>Journal of Neurophysiology</i> , 1998, 79, 635-647. | 1.8 | 31 |
| 104 | Electrophysiological properties of reactive glial cells in the kainate-lesioned hippocampal slice. <i>Brain Research</i> , 1990, 510, 43-52. | 2.2 | 30 |
| 105 | C-Jun N-terminal kinase regulates adenosine A1 receptor-mediated synaptic depression in the rat hippocampus. <i>Neuropharmacology</i> , 2007, 53, 906-917. | 4.1 | 27 |
| 106 | Gamma frequency activation of inhibitory neurons in the acute phase after stroke attenuates vascular and behavioral dysfunction. <i>Cell Reports</i> , 2021, 34, 108696. | 6.4 | 26 |
| 107 | Progranulin promotes activation of microglia/macrophage after pilocarpine-induced status epilepticus. <i>Brain Research</i> , 2013, 1530, 54-65. | 2.2 | 24 |
| 108 | Glutamatergic stimulation triggers rapid Kr ⁴ apple-like factor 4 expression in neurons and the overexpression of KLF4 sensitizes neurons to NMDA-induced caspase-3 activity. <i>Brain Research</i> , 2009, 1250, 49-62. | 2.2 | 23 |

| # | ARTICLE | IF | CITATIONS |
|-----|---|------|-----------|
| 109 | Novel synaptic responses mediated by dopamine and \hat{I}^3 -aminobutyric acid in neuroendocrine cells of the intermediate pituitary. <i>Neuroscience Letters</i> , 1986, 64, 35-40. | 2.1 | 21 |
| 110 | Synaptic inputs and action potentials of magnocellular neuropeptidergic cells: Intracellular recording and staining in slices of rat hypothalamus. <i>Brain Research Bulletin</i> , 1982, 8, 87-93. | 3.0 | 20 |
| 111 | Delayed combinatorial treatment with flavopiridol and minocycline provides longer term protection for neuronal soma but not dendrites following global ischemia. <i>Journal of Neurochemistry</i> , 2008, 105, 703-713. | 3.9 | 20 |
| 112 | Theta-Frequency Facilitation of AMPA Receptor-Mediated Synaptic Currents in the Principal Cells of the Medial Septum. <i>Journal of Neurophysiology</i> , 2001, 85, 1709-1718. | 1.8 | 19 |
| 113 | Intracellular recordings from hippocampal CA3 pyramidal cells during repetitive activation of the mossy fibers in vitro. <i>Brain Research</i> , 1979, 168, 377-381. | 2.2 | 18 |
| 114 | Dye and electrotonic coupling between cultured hippocampal neurons. <i>Neuroscience Letters</i> , 1987, 78, 265-270. | 2.1 | 18 |
| 115 | Phosphoinositides and GTP binding proteins involved in muscarinic generation of hippocampal rhythmic slow activity. <i>Neuroscience Letters</i> , 1989, 102, 58-63. | 2.1 | 18 |
| 116 | Microglia in Neuronal Circuits. <i>Neural Plasticity</i> , 2013, 2013, 1-3. | 2.2 | 18 |
| 117 | Rap2 and TNIK control Plexin-dependent tiled synaptic innervation in <i>C. elegans</i> . <i>ELife</i> , 2018, 7, . | 6.0 | 18 |
| 118 | Serine/Threonine Protein Phosphatases and Synaptic Inhibition Regulate the Expression of Cholinergic-Dependent Plateau Potentials. <i>Journal of Neurophysiology</i> , 2001, 85, 1197-1205. | 1.8 | 17 |
| 119 | The Oral and Fecal Microbiota in a Canadian Cohort of Alzheimer's Disease. <i>Journal of Alzheimer's Disease</i> , 2022, 87, 247-258. | 2.6 | 17 |
| 120 | Identification of a GABA-activated chloride-mediated synaptic potential in rat pars intermedia. <i>Brain Research</i> , 1989, 483, 130-134. | 2.2 | 16 |
| 121 | Repeated NMDA receptor activation induces distinct intracellular calcium changes in subpopulations of striatal neurons in vitro. <i>Brain Research</i> , 1993, 627, 63-71. | 2.2 | 16 |
| 122 | A practical guide to the synthesis and use of membrane-permeant acetoxymethyl esters of caged inositol polyphosphates. <i>Nature Protocols</i> , 2011, 6, 327-337. | 12.0 | 16 |
| 123 | Fixation and Immunolabeling of Brain Slices: SNAPSHOT Method. <i>Current Protocols in Neuroscience</i> , 2015, 71, 1.23.1-1.23.12. | 2.6 | 16 |
| 124 | Astrocytes Provide Metabolic Support for Neuronal Synaptic Function in Response to Extracellular K ⁺ . <i>Neurochemical Research</i> , 2017, 42, 2588-2594. | 3.3 | 16 |
| 125 | Green fluorescent protein emission obscures metabolic fluorescent lifetime imaging of NAD(P)H. <i>Biomedical Optics Express</i> , 2019, 10, 4381. | 2.9 | 15 |
| 126 | Blockade by funnel web toxin of a calcium current in the intermediate pituitary of the rat. <i>Neuroscience Letters</i> , 1993, 157, 171-174. | 2.1 | 13 |

| # | ARTICLE | IF | CITATIONS |
|-----|---|------|-----------|
| 127 | Human immunodeficiency virus type 1 envelope-mediated neuropathogenesis: targeted gene delivery by a Sindbis virus expression vector. <i>Virology</i> , 2003, 309, 61-74. | 2.4 | 13 |
| 128 | Bidirectional Control of Blood Flow by Astrocytes: A Role for Tissue Oxygen and Other Metabolic Factors. <i>Advances in Experimental Medicine and Biology</i> , 2016, 903, 209-219. | 1.6 | 12 |
| 129 | Hyperexcitable superior colliculus and fatal brainstem spreading depolarization in a model of Sudden Unexpected Death in Epilepsy. <i>Brain Communications</i> , 2022, 4, fcac006. | 3.3 | 12 |
| 130 | Neurotransmitter-Mediated Changes in the Electrophysiological Properties of Pituicytes. <i>Journal of Neuroendocrinology</i> , 1991, 3, 433-439. | 2.6 | 11 |
| 131 | How Spreading Depolarization Can Be the Pathophysiological Correlate of Both Migraine Aura and Stroke. <i>Acta Neurochirurgica Supplementum</i> , 2015, 120, 137-140. | 1.0 | 11 |
| 132 | Agtrin plays a major role in the coalescence of the aquaporinâ€4 clusters induced by gammaâ€1â€-containing laminin. <i>Journal of Comparative Neurology</i> , 2020, 528, 407-418. | 1.6 | 10 |
| 133 | PANX1 in inflammation heats up: New mechanistic insights with implications for injury and infection. <i>Cell Calcium</i> , 2020, 90, 102253. | 2.4 | 10 |
| 134 | An in vitro bioengineered model of the human arterial neurovascular unit to study neurodegenerative diseases. <i>Molecular Neurodegeneration</i> , 2020, 15, 70. | 10.8 | 9 |
| 135 | Voltage-Dependent Ionic Channels in Astrocytes. , 1993, , 137-169. | | 9 |
| 136 | Paradoxical effects of lithium on field potentials of dentate granule cells in slices of rat hippocampus. <i>Neuropharmacology</i> , 1981, 20, 489-496. | 4.1 | 8 |
| 137 | Is autocrine ATP release required for activation of volume-sensitive chloride channels?. <i>Journal of Neurophysiology</i> , 2003, 90, 2791-2793. | 1.8 | 8 |
| 138 | Ca ²⁺ - and voltage-dependent inactivation of Ca ²⁺ currents in rat intermediate pituitary. <i>Brain Research</i> , 1991, 564, 12-18. | 2.2 | 7 |
| 139 | Controlled capillaries. <i>Nature</i> , 2006, 443, 642-643. | 27.8 | 7 |
| 140 | The Laminin-Induced Phosphorylation of PKCÎ Regulates AQP4 Distribution and Water Permeability in Rat Astrocytes. <i>Cellular and Molecular Neurobiology</i> , 2021, 41, 1743-1757. | 3.3 | 7 |
| 141 | Gut microbes shape microglia and cognitive function during malnutrition. <i>Glia</i> , 2022, 70, 820-841. | 4.9 | 6 |
| 142 | REVIEW â€ : Mapping Neuronal Activity by Imaging Intrinsic Optical Signals. <i>Neuroscientist</i> , 1997, 3, 381-388. | 3.5 | 5 |
| 143 | Age-dependent gray matter demyelination is associated with leptomeningeal neutrophil accumulation. <i>JCI Insight</i> , 2022, 7, . | 5.0 | 5 |
| 144 | An incubation chamber for the simultaneous, on-slide treatment of brain sections with different reagents. <i>Brain Research Bulletin</i> , 1984, 12, 745-747. | 3.0 | 4 |

| # | ARTICLE | IF | CITATIONS |
|-----|--|------|-----------|
| 145 | Quisqualate agonists occlude kainate-induced current in cultured striatal neurons. <i>Neuroscience</i> , 1991, 43, 429-436. | 2.3 | 4 |
| 146 | Neuron Activity Dependent Redox Compartmentation Revealed with a Second Generation Red-Shifted Ratiometric Sensor. <i>ACS Chemical Neuroscience</i> , 2020, 11, 2666-2678. | 3.5 | 3 |
| 147 | Astrocyte control of blood flow. , 2009, , 461-486. | | 3 |
| 148 | The cost of communication in the brain. <i>ELife</i> , 2017, 6, . | 6.0 | 3 |
| 149 | Electrophysiological Methods for Studying Ionic Currents in Brain Slices and Cell Cultures. , 1988, , 545-588. | | 1 |
| 150 | Disinhibition and brain rhythms.. <i>Journal of Physiology</i> , 1997, 500, 283-283. | 2.9 | 1 |
| 151 | An Analytical Method for Natural Channel Design. , 1998, , 362. | | 1 |
| 152 | Driving the Early Auditory Network the Old-Fashioned Way. <i>Cell</i> , 2015, 163, 1307-1308. | 28.9 | 1 |
| 153 | Mitochondrial Calcium Sparkles Light Up Astrocytes. <i>Developmental Cell</i> , 2017, 40, 327-328. | 7.0 | 1 |
| 154 | Monitoring Intracellular Ca ²⁺ in Brain Slices with Fluorescent Indicators. , 2005, , 12-26. | | 1 |
| 155 | NMDA-activated currents are modulated by dopamine. <i>Schizophrenia Research</i> , 1995, 15, 66. | 2.0 | 0 |
| 156 | Astrocyte Regulation of Neurovascular Control. , 2013, , . | | 0 |