

Arne Schousboe

List of Publications by Year in descending order

Source: [//exaly.com/author-pdf/2203185/publications.pdf](https://exaly.com/author-pdf/2203185/publications.pdf)

Version: 2024-02-01

170
papers

15,953
citations

23302

58
h-index

17540

122
g-index

180
all docs

180
docs citations

180
times ranked

11202
citing authors

| # | ARTICLE | IF | CITATIONS |
|----|--|-----|-----------|
| 1 | Elevation of the Extracellular Concentrations of Glutamate and Aspartate in Rat Hippocampus During Transient Cerebral Ischemia Monitored by Intracerebral Microdialysis. <i>Journal of Neurochemistry</i> , 1984, 43, 1369-1374. | 4.0 | 2,879 |
| 2 | The glutamate/GABA-glutamine cycle: aspects of transport, neurotransmitter homeostasis and ammonia transfer. <i>Journal of Neurochemistry</i> , 2006, 98, 641-653. | 4.0 | 889 |
| 3 | Cellular Origin of Ischemia-Induced Glutamate Release from Brain Tissue In Vivo and In Vitro. <i>Journal of Neurochemistry</i> , 1985, 45, 145-151. | 4.0 | 469 |
| 4 | Glial cells in (patho)physiology. <i>Journal of Neurochemistry</i> , 2012, 121, 4-27. | 4.0 | 467 |
| 5 | The Transcriptome and Metabolic Gene Signature of Protoplasmic Astrocytes in the Adult Murine Cortex. <i>Journal of Neuroscience</i> , 2007, 27, 12255-12266. | 3.8 | 430 |
| 6 | Transport and Metabolism of Glutamate and Gaba in Neurons and Glial Cells. <i>International Review of Neurobiology</i> , 1981, 22, 1-45. | 1.8 | 400 |
| 7 | High Affinity Glutamate Transporters: Regulation of Expression and Activity. <i>Molecular Pharmacology</i> , 1997, 52, 6-15. | 2.3 | 368 |
| 8 | Neurotransmitter transporters: molecular function of important drug targets. <i>Trends in Pharmacological Sciences</i> , 2006, 27, 375-383. | 8.6 | 294 |
| 9 | Glutamate Metabolism in the Brain Focusing on Astrocytes. <i>Advances in Neurobiology</i> , 2014, 11, 13-30. | 0.0 | 280 |
| 10 | Cellular Distribution and Kinetic Properties of High-Affinity Glutamate Transporters. <i>Brain Research Bulletin</i> , 1998, 45, 233-238. | 3.1 | 248 |
| 11 | Astrocytic Control of Biosynthesis and Turnover of the Neurotransmitters Glutamate and GABA. <i>Frontiers in Endocrinology</i> , 2013, 4, 102. | 3.5 | 239 |
| 12 | Glutamate transport and metabolism in astrocytes. <i>Glia</i> , 1997, 21, 56-63. | 5.3 | 237 |
| 13 | Kinetic characteristics of the glutamate uptake into normal astrocytes in cultures. <i>Neurochemical Research</i> , 1978, 3, 1-14. | 3.3 | 218 |
| 14 | Direct Evidence That Excitotoxicity in Cultured Neurons Is Mediated via N-Methyl-D-Aspartate (NMDA) as well as Non-NMDA Receptors. <i>Journal of Neurochemistry</i> , 1989, 53, 297-299. | 4.0 | 209 |
| 15 | Trafficking between glia and neurons of TCA cycle intermediates and related metabolites. <i>Glia</i> , 1997, 21, 99-105. | 5.3 | 184 |
| 16 | The Glutamine-Glutamate/GABA Cycle: Function, Regional Differences in Glutamate and GABA Production and Effects of Interference with GABA Metabolism. <i>Neurochemical Research</i> , 2015, 40, 402-409. | 3.3 | 184 |
| 17 | GABA uptake inhibitors: relevance to antiepileptic drug research. <i>Epilepsy Research</i> , 1987, 1, 77-93. | 1.7 | 180 |
| 18 | Glutamate metabolism and recycling at the excitatory synapse in health and neurodegeneration. <i>Neuropharmacology</i> , 2021, 196, 108719. | 4.2 | 177 |

| # | ARTICLE | IF | CITATIONS |
|----|---|-----|-----------|
| 19 | A Possible Role of Alanine for Ammonia Transfer Between Astrocytes and Glutamatergic Neurons. <i>Journal of Neurochemistry</i> , 2002, 75, 471-479. | 4.0 | 174 |
| 20 | Role of Astrocytes in the Maintenance and Modulation of Glutamatergic and GABAergic Neurotransmission. <i>Neurochemical Research</i> , 2003, 28, 347-352. | 3.3 | 173 |
| 21 | Neuronal and non-neuronal GABA transporters as targets for antiepileptic drugs. , 2010, 125, 394-401. | | 165 |
| 22 | GABA Induces Functionally Active Low-Affinity GABA Receptors on Cultured Cerebellar Granule Cells. <i>Journal of Neurochemistry</i> , 1984, 43, 1737-1744. | 4.0 | 161 |
| 23 | Glucose is Necessary to Maintain Neurotransmitter Homeostasis during Synaptic Activity in Cultured Glutamatergic Neurons. <i>Journal of Cerebral Blood Flow and Metabolism</i> , 2006, 26, 1285-1297. | 4.6 | 157 |
| 24 | Evidence that Aspartate Aminotransferase Activity and Ketodicarboxylate Carrier Function Are Essential for Biosynthesis of Transmitter Glutamate. <i>Journal of Neurochemistry</i> , 1988, 51, 317-320. | 4.0 | 150 |
| 25 | Glutamate and GABA synthesis, release, transport and metabolism as targets for seizure control. <i>Neurochemistry International</i> , 2012, 61, 546-558. | 3.9 | 147 |
| 26 | Development of excitatory amino acid induced cytotoxicity in cultured neurons. <i>International Journal of Developmental Neuroscience</i> , 1990, 8, 209-216. | 1.6 | 138 |
| 27 | Release of taurine from astrocytes during potassium-evoked swelling. <i>Glia</i> , 1989, 2, 45-50. | 5.3 | 135 |
| 28 | Role of aspartate aminotransferase and mitochondrial dicarboxylate transport for release of endogenously and exogenously supplied neurotransmitter in glutamatergic neurons. <i>Neurochemical Research</i> , 1989, 14, 359-366. | 3.3 | 132 |
| 29 | Acetoacetate and Glucose as Lipid Precursors and Energy Substrates in Primary Cultures of Astrocytes and Neurons from Mouse Cerebral Cortex. <i>Journal of Neurochemistry</i> , 1986, 46, 773-778. | 4.0 | 127 |
| 30 | GABA influences the ultrastructure composition of cerebellar granule cells during development in culture. <i>International Journal of Developmental Neuroscience</i> , 1984, 2, 247-251. | 1.6 | 121 |
| 31 | Glutamate-Induced Increase in Intracellular Ca ²⁺ in Cerebral Cortex Neurons Is Transient in Immature Cells but Permanent in Mature Cells. <i>Journal of Neurochemistry</i> , 1989, 53, 1316-1319. | 4.0 | 121 |
| 32 | Ion and Energy Metabolism of the Brain at the Cellular Level. <i>International Review of Neurobiology</i> , 1975, 18, 141-211. | 1.8 | 113 |
| 33 | Synaptic and extrasynaptic GABA transporters as targets for anti-epileptic drugs. <i>Journal of Neurochemistry</i> , 2009, 109, 139-144. | 4.0 | 112 |
| 34 | Glutamate Uptake Triggers Transporter-Mediated GABA Release from Astrocytes. <i>PLoS ONE</i> , 2009, 4, e7153. | 2.5 | 110 |
| 35 | Astrocytic glycogen metabolism in the healthy and diseased brain. <i>Journal of Biological Chemistry</i> , 2018, 293, 7108-7116. | 3.5 | 109 |
| 36 | Utilization of alpha-ketoglutarate as a precursor for transmitter glutamate in cultured cerebellar granule cells. <i>Neurochemical Research</i> , 1991, 16, 29-34. | 3.3 | 108 |

| # | ARTICLE | IF | CITATIONS |
|----|--|-----|-----------|
| 37 | Taurine uptake in astrocytes cultured from dissociated mouse brain hemispheres. <i>Brain Research</i> , 1976, 116, 158-164. | 2.3 | 102 |
| 38 | Evaluation of the importance of transamination versus deamination in astrocytic metabolism of [U-13C] glutamate. <i>Glia</i> , 1996, 17, 160-168. | 5.3 | 101 |
| 39 | Role of glutamine and neuronal glutamate uptake in glutamate homeostasis and synthesis during vesicular release in cultured glutamatergic neurons. <i>Neurochemistry International</i> , 2005, 47, 92-102. | 3.9 | 90 |
| 40 | Metabolism of Lactate in Cultured GABAergic Neurons Studied by 13C Nuclear Magnetic Resonance Spectroscopy. <i>Journal of Cerebral Blood Flow and Metabolism</i> , 1998, 18, 109-117. | 4.6 | 89 |
| 41 | Ionic mechanisms in glutamate-induced astrocyte swelling: Role of K ⁺ influx. <i>Journal of Neuroscience Research</i> , 1998, 52, 307-321. | 3.0 | 88 |
| 42 | Uptake, Release, and Metabolism of Citrate in Neurons and Astrocytes in Primary Cultures. <i>Journal of Neurochemistry</i> , 1994, 62, 1727-1733. | 4.0 | 87 |
| 43 | GABA: Homeostatic and pharmacological aspects. <i>Progress in Brain Research</i> , 2007, 160, 9-19. | 3.9 | 86 |
| 44 | Glutamate oxidation in astrocytes: Roles of glutamate dehydrogenase and aminotransferases. <i>Journal of Neuroscience Research</i> , 2016, 94, 1561-1571. | 3.0 | 86 |
| 45 | Energy Metabolism of the Brain. , 2012, , 200-231. | | 85 |
| 46 | Evidence for net uptake of GABA into mouse astrocytes in primary cultures? Its sodium dependence and potassium independence. <i>Neurochemical Research</i> , 1978, 3, 313-323. | 3.3 | 82 |
| 47 | Multiple compartments with different metabolic characteristics are involved in biosynthesis of intracellular and released glutamine and citrate in astrocytes. <i>Glia</i> , 2001, 35, 246-252. | 5.3 | 82 |
| 48 | Pharmacological and functional characterization of astrocytic GABA transport: a short review. <i>Neurochemical Research</i> , 2000, 25, 1241-1244. | 3.3 | 81 |
| 49 | Demonstration of pyruvate recycling in primary cultures of neocortical astrocytes but not in neurons. <i>Neurochemical Research</i> , 2002, 27, 1431-1437. | 3.3 | 80 |
| 50 | First Demonstration of a Functional Role for Central Nervous System Betaine/ ¹³ C-Aminobutyric Acid Transporter (mGAT2) Based on Synergistic Anticonvulsant Action among Inhibitors of mGAT1 and mGAT2. <i>Journal of Pharmacology and Experimental Therapeutics</i> , 2005, 312, 866-874. | 2.4 | 79 |
| 51 | Selective inhibitors of GABA uptake: synthesis and molecular pharmacology of 4-N-methylamino-4,5,6,7-tetrahydrobenzo[d]isoxazol-3-ol analogues. <i>Bioorganic and Medicinal Chemistry</i> , 2005, 13, 895-908. | 3.1 | 77 |
| 52 | The trophic effect of gaba on cerebellar granule cells is mediated by gaba-receptors. <i>International Journal of Developmental Neuroscience</i> , 1985, 3, 401-407. | 1.6 | 74 |
| 53 | Correlation between Anticonvulsant Activity and Inhibitory Action on Glial ¹³ C-Aminobutyric Acid Uptake of the Highly Selective Mouse ¹³ C-Aminobutyric Acid Transporter 1 Inhibitor 3-Hydroxy-4-amino-4,5,6,7-tetrahydro-1,2-benzisoxazole and Its N-Alkylated Analogs. <i>Journal of Pharmacology and Experimental Therapeutics</i> . 2002. 302. 636-644. | 2.4 | 73 |
| 54 | Metabolic signaling in the brain and the role of astrocytes in control of glutamate and GABA neurotransmission. <i>Neuroscience Letters</i> , 2019, 689, 11-13. | 2.1 | 72 |

| # | ARTICLE | IF | CITATIONS |
|----|--|-----|-----------|
| 55 | Structure-Activity Relationships of Selective GABA Uptake Inhibitors. <i>Current Topics in Medicinal Chemistry</i> , 2006, 6, 1861-1882. | 2.0 | 69 |
| 56 | Inhibition of the high-affinity, net uptake of GABA into cultured astrocytes by $\hat{1}^2$ -proline, nipecotic acid and other compounds. <i>Brain Research</i> , 1978, 153, 623-626. | 2.3 | 65 |
| 57 | Lipid raft localization of GABAA receptor and Na ⁺ , K ⁺ -ATPase in discrete microdomain clusters in rat cerebellar granule cells. <i>Neurochemistry International</i> , 2005, 46, 489-499. | 3.9 | 65 |
| 58 | Citrate, a Ubiquitous Key Metabolite with Regulatory Function in the CNS. <i>Neurochemical Research</i> , 2017, 42, 1583-1588. | 3.3 | 59 |
| 59 | Deficient astrocyte metabolism impairs glutamine synthesis and neurotransmitter homeostasis in a mouse model of Alzheimer's disease. <i>Neurobiology of Disease</i> , 2021, 148, 105198. | 4.5 | 59 |
| 60 | Influence of Pathological Concentrations of Ammonia on Metabolic Fate of ¹⁴ C-Labeled Glutamate in Astrocytes in Primary Cultures. <i>Journal of Neurochemistry</i> , 1984, 42, 594-597. | 4.0 | 58 |
| 61 | Effect of Repeated Treatment with a γ -Aminobutyric Acid Receptor Agonist on Postnatal Neural Development in Rats. <i>Journal of Neurochemistry</i> , 1987, 49, 1462-1470. | 4.0 | 57 |
| 62 | Metabolism and Release of Glutamate in Cerebellar Granule Cells Cocultured with Astrocytes from Cerebellum or Cerebral Cortex. <i>Journal of Neurochemistry</i> , 1991, 56, 59-66. | 4.0 | 57 |
| 63 | Gaba Transport Inhibitors and Seizure Protection: The Past and Future. <i>Future Medicinal Chemistry</i> , 2011, 3, 183-187. | 2.4 | 57 |
| 64 | The GABA Synapse as a Target for Antiepileptic Drugs: A Historical Overview Focused on GABA Transporters. <i>Neurochemical Research</i> , 2014, 39, 1980-1987. | 3.3 | 57 |
| 65 | PROPERTIES OF L-GLUTAMATE DECARBOXYLASE FROM BRAINS OF ADULT AND NEWBORN MICE. <i>Journal of Neurochemistry</i> , 1976, 27, 653-659. | 4.0 | 54 |
| 66 | Immunocytochemical investigation of L-glutamic acid decarboxylase in the rat hippocampal formation: The influence of transient cerebral ischemia. <i>Journal of Comparative Neurology</i> , 1989, 281, 40-53. | 2.0 | 54 |
| 67 | The micro-architecture of the cerebral cortex: Functional neuroimaging models and metabolism. <i>NeuroImage</i> , 2008, 40, 1436-1459. | 4.4 | 54 |
| 68 | Potassium-Stimulated Release of [³ H]Taurine from Cultured GABAergic and Glutamatergic Neurons. <i>Journal of Neurochemistry</i> , 1989, 53, 1309-1315. | 4.0 | 53 |
| 69 | Selective Inhibitors of Glial GABA Uptake: \hat{A} Synthesis, Absolute Stereochemistry, and Pharmacology of the Enantiomers of 3-Hydroxy-4-amino-4,5,6,7-tetrahydro-1,2-benzisoxazole (exo-THPO) and Analogues. <i>Journal of Medicinal Chemistry</i> , 1999, 42, 5402-5414. | 6.6 | 53 |
| 70 | Stereoselective uptake of the GABA-transaminase inhibitors gamma-vinyl gaba and gamma-acetylenic GABA into neurons and astrocytes. <i>Neurochemical Research</i> , 1986, 11, 1497-1505. | 3.3 | 52 |
| 71 | Selective GABA Transporter Inhibitors Tiagabine and EF1502 Exhibit Mechanistic Differences in Their Ability to Modulate the Ataxia and Anticonvulsant Action of the Extrasynaptic GABA _A Receptor Agonist Gaboxadol. <i>Journal of Pharmacology and Experimental Therapeutics</i> , 2011, 338, 214-219. | 2.4 | 50 |
| 72 | The Glutamine Transporters and Their Role in the Glutamate/GABA \hat{A} Glutamine Cycle. <i>Advances in Neurobiology</i> , 2016, 13, 223-257. | 0.0 | 50 |

| # | ARTICLE | IF | CITATIONS |
|----|--|-----|-----------|
| 73 | Compartmentation of TCA cycle metabolism in cultured neocortical neurons revealed by ¹³ C MR spectroscopy. <i>Neurochemistry International</i> , 2000, 36, 349-358. | 3.9 | 49 |
| 74 | Primary Cultures of Gabaergic and Glutamatergic Neurons as Model Systems to Study Neurotransmitter Functions I. <i>Differentiated Cells.</i> , 1987, , 19-31. | | 49 |
| 75 | Differences in uptake kinetics of cis-3-aminocyclohexane carboxylic acid into neurons and astrocytes in primary cultures. <i>Brain Research</i> , 1983, 260, 279-285. | 2.3 | 48 |
| 76 | Cellular mitochondrial heterogeneity in cultured astrocytes as demonstrated by immunogold labeling of Î±-ketoglutarate dehydrogenase. <i>Glia</i> , 2006, 53, 225-231. | 5.3 | 47 |
| 77 | Energy substrates to support glutamatergic and GABAergic synaptic function: Role of glycogen, glucose and lactate. <i>Neurotoxicity Research</i> , 2007, 12, 263-268. | 2.7 | 47 |
| 78 | Hippocampal disruptions of synaptic and astrocyte metabolism are primary events of early amyloid pathology in the 5xFAD mouse model of Alzheimerâ€™s disease. <i>Cell Death and Disease</i> , 2021, 12, 954. | 6.4 | 47 |
| 79 | Functional Importance of the Astrocytic Glycogen-Shunt and Glycolysis for Maintenance of an Intact Intra/Extracellular Glutamate Gradient. <i>Neurotoxicity Research</i> , 2010, 18, 94-99. | 2.7 | 45 |
| 80 | Detoxification of Ammonia in Mouse Cortical GABAergic Cell Cultures Increases Neuronal Oxidative Metabolism and Reveals an Emerging Role for Release of Glucose-Derived Alanine. <i>Neurotoxicity Research</i> , 2011, 19, 496-510. | 2.7 | 43 |
| 81 | GABA-agonists induce the formation of low-affinity GABA-receptors on cultured cerebellar granule cells via preexisting high affinity GABA receptors. <i>Neurochemical Research</i> , 1986, 11, 599-606. | 3.3 | 42 |
| 82 | Brain Alanine Formation as an Ammonia-Scavenging Pathway during Hyperammonemia: Effects of Glutamine Synthetase Inhibition in Rats and Astrocyteâ€“Neuron Co-Cultures. <i>Journal of Cerebral Blood Flow and Metabolism</i> , 2013, 33, 1235-1241. | 4.6 | 42 |
| 83 | ACTIVITY AND ISOENZYME PATTERN OF LACTATE DEHYDROGENASE IN ASTROBLASTS CULTURED FROM BRAINS OF NEWBORN MICE. <i>Journal of Neurochemistry</i> , 1979, 32, 1787-1792. | 4.0 | 41 |
| 84 | Inhibition by excitatory sulphur amino acids of the high-affinity-glutamate transporter in synaptosomes and in primary cultures of cortical astrocytes and cerebellar neurons. <i>Neurochemical Research</i> , 1989, 14, 333-343. | 3.3 | 41 |
| 85 | Introduction to the Glutamateâ€“Glutamine Cycle. <i>Advances in Neurobiology</i> , 2016, 13, 1-7. | 0.0 | 41 |
| 86 | Action of bicyclic isoxazole GABA analogues on GABA transporters and its relation to anticonvulsant activity. <i>European Journal of Pharmacology</i> , 1999, 375, 367-374. | 3.6 | 40 |
| 87 | siRNA knock down of glutamate dehydrogenase in astrocytes affects glutamate metabolism leading to extensive accumulation of the neuroactive amino acids glutamate and aspartate. <i>Neurochemistry International</i> , 2012, 61, 490-497. | 3.9 | 40 |
| 88 | A novel selective Î³-aminobutyric acid transport inhibitor demonstrates a functional role for GABA transporter subtype GAT2/BGT-1 in the CNS. <i>Neurochemistry International</i> , 2006, 48, 637-642. | 3.9 | 39 |
| 89 | Structureâ€“Activity Relationship and Pharmacology of Î³-Aminobutyric Acid (GABA) Transport Inhibitors. <i>Advances in Pharmacology</i> , 2006, 54, 265-284. | 3.4 | 39 |
| 90 | Temporal development of gaba agonist induced alterations in ultrastructure and gaba receptor expression in cultured cerebellar granule cells. <i>International Journal of Developmental Neuroscience</i> , 1987, 5, 263-269. | 1.6 | 38 |

| # | ARTICLE | IF | CITATIONS |
|-----|--|-----|-----------|
| 91 | GABA agonist induced changes in ultrastructure and GABA receptor expression in cerebellar granule cells is linked to hyperpolarization of the neurons. <i>International Journal of Developmental Neuroscience</i> , 1990, 8, 473-479. | 1.6 | 37 |
| 92 | Selective mGAT2 (BGT-1) GABA Uptake Inhibitors: Design, Synthesis, and Pharmacological Characterization. <i>Journal of Medicinal Chemistry</i> , 2013, 56, 2160-2164. | 6.6 | 37 |
| 93 | Astrocytic pyruvate carboxylation: Status after 35 years. <i>Journal of Neuroscience Research</i> , 2019, 97, 890-896. | 3.0 | 37 |
| 94 | Excitatory Amino Acids: Studies on the Biochemical and Chemical Stability of Ibotenic Acid and Related Compounds. <i>Journal of Neurochemistry</i> , 1985, 45, 725-731. | 4.0 | 36 |
| 95 | Effects of 3-hydroxy-4-amino-4,5,6,7-tetrahydro-1,2-benzisoxazol (<i>exo</i> -THPO) and its N-substituted analogs on GABA transport in cultured neurons and astrocytes and by the four cloned mouse GABA transporters. <i>Neurochemistry International</i> , 2003, 43, 445-451. | 3.9 | 36 |
| 96 | Inhibition of glutamine synthesis induces glutamate dehydrogenase-dependent ammonia fixation into alanine in co-cultures of astrocytes and neurons. <i>Neurochemistry International</i> , 2011, 59, 482-488. | 3.9 | 36 |
| 97 | Glutamate and ATP at the Interface Between Signaling and Metabolism in Astroglia: Examples from Pathology. <i>Neurochemical Research</i> , 2017, 42, 19-34. | 3.3 | 35 |
| 98 | Anticonvulsant activity of intracerebroventricularly administered glial GABA uptake inhibitors and other GABA mimetics in chemical seizure models. <i>Epilepsy Research</i> , 1989, 4, 34-41. | 1.7 | 34 |
| 99 | Development of potassium effects on ion concentrations and indicator spaces in rat brain-cortex slices during postnatal ontogenesis. <i>Experimental Brain Research</i> , 1972, 15, 521-31. | 1.5 | 33 |
| 100 | Effect of Hyperosmotic Conditions on the Expression of the Betaine-GABA-Transporter (BGT-1) in Cultured Mouse Astrocytes. <i>Neurochemical Research</i> , 2005, 30, 855-865. | 3.3 | 33 |
| 101 | Extensive astrocyte metabolism of $\hat{3}$ â€œaminobutyric acid (<sc>GABA</sc>) sustains glutamine synthesis in the mammalian cerebral cortex. <i>Glia</i> , 2020, 68, 2601-2612. | 5.3 | 33 |
| 102 | Glutamate neurotransmission is affected in prenatally stressed offspring. <i>Neurochemistry International</i> , 2015, 88, 73-87. | 3.9 | 32 |
| 103 | Expression of the human isoform of glutamate dehydrogenase, hGDH2, augments TCA cycle capacity and oxidative metabolism of glutamate during glucose deprivation in astrocytes. <i>Glia</i> , 2017, 65, 474-488. | 5.3 | 32 |
| 104 | Metabolic Mapping of Astrocytes and Neurons in Culture Using Stable Isotopes and Gas Chromatography-Mass Spectrometry (GC-MS). <i>Neuromethods</i> , 2014, , 73-105. | 0.0 | 32 |
| 105 | Milestone Review: Metabolic dynamics of glutamate and <sc>GABA</sc> mediated neurotransmission â€” The essential roles of astrocytes. <i>Journal of Neurochemistry</i> , 2023, 166, 109-137. | 4.0 | 32 |
| 106 | Metabolic Characterization of Acutely Isolated Hippocampal and Cerebral Cortical Slices Using [U-13C]Glucose and [1,2-13C]Acetate as Substrates. <i>Neurochemical Research</i> , 2017, 42, 810-826. | 3.3 | 31 |
| 107 | Preface for the Mary C. McKenna Honorary Issue of <i>Neurochemical Research</i> . <i>Neurochemical Research</i> , 2017, 42, 1-3. | 3.3 | 31 |
| 108 | Discovery of a subtype selective inhibitor of the human betaine/GABA transporter 1 (BGT-1) with a non-competitive pharmacological profile. <i>Biochemical Pharmacology</i> , 2013, 86, 521-528. | 4.6 | 30 |

| # | ARTICLE | IF | CITATIONS |
|-----|---|-----|-----------|
| 109 | Misconceptions regarding basic thermodynamics and enzyme kinetics have led to erroneous conclusions regarding the metabolic importance of lactate dehydrogenase isoenzyme expression. <i>Journal of Neuroscience Research</i> , 2017, 95, 2098-2102. | 3.0 | 30 |
| 110 | GABA-A agonists and GABA uptake inhibitors: Structure-activity relationships. <i>Drug Development Research</i> , 1990, 21, 169-188. | 3.0 | 29 |
| 111 | Stimulation of γ -[3H]Aminobutyric Acid Release from Cultured Mouse Cerebral Cortex Neurons by Sulphur-Containing Excitatory Amino Acid Transmitter Candidates: Receptor Activation Mediates Two Distinct Mechanisms of Release. <i>Journal of Neurochemistry</i> , 1991, 57, 1388-1397. | 4.0 | 29 |
| 112 | Astrocytic GABA Transporters: Pharmacological Properties and Targets for Antiepileptic Drugs. <i>Advances in Neurobiology</i> , 2017, 16, 283-296. | 0.0 | 29 |
| 113 | Neuroactive Sulphur Amino Acids Evoke a Calcium-Dependent Transmitter Release from Cultured Neurons That Is Sensitive to Excitatory Amino Acid Receptor Antagonists. <i>Journal of Neurochemistry</i> , 1989, 52, 1648-1651. | 4.0 | 28 |
| 114 | Structure activity relationship of selective GABA uptake inhibitors. <i>Bioorganic and Medicinal Chemistry</i> , 2015, 23, 2480-2488. | 3.1 | 28 |
| 115 | Specificity of exogenous acetate and glutamate as astrocyte substrates examined in acute brain slices from female mice using methionine sulfoximine (MSO) to inhibit glutamine synthesis. <i>Journal of Neuroscience Research</i> , 2017, 95, 2207-2216. | 3.0 | 26 |
| 116 | Structural and molecular aspects of betaine-GABA transporter 1 (BGT1) and its relation to brain function. <i>Neuropharmacology</i> , 2019, 161, 107644. | 4.2 | 25 |
| 117 | Glial Glutamine Homeostasis in Health and Disease. <i>Neurochemical Research</i> , 2023, 48, 1100-1128. | 3.3 | 25 |
| 118 | Baclofen-induced, calcium-dependent stimulation of in vivo release of γ -[3H]aspartate from rat hippocampus monitored by intracerebral microdialysis. <i>Neurochemical Research</i> , 1989, 14, 321-326. | 3.3 | 24 |
| 119 | Regulation of Excitation by GABA Neurotransmission: Focus on Metabolism and Transport. , 2008, 44, 201-221. | | 24 |
| 120 | 40 th Year Anniversary Issue of <i>Neurochemical Research</i> . <i>Neurochemical Research</i> , 2016, 41, 1-2. | 3.3 | 24 |
| 121 | Glial GABA Transporters as Modulators of Inhibitory Signalling in Epilepsy and Stroke. <i>Advances in Neurobiology</i> , 2017, 16, 137-167. | 0.0 | 22 |
| 122 | Ornithine- γ -Aminotransferase Exhibits Different Kinetic Properties in Astrocytes, Cerebral Cortex Interneurons, and Cerebellar Granule Cells in Primary Culture. <i>Journal of Neurochemistry</i> , 1984, 42, 1194-1197. | 4.0 | 20 |
| 123 | γ -Aminobutyric Acid Agonist-Induced Alterations in the Ultrastructure of Cultured Cerebellar Granule Cells Is Restricted to Early Development. <i>Journal of Neurochemistry</i> , 1988, 51, 243-245. | 4.0 | 20 |
| 124 | AMPK Activation Affects Glutamate Metabolism in Astrocytes. <i>Neurochemical Research</i> , 2015, 40, 2431-2442. | 3.3 | 20 |
| 125 | Structure-Activity Relationship, Pharmacological Characterization, and Molecular Modeling of Noncompetitive Inhibitors of the Betaine/ γ -Aminobutyric Acid Transporter 1 (BGT1). <i>Journal of Medicinal Chemistry</i> , 2017, 60, 8834-8846. | 6.6 | 20 |
| 126 | Anticonvulsant activity of the glial GABA uptake inhibitor, THAO, in chemical seizures. <i>European Journal of Pharmacology</i> , 1989, 168, 265-268. | 3.6 | 19 |

| # | ARTICLE | IF | CITATIONS |
|-----|---|-----|-----------|
| 127 | Effects of hyperammonemia on brain energy metabolism: controversial findings in vivo and in vitro. <i>Metabolic Brain Disease</i> , 2014, 29, 913-917. | 3.0 | 19 |
| 128 | A Tribute to Mary C. McKenna: Glutamate as Energy Substrate and Neurotransmitterâ€™Functional Interaction Between Neurons and Astrocytes. <i>Neurochemical Research</i> , 2017, 42, 4-9. | 3.3 | 18 |
| 129 | Glutamate-Induced ⁴⁵ Ca ²⁺ Uptake into Immature Cerebral Cortex Neurons Shows a Distinct Pharmacological Profile. <i>Journal of Neurochemistry</i> , 1989, 53, 1959-1962. | 4.0 | 16 |
| 130 | Development of Benzodiazepine and Picrotoxin (t-Butylbicyclophosphorothionate) Binding Sites in Rat Cerebellar Granule Cells in Culture. <i>Journal of Neurochemistry</i> , 1990, 54, 473-478. | 4.0 | 16 |
| 131 | Oxidative metabolism of astrocytes is not reduced in hepatic encephalopathy: a PET study with [¹¹ C]acetate in humans. <i>Frontiers in Neuroscience</i> , 2014, 8, 353. | 2.9 | 16 |
| 132 | Effect of Glutamine Synthetase Inhibition on Brain and Interorgan Ammonia Metabolism in Bile Duct Ligated Rats. <i>Journal of Cerebral Blood Flow and Metabolism</i> , 2014, 34, 460-466. | 4.6 | 16 |
| 133 | Glucose replaces glutamate as energy substrate to fuel glutamate uptake in glutamate dehydrogenaseâ€deficient astrocytes. <i>Journal of Neuroscience Research</i> , 2015, 93, 1093-1100. | 3.0 | 16 |
| 134 | Glutamate Dehydrogenase Is Important for Ammonia Fixation and Amino Acid Homeostasis in Brain During Hyperammonemia. <i>Frontiers in Neuroscience</i> , 2021, 15, 646291. | 2.9 | 16 |
| 135 | Anticonvulsant activity of the Î³-aminobutyric acid uptake inhibitor N-4,4-diphenyl-3-butenyl-4,5,6,7-tetrahydroisoxazolo[4,5-c]pyridin-3-ol. <i>European Journal of Pharmacology</i> , 1993, 236, 147-149. | 3.6 | 15 |
| 136 | A Subconvulsive Dose of Kainate Selectively Compromises Astrocytic Metabolism in the Mouse Brain <i>In Vivo</i>. <i>Journal of Cerebral Blood Flow and Metabolism</i> , 2014, 34, 1340-1346. | 4.6 | 15 |
| 137 | Downregulation of GABA Transporter 3 (GAT3) is Associated with Deficient Oxidative GABA Metabolism in Human Induced Pluripotent Stem Cell-Derived Astrocytes in Alzheimer's Disease. <i>Neurochemical Research</i> , 2021, 46, 2676-2686. | 3.3 | 14 |
| 138 | Effect of l-homocysteine and derivatives on the high-affinity uptake of taurine and GABA into synaptosomes and cultured neurons and astrocytes. <i>Neurochemical Research</i> , 1986, 11, 1487-1496. | 3.3 | 13 |
| 139 | Delineation of the Role of Astroglial GABA Transporters in Seizure Control. <i>Neurochemical Research</i> , 2017, 42, 2019-2023. | 3.3 | 13 |
| 140 | Anaplerosis for Glutamate Synthesis in the Neonate and in Adulthood. <i>Advances in Neurobiology</i> , 2016, 13, 43-58. | 0.0 | 12 |
| 141 | Studies of Brain Metabolism: A Historical Perspective. <i>Advances in Neurobiology</i> , 2012, , 909-920. | 0.0 | 12 |
| 142 | Glycogen Shunt Activity and Glycolytic Supercompensation in Astrocytes May Be Distinctly Mediated via the Muscle Form of Glycogen Phosphorylase. <i>Neurochemical Research</i> , 2017, 42, 2490-2494. | 3.3 | 11 |
| 143 | Glutamate and ATP: The Crossroads of Signaling and Metabolism in the Brain. <i>Advances in Neurobiology</i> , 2014, 11, 1-12. | 0.0 | 11 |
| 144 | The Subcellular Localization of GABA Transporters and Its Implication for Seizure Management. <i>Neurochemical Research</i> , 2015, 40, 410-419. | 3.3 | 9 |

| # | ARTICLE | IF | CITATIONS |
|-----|--|-----|-----------|
| 145 | Expression of glutamine transporter isoforms in cerebral cortex of rats with chronic hepatic encephalopathy. <i>Neurochemistry International</i> , 2015, 88, 32-37. | 3.9 | 7 |
| 146 | State-Dependent Changes in Brain Glycogen Metabolism. <i>Advances in Neurobiology</i> , 2019, 23, 269-309. | 0.0 | 7 |
| 147 | A tribute to Leif Hertz: The historical context of his pioneering studies of the roles of astrocytes in brain energy metabolism, neurotransmission, cognitive functions, and pharmacology identifies important, unresolved topics for future studies. <i>Journal of Neurochemistry</i> , 2024, 168, 461-495. | 4.0 | 7 |
| 148 | Astrocytic Metabolism Focusing on Glutamate Homeostasis: A Short Review Dedicated to Vittorio Gallo. <i>Neurochemical Research</i> , 2020, 45, 522-525. | 3.3 | 6 |
| 149 | SKF89976A, A Highly Potent GABA Transport Inhibitor Capable of Crossing the Blood-Brain Barrier. , 2018, , . | | 6 |
| 150 | The anticonvulsant action of the galanin receptor agonist NAX-5055 involves modulation of both excitatory- and inhibitory neurotransmission. <i>Epilepsy Research</i> , 2016, 121, 55-63. | 1.7 | 5 |
| 151 | γ-Aminobutyric Acid and Glycine Neurotransmitter Transporters. <i>Methods and Principles in Medicinal Chemistry</i> , 2017, , 69-106. | 0.0 | 5 |
| 152 | Pharmacological Characterization of a Betaine/GABA Transporter 1 (BGT1) Inhibitor Displaying an Unusual Biphasic Inhibition Profile and Anti-seizure Effects. <i>Neurochemical Research</i> , 2020, 45, 1551-1565. | 3.3 | 4 |
| 153 | Two Metabolic Fuels, Glucose and Lactate, Differentially Modulate Exocytotic Glutamate Release from Cultured Astrocytes. <i>Neurochemical Research</i> , 2021, 46, 2551-2579. | 3.3 | 3 |
| 154 | Neurotransmitter Transporters and Anticonvulsant Drug Development. <i>Neuromethods</i> , 2011, , 431-446. | 0.0 | 3 |
| 155 | Brain glycogen: emergency fuel and dynamic function in neurotransmission. <i>Metabolic Brain Disease</i> , 2015, 30, 249-249. | 3.0 | 2 |
| 156 | Deletion of $\text{CaMKII}\alpha$ disrupts glucose metabolism, glutamate uptake, and synaptic energetics in the cerebral cortex. <i>Journal of Neurochemistry</i> , 2024, 168, 704-718. | 4.0 | 2 |
| 157 | Hepatic encephalopathy: an enigma from patient to enzyme and back. <i>Metabolic Brain Disease</i> , 2013, 28, 117-117. | 3.0 | 1 |
| 158 | Special issue on neurotransmitter transporters. <i>Neuropharmacology</i> , 2019, 161, 107859. | 4.2 | 1 |
| 159 | Dedication issue of neurochemical research in honor of Elling Kvamme. <i>Neurochemical Research</i> , 1989, 14, 293-295. | 3.3 | 0 |
| 160 | Introduction to Special Issue in Honor of Professor Povl Krosgaard-Larsen. <i>Neurochemical Research</i> , 2014, 39, 1845-1846. | 3.3 | 0 |
| 161 | Introduction to Special Issue in Honor of Michael D. Norenberg: A Pathologist Who Incorporated Glutamine to the Astrocytic-Neuronal Crosstalk. <i>Neurochemical Research</i> , 2015, 40, 227-229. | 3.3 | 0 |
| 162 | The novel anticonvulsant neuropeptide and galanin analogue, NAX-5055, does not alter energy and amino acid metabolism in cultured brain cells. <i>Journal of Neuroscience Research</i> , 2017, 95, 2286-2296. | 3.0 | 0 |

| # | ARTICLE | IF | CITATIONS |
|-----|---|-----|-----------|
| 163 | Preface for the Ursula Sonnewald Honorary Issue of Neurochemical Research. Neurochemical Research, 2017, 42, 1581-1582. | 3.3 | 0 |
| 164 | Modulation of Excitability via Glutamate and GABA Transporters \hat{a} t. , 2018, , . | | 0 |
| 165 | Preface for the Vittorio Gallo Honorary Issue of Neurochemical Research. Neurochemical Research, 2020, 45, 519-521. | 3.3 | 0 |
| 166 | Glutamate Neurotoxicity Related to Energy Failure. , 2021, , 1-13. | | 0 |
| 167 | Amino Acids Glutamate Dehydrogenase: An Anaplerotic Enzyme in Neurons and an Energy Producing Enzyme in Astrocytes. , 2021, , 51-55. | | 0 |
| 168 | Preface for the Vladimir Parpura Honorary Issue of Neurochemical Research. Neurochemical Research, 2021, 46, 2507-2511. | 3.3 | 0 |
| 169 | Preface: Special issue: 14 th International Conference on Brain Energy Metabolism: Energy substrates and microbiome govern brain bioenergetics and cognitive function with aging. Journal of Neurochemistry, 2024, 168, 443-449. | 4.0 | 0 |
| 170 | Deficient brain \langle sc \rangle GABA \langle /sc \rangle metabolism leads to widespread impairments of astrocyte and oligodendrocyte function. Glia, 0, , . | 5.3 | 0 |