

Helle Snderby Waagepetersen

List of Publications by Year in Descending Order

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The third column is the impact factor (IF) of the journal, and the fourth column is the number of citations of the article.

176
papers

7,642
citations

47
h-index

80
g-index

180
ext. papers

8,805
ext. citations

5.3
avg, IF

5.99
L-index

#	Paper	IF	Citations
176	Rates of pyruvate carboxylase, glutamate and GABA neurotransmitter cycling, and glucose oxidation in multiple brain regions of the awake rat using a combination of [2-C]/[1-C]glucose infusion and H-[C]NMR .. <i>Journal of Cerebral Blood Flow and Metabolism</i> , 2022 , 271678X221074211	7.3	0
175	Hippocampal disruptions of synaptic and astrocyte metabolism are primary events of early amyloid pathology in the 5xFAD mouse model of Alzheimer's disease. <i>Cell Death and Disease</i> , 2021 , 12, 954	9.8	5
174	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	4.6	3
173	Two Metabolic Fuels, Glucose and Lactate, Differentially Modulate Exocytotic Glutamate Release from Cultured Astrocytes. <i>Neurochemical Research</i> , 2021 , 46, 2551-2579	4.6	1
172	Glutamate Dehydrogenase Is Important for Ammonia Fixation and Amino Acid Homeostasis in Brain During Hyperammonemia. <i>Frontiers in Neuroscience</i> , 2021 , 15, 646291	5.1	1
171	Clearance of activity-evoked K transients and associated glia cell swelling occur independently of AQP4: A study with an isoform-selective AQP4 inhibitor. <i>Glia</i> , 2021 , 69, 28-41	9	13
170	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	7.5	13
169	Pharmacological inhibition of mitochondrial soluble adenylyl cyclase in astrocytes causes activation of AMP-activated protein kinase and induces breakdown of glycogen. <i>Glia</i> , 2021 , 69, 2828-2844	9	4
168	Functional Metabolic Mapping Reveals Highly Active Branched-Chain Amino Acid Metabolism in Human Astrocytes, Which Is Impaired in iPSC-Derived Astrocytes in Alzheimer's Disease. <i>Frontiers in Aging Neuroscience</i> , 2021 , 13, 736580	5.3	2
167	Glutamate metabolism and recycling at the excitatory synapse in health and neurodegeneration. <i>Neuropharmacology</i> , 2021 , 196, 108719	5.5	30
166	Astrocyte metabolism of the medium-chain fatty acids octanoic acid and decanoic acid promotes GABA synthesis in neurons via elevated glutamine supply. <i>Molecular Brain</i> , 2021 , 14, 132	4.5	5
165	Cellular bioenergetics in human iPSC-derived glutamatergic neurons in health and disease 2021 , 205-221		
164	Conditional Knockout of GLT-1 in Neurons Leads to Alterations in Aspartate Homeostasis and Synaptic Mitochondrial Metabolism in Striatum and Hippocampus. <i>Neurochemical Research</i> , 2020 , 45, 1420-1437	4.6	9
163	Extensive astrocyte metabolism of γ -aminobutyric acid (GABA) sustains glutamine synthesis in the mammalian cerebral cortex. <i>Glia</i> , 2020 , 68, 2601-2612	9	12
162	induces cell-surface expression of immune stimulatory NKG2D ligands on human monocytes. <i>Journal of Biological Chemistry</i> , 2020 , 295, 11803-11821	5.4	2
161	AMP-activated protein kinase (AMPK) regulates astrocyte oxidative metabolism by balancing TCA cycle dynamics. <i>Glia</i> , 2020 , 68, 1824-1839	9	15
160	Diphenylalanine Peptide Nanowires as a Substrate for Neural Cultures. <i>BioNanoScience</i> , 2020 , 10, 224-234	3.4	3

159	Glutamate-glutamine homeostasis is perturbed in neurons and astrocytes derived from patient iPSC models of frontotemporal dementia. <i>Molecular Brain</i> , 2020 , 13, 125	4.5	8
158	Distinct differences in rates of oxygen consumption and ATP synthesis of regionally isolated non-synaptic mouse brain mitochondria. <i>Journal of Neuroscience Research</i> , 2019 , 97, 961-974	4.4	10
157	The role of astrocytes in seizure generation: insights from a novel in vitro seizure model based on mitochondrial dysfunction. <i>Brain</i> , 2019 , 142, 391-411	11.2	24
156	Phosphorylation of Glutamine Synthetase on Threonine 301 Contributes to Its Inactivation During Epilepsy. <i>Frontiers in Molecular Neuroscience</i> , 2019 , 12, 120	6.1	4
155	Glycogen metabolism is impaired in the brain of male type 2 diabetic Goto-Kakizaki rats. <i>Journal of Neuroscience Research</i> , 2019 , 97, 1004-1017	4.4	8
154	Functional Differences between Synaptic Mitochondria from the Striatum and the Cerebral Cortex. <i>Neuroscience</i> , 2019 , 406, 432-443	3.9	3
153	Dual Properties of Lactate in Müller Cells: The Effect of GPR81 Activation 2019 , 60, 999-1008		8
152	Enhanced cerebral branched-chain amino acid metabolism in R6/2 mouse model of Huntington's disease. <i>Cellular and Molecular Life Sciences</i> , 2019 , 76, 2449-2461	10.3	5
151	Lactate-Mediated Protection of Retinal Ganglion Cells. <i>Journal of Molecular Biology</i> , 2019 , 431, 1878-1885	8.5	13
150	Deletion of Neuronal GLT-1 in Mice Reveals Its Role in Synaptic Glutamate Homeostasis and Mitochondrial Function. <i>Journal of Neuroscience</i> , 2019 , 39, 4847-4863	6.6	21
149	Astrocytic pyruvate carboxylation: Status after 35 years. <i>Journal of Neuroscience Research</i> , 2019 , 97, 890-896	7.4	19
148	Mutation Causes Metabolic Disturbances and Impaired Survival of Human iPSC-Derived Neurons. <i>Frontiers in Cellular Neuroscience</i> , 2019 , 13, 297	6.1	29
147	State-Dependent Changes in Brain Glycogen Metabolism. <i>Advances in Neurobiology</i> , 2019 , 23, 269-309	2.1	3
146	Essential Roles of Lactate in Müller Cell Survival and Function. <i>Molecular Neurobiology</i> , 2018 , 55, 9108-9121	12.1	15
145	Astrocytic glycogen metabolism in the healthy and diseased brain. <i>Journal of Biological Chemistry</i> , 2018 , 293, 7108-7116	5.4	64
144	Glutamate dehydrogenase is essential to sustain neuronal oxidative energy metabolism during stimulation. <i>Journal of Cerebral Blood Flow and Metabolism</i> , 2018 , 38, 1754-1768	7.3	23
143	Integrative Characterization of the R6/2 Mouse Model of Huntington's Disease Reveals Dysfunctional Astrocyte Metabolism. <i>Cell Reports</i> , 2018 , 23, 2211-2224	10.6	47
142	The inhibitors of soluble adenylylase 2-OHE, KH7, and bithionol compromise mitochondrial ATP production by distinct mechanisms. <i>Biochemical Pharmacology</i> , 2018 , 155, 92-101	6	13

141	Glutamate and ATP at the Interface Between Signaling and Metabolism in Astroglia: Examples from Pathology. <i>Neurochemical Research</i> , 2017 , 42, 19-34	4.6	24
140	Citrate, a Ubiquitous Key Metabolite with Regulatory Function in the CNS. <i>Neurochemical Research</i> , 2017 , 42, 1583-1588	4.6	22
139	Epigallocatechin-3-gallate (EGCG) activates AMPK through the inhibition of glutamate dehydrogenase in muscle and pancreatic β-cells: A potential beneficial effect in the pre-diabetic state?. <i>International Journal of Biochemistry and Cell Biology</i> , 2017 , 88, 220-225	5.6	35
138	Improved cerebral energetics and ketone body metabolism in db/db mice. <i>Journal of Cerebral Blood Flow and Metabolism</i> , 2017 , 37, 1137-1147	7.3	23
137	Patient iPSC-Derived Neurons for Disease Modeling of Frontotemporal Dementia with Mutation in CHMP2B. <i>Stem Cell Reports</i> , 2017 , 8, 648-658	8	52
136	Characterization of the L-glutamate clearance pathways across the blood-brain barrier and the effect of astrocytes in an in vitro blood-brain barrier model. <i>Journal of Cerebral Blood Flow and Metabolism</i> , 2017 , 37, 3744-3758	7.3	7
135	Characterization of energy and neurotransmitter metabolism in cortical glutamatergic neurons derived from human induced pluripotent stem cells: A novel approach to study metabolism in human neurons. <i>Neurochemistry International</i> , 2017 , 106, 48-61	4.4	12
134	Mitochondrial function in Müller cells - Does it matter?. <i>Mitochondrion</i> , 2017 , 36, 43-51	4.9	33
133	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	4.4	
132	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	4.4	13
131	The tricarboxylic acid cycle activity in cultured primary astrocytes is strongly accelerated by the protein tyrosine kinase inhibitor tyrphostin 23. <i>Neurochemistry International</i> , 2017 , 102, 13-21	4.4	2
130	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	4.6	9
129	The antidiabetic drug metformin decreases mitochondrial respiration and tricarboxylic acid cycle activity in cultured primary rat astrocytes. <i>Journal of Neuroscience Research</i> , 2017 , 95, 2307-2320	4.4	13
128	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	9	22
127	Metabolic Characterization of Acutely Isolated Hippocampal and Cerebral Cortical Slices Using [U-C]Glucose and [1,2-C]Acetate as Substrates. <i>Neurochemical Research</i> , 2017 , 42, 810-826	4.6	18
126	Gamma-Aminobutyric Acid (GABA) 2017 ,		0
125	Glutamate Transporters in the Blood-Brain Barrier. <i>Advances in Neurobiology</i> , 2017 , 16, 297-314	2.1	10
124	Glucose, Lactate and Glutamine but not Glutamate Support Depolarization-Induced Increased Respiration in Isolated Nerve Terminals. <i>Neurochemical Research</i> , 2017 , 42, 191-201	4.6	9

123	Alterations in Cerebral Cortical Glucose and Glutamine Metabolism Precedes Amyloid Plaques in the APP ^{swe} /PSEN1 ^{dE9} Mouse Model of Alzheimer's Disease. <i>Neurochemical Research</i> , 2017 , 42, 1589-1598	4.6	39
122	Impaired Hippocampal Glutamate and Glutamine Metabolism in the db/db Mouse Model of Type 2 Diabetes Mellitus. <i>Neural Plasticity</i> , 2017 , 2017, 2107084	3.3	14
121	Glutamate oxidation in astrocytes: Roles of glutamate dehydrogenase and aminotransferases. <i>Journal of Neuroscience Research</i> , 2016 , 94, 1561-1571	4.4	56
120	Chronic Pyruvate Supplementation Increases Exploratory Activity and Brain Energy Reserves in Young and Middle-Aged Mice. <i>Frontiers in Aging Neuroscience</i> , 2016 , 8, 41	5.3	17
119	Anaplerosis for Glutamate Synthesis in the Neonate and in Adulthood. <i>Advances in Neurobiology</i> , 2016 , 13, 43-58	2.1	8
118	Glutamate neurotransmission is affected in prenatally stressed offspring. <i>Neurochemistry International</i> , 2015 , 88, 73-87	4.4	21
117	Dynamic Changes in Cytosolic ATP Levels in Cultured Glutamatergic Neurons During NMDA-Induced Synaptic Activity Supported by Glucose or Lactate. <i>Neurochemical Research</i> , 2015 , 40, 2517-26	4.6	14
116	AMPK Activation Affects Glutamate Metabolism in Astrocytes. <i>Neurochemical Research</i> , 2015 , 40, 2431-2436	4.2	15
115	Astroglia and Brain Metabolism: Focus on Energy and Neurotransmitter Amino Acid Homeostasis 2015 , 2, 1-64		1
114	Fluidic system for long-term in vitro culturing and monitoring of organotypic brain slices. <i>Biomedical Microdevices</i> , 2015 , 17, 71	3.7	9
113	GDH-Dependent Glutamate Oxidation in the Brain Dictates Peripheral Energy Substrate Distribution. <i>Cell Reports</i> , 2015 , 13, 365-75	10.6	40
112	Isoform-selective regulation of glycogen phosphorylase by energy deprivation and phosphorylation in astrocytes. <i>Glia</i> , 2015 , 63, 154-62	9	35
111	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, 402-9	4.6	129
110	Effects of diabetes on brain metabolism--is brain glycogen a significant player?. <i>Metabolic Brain Disease</i> , 2015 , 30, 335-43	3.9	22
109	The 11th International Conference on Brain Energy Metabolism "how energy metabolism shapes brain function". Preface. <i>Journal of Neuroscience Research</i> , 2015 , 93, 985-6	4.4	
108	Effects of ketone bodies in Alzheimer's disease in relation to neural hypometabolism, amyloid toxicity, and astrocyte function. <i>Journal of Neurochemistry</i> , 2015 , 134, 7-20	6	67
107	Dysfunctional TCA-Cycle Metabolism in Glutamate Dehydrogenase Deficient Astrocytes. <i>Glia</i> , 2015 , 63, 2313-26	9	46
106	Glucose replaces glutamate as energy substrate to fuel glutamate uptake in glutamate dehydrogenase-deficient astrocytes. <i>Journal of Neuroscience Research</i> , 2015 , 93, 1093-100	4.4	15

105 Glutamine and Ammonia in Hepatic Encephalopathy **2015**, 219-227

104	Effects of hyperammonemia on brain energy metabolism: controversial findings in vivo and in vitro. <i>Metabolic Brain Disease</i> , 2014 , 29, 913-7	3.9	14
103	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, 460-6	7.3	13
102	Limited energy supply in Müller cells alters glutamate uptake. <i>Neurochemical Research</i> , 2014 , 39, 941-9	4.6	20
101	Astrocyte glycogenolysis is triggered by store-operated calcium entry and provides metabolic energy for cellular calcium homeostasis. <i>Glia</i> , 2014 , 62, 526-34	9	49
100	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	5.1	13
99	A subconvulsive dose of kainate selectively compromises astrocytic metabolism in the mouse brain in vivo. <i>Journal of Cerebral Blood Flow and Metabolism</i> , 2014 , 34, 1340-6	7.3	12
98	Glutamate metabolism in the brain focusing on astrocytes. <i>Advances in Neurobiology</i> , 2014 , 11, 13-30	2.1	180
97	Glutamate dehydrogenase isoforms with N-terminal (His)6- or FLAG-tag retain their kinetic properties and cellular localization. <i>Neurochemical Research</i> , 2014 , 39, 487-99	4.6	4
96	Metabolic Mapping of Astrocytes and Neurons in Culture Using Stable Isotopes and Gas Chromatography-Mass Spectrometry (GC-MS). <i>Neuromethods</i> , 2014 , 73-105	0.4	21
95	Complex actions of ionomycin in cultured cerebellar astrocytes affecting both calcium-induced calcium release and store-operated calcium entry. <i>Neurochemical Research</i> , 2013 , 38, 1260-5	4.6	15
94	The effect of pH and ADP on ammonia affinity for human glutamate dehydrogenases. <i>Metabolic Brain Disease</i> , 2013 , 28, 127-31	3.9	15
93	Hepatic encephalopathy is associated with decreased cerebral oxygen metabolism and blood flow, not increased ammonia uptake. <i>Hepatology</i> , 2013 , 57, 258-65	11.2	57
92	Brain alanine formation as an ammonia-scavenging pathway during hyperammonemia: effects of glutamine synthetase inhibition in rats and astrocyte-neuron co-cultures. <i>Journal of Cerebral Blood Flow and Metabolism</i> , 2013 , 33, 1235-41	7.3	28
91	Role of branched chain amino acids in cerebral ammonia homeostasis related to hepatic encephalopathy. <i>Metabolic Brain Disease</i> , 2013 , 28, 209-15	3.9	19
90	Interorgan metabolism of ornithine phenylacetate (OP)--a novel strategy for treatment of hyperammonemia. <i>Biochemical Pharmacology</i> , 2013 , 85, 115-23	6	13
89	Astrocytic Control of Biosynthesis and Turnover of the Neurotransmitters Glutamate and GABA. <i>Frontiers in Endocrinology</i> , 2013 , 4, 102	5.7	178
88	Reply: To PMID 22886493. <i>Hepatology</i> , 2013 , 58, 833-4	11.2	1

87	Direct measurement of backflux between oxaloacetate and fumarate following pyruvate carboxylation. <i>Glia</i> , 2012 , 60, 147-58	9	19
86	Effects of adrenergic agents on intracellular Ca ²⁺ homeostasis and metabolism of glucose in astrocytes with an emphasis on pyruvate carboxylation, oxidative decarboxylation and recycling: implications for glutamate neurotransmission and excitotoxicity. <i>Neurotoxicity Research</i> , 2012 , 21, 405-17	4.3	22
85	Brain glycogen and its role in supporting glutamate and GABA homeostasis in a type 2 diabetes rat model. <i>Neurochemistry International</i> , 2012 , 60, 267-75	4.4	47
84	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, 490-7	4.4	31
83	Deletion of glutamate dehydrogenase 1 (Glud1) in the central nervous system affects glutamate handling without altering synaptic transmission. <i>Journal of Neurochemistry</i> , 2012 , 123, 342-8	6	41
82	Primary cultures of astrocytes: their value in understanding astrocytes in health and disease. <i>Neurochemical Research</i> , 2012 , 37, 2569-88	4.6	109
81	Valine but not leucine or isoleucine supports neurotransmitter glutamate synthesis during synaptic activity in cultured cerebellar neurons. <i>Journal of Neuroscience Research</i> , 2012 , 90, 1768-75	4.4	10
80	In vitro evidence for the brain glutamate efflux hypothesis: brain endothelial cells cocultured with astrocytes display a polarized brain-to-blood transport of glutamate. <i>Glia</i> , 2012 , 60, 882-93	9	62
79	Energy Metabolism of the Brain 2012 , 200-231		60
78	Delineation of glutamate pathways and secretory responses in pancreatic islets with cell-specific abrogation of the glutamate dehydrogenase. <i>Molecular Biology of the Cell</i> , 2012 , 23, 3851-62	3.5	34
77	Quantitative importance of the pentose phosphate pathway determined by incorporation of ¹³ C from [2- ¹³ C]- and [3- ¹³ C]glucose into TCA cycle intermediates and neurotransmitter amino acids in functionally intact neurons. <i>Journal of Cerebral Blood Flow and Metabolism</i> , 2012 , 32, 1788-99	7.3	49
76	Novel model of neuronal bioenergetics: postsynaptic utilization of glucose but not lactate correlates positively with Ca ²⁺ signalling in cultured mouse glutamatergic neurons. <i>ASN Neuro</i> , 2012 , 4,	5.3	37
75	Aspects of astrocyte energy metabolism, amino acid neurotransmitter homeostasis and metabolic compartmentation. <i>ASN Neuro</i> , 2012 , 4,	5.3	61
74	Brain glycogen-new perspectives on its metabolic function and regulation at the subcellular level. <i>Frontiers in Neuroenergetics</i> , 2012 , 4, 3		135
73	Impairment of the organization of locomotor and exploratory behaviors in bile duct-ligated rats. <i>PLoS ONE</i> , 2012 , 7, e36322	3.7	25
72	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, 482-8	4.4	34
71	Synthesis of neurotransmitter GABA via the neuronal tricarboxylic acid cycle is elevated in rats with liver cirrhosis consistent with a high GABAergic tone in chronic hepatic encephalopathy. <i>Journal of Neurochemistry</i> , 2011 , 117, 824-32	6	36
70	Knockout of GAD65 has major impact on synaptic GABA synthesized from astrocyte-derived glutamine. <i>Journal of Cerebral Blood Flow and Metabolism</i> , 2011 , 31, 494-503	7.3	52

69	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	4.3	38
68	Neuron-glia interactions in glutamatergic neurotransmission: roles of oxidative and glycolytic adenosine triphosphate as energy source. <i>Journal of Neuroscience Research</i> , 2011 , 89, 1926-34	4.4	42
67	Branched-chain amino acids increase arterial blood ammonia in spite of enhanced intrinsic muscle ammonia metabolism in patients with cirrhosis and healthy subjects. <i>American Journal of Physiology - Renal Physiology</i> , 2011 , 301, G269-77	5.1	36
66	¹³ C NMR Spectroscopy and Mass Spectrometry Analysis of Intermediary Metabolism in Cultured Neural Cells. <i>Neuromethods</i> , 2011 , 403-415	0.4	2
65	Glutamate and Glutamine in Brain Disorders. <i>Advances in Neurobiology</i> , 2011 , 195-212	2.1	1
64	GAD65 is essential for synthesis of GABA destined for tonic inhibition regulating epileptiform activity. <i>Journal of Neurochemistry</i> , 2010 , 115, 1398-408	6	43
63	Obesity and type 2 diabetes in rats are associated with altered brain glycogen and amino-acid homeostasis. <i>Journal of Cerebral Blood Flow and Metabolism</i> , 2010 , 30, 1527-37	7.3	62
62	Paracellular tightness and claudin-5 expression is increased in the BCEC/astrocyte blood-brain barrier model by increasing media buffer capacity during growth. <i>AAPS Journal</i> , 2010 , 12, 759-70	3.7	48
61	Functional importance of the astrocytic glycogen-shunt and glycolysis for maintenance of an intact intra/extracellular glutamate gradient. <i>Neurotoxicity Research</i> , 2010 , 18, 94-9	4.3	39
60	Characterization of primary and secondary cultures of astrocytes prepared from mouse cerebral cortex. <i>Neurochemical Research</i> , 2010 , 35, 2043-52	4.6	19
59	Metabolic fate of isoleucine in a rat model of hepatic encephalopathy and in cultured neural cells exposed to ammonia. <i>Metabolic Brain Disease</i> , 2009 , 24, 135-45	3.9	26
58	Functional significance of brain glycogen in sustaining glutamatergic neurotransmission. <i>Journal of Neurochemistry</i> , 2009 , 109 Suppl 1, 80-6	6	97
57	Neuronal glucose but not lactate utilization is positively correlated with NMDA-induced neurotransmission and fluctuations in cytosolic Ca ²⁺ levels. <i>Journal of Neurochemistry</i> , 2009 , 109 Suppl 1, 87-93	6	76
56	Availability of neurotransmitter glutamate is diminished when beta-hydroxybutyrate replaces glucose in cultured neurons. <i>Journal of Neurochemistry</i> , 2009 , 110, 80-91	6	38
55	Energy and Amino Acid Neurotransmitter Metabolism in Astrocytes 2009 , 177-200		12
54	Robust glycogen shunt activity in astrocytes: Effects of glutamatergic and adrenergic agents. <i>Neuroscience</i> , 2009 , 158, 284-92	3.9	127
53	Low cerebral oxygen consumption and blood flow in patients with cirrhosis and an acute episode of hepatic encephalopathy. <i>Gastroenterology</i> , 2009 , 136, 863-71	13.3	83
52	Characterization of 1,4-dideoxy-1,4-imino-d-arabinitol (DAB) as an inhibitor of brain glycogen shunt activity. <i>Journal of Neurochemistry</i> , 2008 , 105, 1462-70	6	58

51	The micro-architecture of the cerebral cortex: functional neuroimaging models and metabolism. <i>NeuroImage</i> , 2008 , 40, 1436-59	7.9	43
50	Metabolism of [U-13C]glutamine and [U-13C]glutamate in isolated rat brain mitochondria suggests functional phosphate-activated glutaminase activity in matrix. <i>Neurochemical Research</i> , 2008 , 33, 273-8	4.6	36
49	Metabolism of [1,6-(13)C]glucose and [U-(13)C]glutamine and depolarization induced GABA release in superfused mouse cerebral cortical mini-slices. <i>Neurochemical Research</i> , 2008 , 33, 1610-7	4.6	5
48	Demonstration of neuron-glia transfer of precursors for GABA biosynthesis in a co-culture system of dissociated mouse cerebral cortex. <i>Neurochemical Research</i> , 2008 , 33, 2629-35	4.6	17
47	GABA: homeostatic and pharmacological aspects. <i>Progress in Brain Research</i> , 2007 , 160, 9-19	2.9	69
46	Among the branched-chain amino acids, only valine metabolism is up-regulated in astrocytes during glutamate exposure. <i>Journal of Neuroscience Research</i> , 2007 , 85, 3465-70	4.4	13
45	Energy substrates to support glutamatergic and GABAergic synaptic function: role of glycogen, glucose and lactate. <i>Neurotoxicity Research</i> , 2007 , 12, 263-8	4.3	43
44	Complex glutamate labeling from [U-13C]glucose or [U-13C]lactate in co-cultures of cerebellar neurons and astrocytes. <i>Neurochemical Research</i> , 2007 , 32, 671-80	4.6	21
43	The metabolic role of isoleucine in detoxification of ammonia in cultured mouse neurons and astrocytes. <i>Neurochemistry International</i> , 2007 , 50, 1042-51	4.4	46
42	The transcriptome and metabolic gene signature of protoplasmic astrocytes in the adult murine cortex. <i>Journal of Neuroscience</i> , 2007 , 27, 12255-66	6.6	376
41	Glutamine in the central nervous system: function and dysfunction. <i>Frontiers in Bioscience - Landmark</i> , 2007 , 12, 332-43	2.8	110
40	Neuron-Glia Interaction in Homeostasis of the Neurotransmitters Glutamate and GABA 2007 , 111-120		1
39	Neuronal and astrocytic shuttle mechanisms for cytosolic-mitochondrial transfer of reducing equivalents: current evidence and pharmacological tools. <i>Biochemical Pharmacology</i> , 2006 , 71, 399-407	6	235
38	Cellular mitochondrial heterogeneity in cultured astrocytes as demonstrated by immunogold labeling of alpha-ketoglutarate dehydrogenase. <i>Glia</i> , 2006 , 53, 225-31	9	45
37	Glial modulation of GABAergic and glutamatergic neurotransmission. <i>Current Topics in Medicinal Chemistry</i> , 2006 , 6, 929-34	3	47
36	Demonstration of extensive GABA synthesis in the small population of GAD positive neurons in cerebellar cultures by the use of pharmacological tools. <i>Neurochemistry International</i> , 2006 , 48, 572-8	4.4	19
35	The glutamate/GABA-glutamine cycle: aspects of transport, neurotransmitter homeostasis and ammonia transfer. <i>Journal of Neurochemistry</i> , 2006 , 98, 641-53	6	640
34	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, 1285-97	7.3	132

33	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	4.4	84
32	Activity of the lactate-alanine shuttle is independent of glutamate-glutamine cycle activity in cerebellar neuronal-astrocytic cultures. <i>Journal of Neuroscience Research</i> , 2005 , 79, 88-96	4.4	39
31	Astrocyte glycogen metabolism is required for neural activity during aglycemia or intense stimulation in mouse white matter. <i>Journal of Neuroscience Research</i> , 2005 , 79, 74-80	4.4	136
30	Homeostasis of neuroactive amino acids in cultured cerebellar and neocortical neurons is influenced by environmental cues. <i>Journal of Neuroscience Research</i> , 2005 , 79, 97-105	4.4	8
29	Role of astrocytes in glutamate homeostasis: implications for excitotoxicity. <i>Neurotoxicity Research</i> , 2005 , 8, 221-5	4.3	137
28	Compartmentation of lactate originating from glycogen and glucose in cultured astrocytes. <i>Neurochemical Research</i> , 2005 , 30, 1295-304	4.6	64
27	First direct demonstration of extensive GABA synthesis in mouse cerebellar neuronal cultures. <i>Journal of Neurochemistry</i> , 2004 , 91, 796-803	6	47
26	Role of astrocytes in depolarization-coupled release of glutamate in cerebellar cultures. <i>Neurochemical Research</i> , 2004 , 29, 257-65	4.6	11
25	Analysis of glutamine accumulation in rat brain mitochondria in the presence of a glutamine uptake inhibitor, histidine, reveals glutamine pools with a distinct access to deamidation. <i>Neurochemical Research</i> , 2004 , 29, 2121-3	4.6	24
24	Intracellular metabolic compartmentation assessed by ¹³ C magnetic resonance spectroscopy. <i>Neurochemistry International</i> , 2004 , 45, 305-10	4.4	38
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17	Demonstration of pyruvate recycling in primary cultures of neocortical astrocytes but not in neurons. <i>Neurochemical Research</i> , 2002 , 27, 1431-7	4.6	74
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2	Trafficking between glia and neurons of TCA cycle intermediates and related metabolites 1997 , 21, 99		4
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