

# Ursula Sonnewald

## List of Publications by Year in descending order

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133  
papers

7,528  
citations

36087

51  
h-index

65711

79  
g-index

139  
all docs

139  
docs citations

139  
times ranked

6987  
citing authors

#	ARTICLE	IF	CITATIONS
1	Exogenous Glutamate Concentration Regulates the Metabolic Fate of Glutamate in Astrocytes. <i>Journal of Neurochemistry</i> , 1996, 66, 386-393.	4.0	337
2	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.	4.6	284
3	Glutamate transport and metabolism in astrocytes. <i>Glia</i> , 1997, 21, 56-63.	5.3	237
4	Trafficking between glia and neurons of TCA cycle intermediates and related metabolites. <i>Glia</i> , 1997, 21, 99-105.	5.3	184
5	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
6	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
7	Trafficking of Amino Acids between Neurons and Glia In Vivo. Effects of Inhibition of Glial Metabolism by Fluoroacetate. <i>Journal of Cerebral Blood Flow and Metabolism</i> , 1997, 17, 1230-1238.	4.6	163
8	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
9	Glia-Neuronal Interactions as Studied by Cerebral Metabolism of [ <sup>13</sup> C]Acetate and [ <sup>13</sup> C]Glucose: An Ex Vivo <sup>13</sup> C NMR Spectroscopic Study. <i>Journal of Neurochemistry</i> , 1995, 64, 2773-2782.	4.0	149
10	The GABA Paradox. <i>Journal of Neurochemistry</i> , 1999, 73, 1335-1342.	4.0	142
11	Glutamate synthesis has to be matched by its degradation – where do all the carbons go?. <i>Journal of Neurochemistry</i> , 2014, 131, 399-406.	4.0	139
12	Neuronal-glial interactions in rats fed a ketogenic diet. <i>Neurochemistry International</i> , 2006, 48, 498-507.	3.9	132
13	Evaluation of the importance of transamination versus deamination in astrocytic metabolism of [U- <sup>13</sup> C] glutamate. <i>Glia</i> , 1996, 17, 160-168.	5.3	101
14	Pharmacology and Toxicology of Astrocyte-Neuron Glutamate Transport and Cycling. <i>Journal of Pharmacology and Experimental Therapeutics</i> , 2002, 301, 1-6.	2.4	90
15	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
16	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
17	Glutamate oxidation in astrocytes: Roles of glutamate dehydrogenase and aminotransferases. <i>Journal of Neuroscience Research</i> , 2016, 94, 1561-1571.	3.0	86
18	Energy Metabolism of the Brain. , 2012, , 200-231.		85

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19	Glial Formation of Pyruvate and Lactate from TCA Cycle Intermediates: Implications for the Inactivation of Transmitter Amino Acids?. <i>Journal of Neurochemistry</i> , 1995, 65, 2227-2234.	4.0	83
20	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
21	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
22	Expression of glutamine synthetase and glutamate dehydrogenase in the latent phase and chronic phase in the kainate model of temporal lobe epilepsy. <i>Glia</i> , 2008, 56, 856-868.	5.3	78
23	Glucose metabolism and astrocyte-neuron interactions in the neonatal brain. <i>Neurochemistry International</i> , 2015, 82, 33-41.	3.9	77
24	Characterization of glucose-related metabolic pathways in differentiated rat oligodendrocyte lineage cells. <i>Glia</i> , 2016, 64, 21-34.	5.3	75
25	Metabolic distinction between vesicular and cytosolic GABA in cultured GABAergic neurons using <sup>13</sup> C magnetic resonance spectroscopy. <i>Journal of Neuroscience Research</i> , 2001, 63, 347-355.	3.0	74
26	How do glial-neuronal interactions fit into current neurotransmitter hypotheses of schizophrenia?. <i>Neurochemistry International</i> , 2007, 50, 291-301.	3.9	74
27	Brain metabolism in adult chronic hydrocephalus. <i>Journal of Neurochemistry</i> , 2008, 106, 1515-1524.	4.0	74
28	In Vivo Injection of [1- <sup>13</sup> C]Glucose and [1,2- <sup>13</sup> C]Acetate Combined with Ex Vivo <sup>13</sup> C Nuclear Magnetic Resonance Spectroscopy: A Novel Approach to the Study of Middle Cerebral Artery Occlusion in the Rat. <i>Journal of Cerebral Blood Flow and Metabolism</i> , 1998, 18, 1223-1232.	4.6	73
29	Glial-Neuronal Interactions are Impaired in the Schizophrenia Model of Repeated MK801 Exposure. <i>Neuropsychopharmacology</i> , 2006, 31, 1880-1887.	5.6	73
30	Elucidation of the quantitative significance of pyruvate carboxylation in cultured cerebellar neurons and astrocytes. <i>Journal of Neuroscience Research</i> , 2001, 66, 763-770.	3.0	72
31	Differences in Neurotransmitter Synthesis and Intermediary Metabolism between Glutamatergic and GABAergic Neurons during 4 Hours of Middle Cerebral Artery Occlusion in the Rat: The Role of Astrocytes in Neuronal Survival. <i>Journal of Cerebral Blood Flow and Metabolism</i> , 2001, 21, 1451-1463.	4.6	72
32	Metabolism is Normal in Astrocytes in Chronically Epileptic Rats: A <sup>13</sup> C NMR Study of Neuronal-Glial Interactions in a Model of Temporal Lobe Epilepsy. <i>Journal of Cerebral Blood Flow and Metabolism</i> , 2005, 25, 1254-1264.	4.6	72
33	Chronic acetyl-L-carnitine alters brain energy metabolism and increases noradrenaline and serotonin content in healthy mice. <i>Neurochemistry International</i> , 2012, 61, 100-107.	3.9	72
34	Metabolic Aspects of Neuron-Oligodendrocyte-Astrocyte Interactions. <i>Frontiers in Endocrinology</i> , 2013, 4, 54.	3.5	71
35	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.	4.6	70
36	Triheptanoin-A medium chain triglyceride with odd chain fatty acids: A new anaplerotic anticonvulsant treatment?. <i>Epilepsy Research</i> , 2012, 100, 239-244.	1.7	69

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37	Quantification of the GABA Shunt and the Importance of the GABA Shunt Versus the $\alpha$ -oxoglutarate Dehydrogenase Pathway in GABAergic Neurons. <i>Journal of Neurochemistry</i> , 1998, 71, 1511-1518.	4.0	67
38	Neuronal glial interaction in different neurological diseases studied by <i>ex vivo</i> $^{13}\text{C}$ NMR spectroscopy. <i>NMR in Biomedicine</i> , 2003, 16, 424-429.	2.9	66
39	Repeated injection of MK801: An animal model of schizophrenia?. <i>Neurochemistry International</i> , 2006, 48, 541-546.	3.9	63
40	Altered Astrocyte-Neuronal Interactions After Hypoxia-Ischemia in the Neonatal Brain in Female and Male Rats. <i>Stroke</i> , 2014, 45, 2777-2785.	5.3	63
41	Synthesis of vesicular GABA from glutamine involves TCA cycle metabolism in neocortical neurons. <i>Journal of Neuroscience Research</i> , 1999, 57, 342-349.	3.0	62
42	Neuronal and Astrocytic Metabolism in a Transgenic Rat Model of Alzheimer's Disease. <i>Journal of Cerebral Blood Flow and Metabolism</i> , 2014, 34, 906-914.	4.6	60
43	MRS study of glutamate metabolism in cultured neurons/glia. <i>Neurochemical Research</i> , 1996, 21, 987-993.	3.3	58
44	Pyruvate recycling in cultured neurons from cerebellum. <i>Journal of Neuroscience Research</i> , 2007, 85, 3318-3325.	3.0	58
45	$[\text{U-}^{13}\text{C}]$ glutamate metabolism in astrocytes during hypoglycemia and hypoxia. <i>Journal of Neuroscience Research</i> , 1998, 51, 636-645.	3.0	57
46	Glutamate Metabolism is Impaired in Transgenic Mice with Tau Hyperphosphorylation. <i>Journal of Cerebral Blood Flow and Metabolism</i> , 2013, 33, 684-691.	4.6	57
47	Brain Mitochondrial Metabolic Dysfunction and Glutamate Level Reduction in the Pilocarpine Model of Temporal Lobe Epilepsy in Mice. <i>Journal of Cerebral Blood Flow and Metabolism</i> , 2013, 33, 1090-1097.	4.6	57
48	Differential expression of glutamate dehydrogenase in cultured neurons and astrocytes from mouse cerebellum and cerebral cortex. <i>Journal of Neuroscience Research</i> , 2001, 66, 909-913.	3.0	55
49	Differential roles of alanine in GABAergic and glutamatergic neurons. <i>Neurochemistry International</i> , 2003, 43, 311-315.	3.9	55
50	Quantitative Importance of the Pentose Phosphate Pathway Determined by Incorporation of $^{13}\text{C}$ from $[\text{2-}^{13}\text{C}]$ - and $[\text{3-}^{13}\text{C}]$ Glucose into TCA Cycle Intermediates and Neurotransmitter Amino Acids in Functionally Intact Neurons. <i>Journal of Cerebral Blood Flow and Metabolism</i> , 2012, 32, 1788-1799.	4.6	54
51	Inhibitors of the $\alpha$ -ketoglutarate dehydrogenase complex alter $[\text{1-}^{13}\text{C}]$ glucose and $[\text{U-}^{13}\text{C}]$ glutamate metabolism in cerebellar granule neurons. <i>Journal of Neuroscience Research</i> , 2006, 83, 450-458.	3.0	51
52	Availability of neurotransmitter glutamate is diminished when $\beta$ -hydroxybutyrate replaces glucose in cultured neurons. <i>Journal of Neurochemistry</i> , 2009, 110, 80-91.	4.0	51
53	Limbic Structures Show Altered Glial-Neuronal Metabolism in the Chronic Phase of Kainate Induced Epilepsy. <i>Neurochemical Research</i> , 2008, 33, 257-266.	3.3	50
54	First direct demonstration of extensive GABA synthesis in mouse cerebellar neuronal cultures. <i>Journal of Neurochemistry</i> , 2004, 91, 796-803.	4.0	49

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55	Triheptanoin partially restores levels of tricarboxylic acid cycle intermediates in the mouse pilocarpine model of epilepsy. <i>Journal of Neurochemistry</i> , 2014, 129, 107-119.	4.0	49
56	The <sc>GLT</sc>1 (<sc>EAAT</sc>2; slc1a2) glutamate transporter is essential for glutamate homeostasis in the neocortex of the mouse. <i>Journal of Neurochemistry</i> , 2014, 128, 641-649.	4.0	48
57	Metabolic compartmentation in cortical synaptosomes: influence of glucose and preferential incorporation of endogenous glutamate into GABA. <i>Neurochemical Research</i> , 2002, 27, 43-50.	3.3	47
58	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
59	Mild reduction in the activity of the Î±-ketoglutarate dehydrogenase complex elevates GABA shunt and glycolysis. <i>Journal of Neurochemistry</i> , 2009, 109, 214-221.	4.0	46
60	Glutamate decreases pyruvate carboxylase activity and spares glucose as energy substrate in cultured cerebellar astrocytes. <i>Journal of Neuroscience Research</i> , 2001, 66, 1127-1132.	3.0	43
61	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
62	The Pentose Phosphate Pathway and Pyruvate Carboxylation after Neonatal Hypoxic-Ischemic Brain Injury. <i>Journal of Cerebral Blood Flow and Metabolism</i> , 2014, 34, 724-734.	4.6	43
63	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.	3.8	43
64	Intracellular metabolic compartmentation assessed by <sup>13</sup> C magnetic resonance spectroscopy. <i>Neurochemistry International</i> , 2004, 45, 305-310.	3.9	42
65	Glutamate is Preferred over Glutamine for Intermediary Metabolism in Cultured Cerebellar Neurons. <i>Journal of Cerebral Blood Flow and Metabolism</i> , 2007, 27, 811-820.	4.6	41
66	Introduction to the Glutamateâ€“Glutamine Cycle. <i>Advances in Neurobiology</i> , 2016, 13, 1-7.	0.0	41
67	Lactate formation from [U- <sup>13</sup> C]aspartate in cultured astrocytes: compartmentation of pyruvate metabolism. <i>Neuroscience Letters</i> , 1997, 237, 117-120.	2.1	40
68	Glucose and Intermediary Metabolism and Astrocyteâ€“Neuron Interactions Following Neonatal Hypoxiaâ€“Ischemia in Rat. <i>Neurochemical Research</i> , 2017, 42, 115-132.	3.3	40
69	Neuronâ€“Astrocyte Interactions, Pyruvate Carboxylation and the Pentose Phosphate Pathway in the Neonatal Rat Brain. <i>Neurochemical Research</i> , 2014, 39, 556-569.	3.3	39
70	Cortical Glutamate Metabolism is Enhanced in a Genetic Model of Absence Epilepsy. <i>Journal of Cerebral Blood Flow and Metabolism</i> , 2006, 26, 1496-1506.	4.6	37
71	Astrocytic pyruvate carboxylation: Status after 35 years. <i>Journal of Neuroscience Research</i> , 2019, 97, 890-896.	3.0	37
72	[U- <sup>13</sup> C]aspartate metabolism in cultured cortical astrocytes and cerebellar granule neurons studied by NMR spectroscopy. <i>Glia</i> , 1998, 23, 271-277.	5.3	36

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73	Alterations in brain metabolism, CNS morphology and CSF dynamics in adult rats with kaolin-induced hydrocephalus. <i>Brain Research</i> , 2002, 927, 35-41.	2.3	36
74	Pentylentetrazole decreases metabolic glutamate turnover in rat brain. <i>Journal of Neurochemistry</i> , 2003, 85, 1200-1207.	4.0	36
75	A comprehensive metabolic profile of cultured astrocytes using isotopic transient metabolic flux analysis and <sup>13</sup> C-labeled glucose. <i>Frontiers in Neuroenergetics</i> , 2011, 3, 5.	5.0	36
76	Altered neurochemical profile in the M <sup>1</sup> Gill <sup>1</sup> R <sup>1</sup> T <sup>1</sup> hy1 <sup>1</sup> APP <sup>1</sup> rat model of Alzheimer's disease: a longitudinal <i>in vivo</i> <sup>1</sup> H <sup>1</sup> MRS <sup>1</sup> study. <i>Journal of Neurochemistry</i> , 2012, 123, 532-541.	4.0	35
77	Proton magnetic resonance spectroscopy of cerebrospinal fluid in neurodegenerative disease: Indication of glial energy impairment in Huntington chorea, but not Parkinson disease. <i>Journal of Neuroscience Research</i> , 2000, 60, 779-782.	3.0	34
78	Hypoglutamatergic activity in the STOP knockout mouse: A potential model for chronic untreated schizophrenia. <i>Journal of Neuroscience Research</i> , 2007, 85, 3487-3493.	3.0	34
79	Pyruvate Carboxylation in Different Model Systems Studied by <sup>13</sup> C MRS. <i>Neurochemical Research</i> , 2010, 35, 1916-1921.	3.3	34
80	Role of Astrocytes in Glutamate Homeostasis. <i>Advances in Experimental Medicine and Biology</i> , 1997, 429, 195-206.	0.0	34
81	Glutamate neurotransmission is affected in prenatally stressed offspring. <i>Neurochemistry International</i> , 2015, 88, 73-87.	3.9	32
82	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
83	Glial-neuronal interactions following kainate injection in rats. <i>Neurochemistry International</i> , 2003, 42, 101-106.	3.9	30
84	Reduced Astrocytic Contribution to the Turnover of Glutamate, Glutamine, and GABA Characterizes the Latent Phase in the Kainate Model of Temporal Lobe Epilepsy. <i>Journal of Cerebral Blood Flow and Metabolism</i> , 2011, 31, 1675-1686.	4.6	30
85	Decreased glutamate metabolism in cultured astrocytes in the presence of thiopental. <i>Biochemical Pharmacology</i> , 1999, 58, 1075-1080.	4.6	29
86	Estimation of intracellular fluxes in cerebellar neurons after hypoglycemia: Importance of the pyruvate recycling pathway and glutamine oxidation. <i>Journal of Neuroscience Research</i> , 2011, 89, 700-710.	3.0	29
87	Quantification of Metabolic Rearrangements During Neural Stem Cells Differentiation into Astrocytes by Metabolic Flux Analysis. <i>Neurochemical Research</i> , 2017, 42, 244-253.	3.3	29
88	Impaired glutamine metabolism in NMDA receptor hypofunction induced by MK801. <i>Journal of Neurochemistry</i> , 2005, 94, 1594-1603.	4.0	28
89	Lactate metabolism in mouse brain astrocytes studied by [ <sup>13</sup> C]NMR spectroscopy. <i>NeuroReport</i> , 1995, 6, 2201-2204.	1.2	27
90	Alteration of glial-neuronal metabolic interactions in a mouse model of Alexander disease. <i>Glia</i> , 2010, 58, 1228-1234.	5.3	26

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91	Glutamate: Where does it come from and where does it go?. <i>Neurochemistry International</i> , 2015, 88, 47-52.	3.9	26
92	Astrocytes may play a role in the etiology of absence epilepsy: A comparison between immature GAERS not yet expressing seizures and adults. <i>Neurobiology of Disease</i> , 2007, 28, 227-235.	4.5	25
93	Altered <sup>13</sup> C Glucose Metabolism in the Cortico-Striato-Thalamo-Cortical Loop in the MK-801 Rat Model of Schizophrenia. <i>Journal of Cerebral Blood Flow and Metabolism</i> , 2011, 31, 976-985.	4.6	25
94	[U-13C]Glutamate metabolism in rat brain mitochondria reveals malic enzyme activity. <i>NeuroReport</i> , 1997, 8, 1567-1570.	1.2	23
95	Î±-Ketoisocaproate Alters the Production of Both Lactate and Aspartate from [U-13C]Glutamate in Astrocytes: A 13C NMR Study. <i>Journal of Neurochemistry</i> , 2002, 70, 1001-1008.	4.0	23
96	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, 572-578.	3.9	23
97	Carbon monoxide improves neuronal differentiation and yield by increasing the functioning and number of mitochondria. <i>Journal of Neurochemistry</i> , 2016, 138, 423-435.	4.0	23
98	Changes of glial-neuronal interaction and metabolism after a subconvulsive dose of pentylenetetrazole. <i>Neurochemistry International</i> , 2004, 45, 739-745.	3.9	22
99	System N transporters are critical for glutamine release and modulate metabolic fluxes of glucose and acetate in cultured cortical astrocytes: changes induced by ammonia. <i>Journal of Neurochemistry</i> , 2016, 136, 329-338.	4.0	22
100	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, 671-680.	3.3	21
101	Direct measurement of backflux between oxaloacetate and fumarate following pyruvate carboxylation. <i>Glia</i> , 2012, 60, 147-158.	5.3	21
102	Amino acid neurotransmitter metabolism in neurones and glia following kainate injection in rats. <i>Neuroscience Letters</i> , 2000, 279, 169-172.	2.1	20
103	Î²-Hydroxybutyrate is the preferred substrate for GABA and glutamate synthesis while glucose is indispensable during depolarization in cultured GABAergic neurons. <i>Neurochemistry International</i> , 2011, 59, 309-318.	3.9	19
104	Region- and Age-Dependent Alterations of Glial-Neuronal Metabolic Interactions Correlate with CNS Pathology in a Mouse Model of Globoid Cell Leukodystrophy. <i>Journal of Cerebral Blood Flow and Metabolism</i> , 2013, 33, 1127-1137.	4.6	19
105	Astrocyte-neuronal interactions in epileptogenesis. <i>Journal of Neuroscience Research</i> , 2015, 93, 1157-1164.	3.0	19
106	No improvement of neuronal metabolism in the reperfusion phase with melatonin treatment after hypoxic-ischemic brain injury in the neonatal rat. <i>Journal of Neurochemistry</i> , 2016, 136, 339-350.	4.0	19
107	The role of glia in neuronal recovery following anoxia: In vitro evidence of neuronal adaptation. <i>Neurochemistry International</i> , 2011, 58, 665-675.	3.9	18
108	Brain [U- <sup>13</sup> C]glucose metabolism in mice with decreased Î±-ketoglutarate dehydrogenase complex activity. <i>Journal of Neuroscience Research</i> , 2011, 89, 1997-2007.	3.0	18

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109	Acetyl-L-carnitine versus placebo for migraine prophylaxis: A randomized, triple-blind, crossover study. <i>Cephalalgia</i> , 2015, 35, 987-995.	4.2	18
110	Oligodendrocytes: Development, Physiology and Glucose Metabolism. <i>Advances in Neurobiology</i> , 2016, 13, 275-294.	0.0	18
111	Astrocyte metabolism is disturbed in the early development of experimental hydrocephalus. <i>Journal of Neurochemistry</i> , 2003, 85, 274-281.	4.0	17
112	Neuronal hyperexcitability and seizures are associated with changes in glial-neuronal interactions in the hippocampus of a mouse model of epilepsy with mental retardation. <i>Journal of Neurochemistry</i> , 2010, 115, 1445-1454.	4.0	17
113	[2,4- <sup>13</sup> C] <sup>2</sup> -hydroxybutyrate Metabolism in Astrocytes and C6 Glioblastoma Cells. <i>Neurochemical Research</i> , 2011, 36, 1566-1573.	3.3	17
114	Functional metabolic interactions of human neuron-astrocyte 3D in vitro networks. <i>Scientific Reports</i> , 2016, 6, 33285.	3.4	16
115	NMR spectroscopy study of the effect of 3-nitropropionic acid on glutamate metabolism in cultured astrocytes. <i>Journal of Neuroscience Research</i> , 1997, 47, 642-649.	3.0	15
116	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
117	Oligodendrocytes Do Not Export NAA-Derived Aspartate In Vitro. <i>Neurochemical Research</i> , 2017, 42, 827-837.	3.3	15
118	Effect of glutamine and GABA on [U- <sup>13</sup> C]glutamate metabolism in cerebellar astrocytes and granule neurons. <i>Journal of Neuroscience Research</i> , 2001, 66, 885-890.	3.0	14
119	Effects of pentylenetetrazole and glutamate on metabolism of [U- <sup>13</sup> C]glucose in cultured cerebellar granule neurons. <i>Neurochemistry International</i> , 2002, 40, 181-187.	3.9	14
120	Energy and Amino Acid Neurotransmitter Metabolism in Astrocytes. , 2009, , 177-200.		14
121	Dietary supplementation with acetyl-L-carnitine in seizure treatment of pentylenetetrazole kindled mice. <i>Neurochemistry International</i> , 2012, 61, 444-454.	3.9	14
122	Anaplerosis for Glutamate Synthesis in the Neonate and in Adulthood. <i>Advances in Neurobiology</i> , 2016, 13, 43-58.	0.0	12
123	Modification of Astrocyte Metabolism as an Approach to the Treatment of Epilepsy: Triheptanoin and Acetyl-L-Carnitine. <i>Neurochemical Research</i> , 2016, 41, 86-95.	3.3	12
124	Pentylenetetrazole affects metabolism of astrocytes in culture. <i>Journal of Neuroscience Research</i> , 2005, 79, 48-54.	3.0	11
125	The anticonvulsant actions of carisbamate associate with alterations in astrocyte glutamine metabolism in the lithium-pilocarpine epilepsy model. <i>Journal of Neurochemistry</i> , 2015, 132, 532-545.	4.0	11
126	Effect of orotic acid on the metabolism of cerebral cortical astrocytes during hypoxia and reoxygenation: an NMR spectroscopy study. <i>Journal of Neuroscience Research</i> , 1998, 51, 103.	3.0	9



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127	Effects of potassium and glutamine on metabolism of glucose in astrocytes. <i>Neurochemical Research</i> , 2002, 27, 167-171.	3.3	9
128	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.	3.0	8
129	Tricarboxylic Acid Cycle Activity Measured by <sup>13</sup> C Magnetic Resonance Spectroscopy in Rats Subjected to the Kaolin Model of Obstructed Hydrocephalus. <i>Neurochemical Research</i> , 2011, 36, 1801-1808.	3.3	6
130	Citrate, beneficial or deleterious in the CNS?. <i>Neurochemical Research</i> , 2002, 27, 155-159.	3.3	4
131	Long-term kainic acid exposure reveals compartmentation of glutamate and glutamine metabolism in cultured cerebellar neurons. <i>Neurochemistry International</i> , 2007, 50, 1004-1013.	3.9	3
132	Synthesis of vesicular GABA from glutamine involves TCA cycle metabolism in neocortical neurons. <i>Journal of Neuroscience Research</i> , 1999, 57, 342-349.	3.0	2
133	<sup>13</sup> C NMR Spectroscopy as a Tool in Neurobiology. <i>Advances in Neurobiology</i> , 2012, , 221-253.	0.0	2