

# Ursula Sonnewald

## List of Publications by Year in descending order

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138  
papers

7,387  
citations

41344

49  
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71685

76  
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139  
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139  
docs citations

139  
times ranked

6475  
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.	3.9	332
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.	4.4	278
3	Glutamate transport and metabolism in astrocytes. <i>Glia</i> , 1997, 21, 56-63.	4.9	235
4	Trafficking between glia and neurons of TCA cycle intermediates and related metabolites. , 1997, 21, 99-105.		180
5	The Glutamineâ€“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	177
6	A Possible Role of Alanine for Ammonia Transfer Between Astrocytes and Glutamatergic Neurons. <i>Journal of Neurochemistry</i> , 2002, 75, 471-479.	3.9	173
7	Glutamate and Glutamine Metabolism and Compartmentation in Astrocytes. <i>Developmental Neuroscience</i> , 1993, 15, 359-366.	2.0	165
8	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.	4.3	162
9	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.	4.3	153
10	Glialâ€“Neuronal Interactions as Studied by Cerebral Metabolism of [ <sup>2</sup> â€“sup>13</sup>C]Acetate and [ <sup>1</sup> â€“sup>13</sup>C]Glucose: An Ex Vivo <sup>13</sup>C NMR Spectroscopic Study. <i>Journal of Neurochemistry</i> , 1995, 64, 2773-2782.	3.9	147
11	The GABA Paradox. <i>Journal of Neurochemistry</i> , 1999, 73, 1335-1342.	3.9	140
12	Glutamate synthesis has to be matched by its degradation â€“ where do all the carbons go?. <i>Journal of Neurochemistry</i> , 2014, 131, 399-406.	3.9	133
13	Neuronalâ€“glial interactions in rats fed a ketogenic diet. <i>Neurochemistry International</i> , 2006, 48, 498-507.	3.8	130
14	&lt;sup>13</sup>C MR Spectroscopy Study of Lactate as Substrate for Rat Brain. <i>Developmental Neuroscience</i> , 2000, 22, 429-436.	2.0	119
15	Evaluation of the importance of transamination versus deamination in astrocytic metabolism of [U- <sup>13</sup> C] glutamate. , 1996, 17, 160-168.		99
16	Pharmacology and Toxicology of Astrocyte-Neuron Glutamate Transport and Cycling. <i>Journal of Pharmacology and Experimental Therapeutics</i> , 2002, 301, 1-6.	2.5	89
17	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.	3.8	89
18	Uptake, Release, and Metabolism of Citrate in Neurons and Astrocytes in Primary Cultures. <i>Journal of Neurochemistry</i> , 1994, 62, 1727-1733.	3.9	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.	3.9	82
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.	4.9	80
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	Glutamate oxidation in astrocytes: Roles of glutamate dehydrogenase and aminotransferases. <i>Journal of Neuroscience Research</i> , 2016, 94, 1561-1571.	2.9	80
23	Energy Metabolism of the Brain. , 2012, , 200-231.		79
24	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.	4.9	77
25	Brain metabolism in adult chronic hydrocephalus. <i>Journal of Neurochemistry</i> , 2008, 106, 1515-1524.	3.9	74
26	Glucose metabolism and astrocyte-neuron interactions in the neonatal brain. <i>Neurochemistry International</i> , 2015, 82, 33-41.	3.8	74
27	In Vivo Injection of [1-13C]Glucose and [1,2-13C]Acetate Combined with Ex Vivo 13C 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.	4.3	73
28	Metabolic distinction between vesicular and cytosolic GABA in cultured GABAergic neurons using 13C magnetic resonance spectroscopy. <i>Journal of Neuroscience Research</i> , 2001, 63, 347-355.	2.9	73
29	How do glial-neuronal interactions fit into current neurotransmitter hypotheses of schizophrenia?. <i>Neurochemistry International</i> , 2007, 50, 291-301.	3.8	73
30	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.	4.3	72
31	Metabolism is Normal in Astrocytes in Chronically Epileptic Rats: A 13C 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.	4.3	72
32	Glial-Neuronal Interactions are Impaired in the Schizophrenia Model of Repeated MK801 Exposure. <i>Neuropsychopharmacology</i> , 2006, 31, 1880-1887.	5.4	72
33	Elucidation of the quantitative significance of pyruvate carboxylation in cultured cerebellar neurons and astrocytes. <i>Journal of Neuroscience Research</i> , 2001, 66, 763-770.	2.9	71
34	Characterization of glucose-related metabolic pathways in differentiated rat oligodendrocyte lineage cells. <i>Glia</i> , 2016, 64, 21-34.	4.9	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.	4.3	70
36	Metabolic Aspects of Neuron-Oligodendrocyte-Astrocyte Interactions. <i>Frontiers in Endocrinology</i> , 2013, 4, 54.	3.5	70

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37	Triheptanoin—A medium chain triglyceride with odd chain fatty acids: A new anaplerotic anticonvulsant treatment?. <i>Epilepsy Research</i> , 2012, 100, 239-244.	1.6	68
38	Quantification of the GABA Shunt and the Importance of the GABA Shunt Versus the 2-oxoglutarate Dehydrogenase Pathway in GABAergic Neurons. <i>Journal of Neurochemistry</i> , 1998, 71, 1511-1518.	3.9	66
39	Neuronal glial interaction in different neurological diseases studied by ex vivo <sup>13</sup> C NMR spectroscopy. <i>NMR in Biomedicine</i> , 2003, 16, 424-429.	2.8	66
40	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.	3.8	65
41	Repeated injection of MK801: An animal model of schizophrenia?. <i>Neurochemistry International</i> , 2006, 48, 541-546.	3.8	63
42	Synthesis of vesicular GABA from glutamine involves TCA cycle metabolism in neocortical neurons. <i>Journal of Neuroscience Research</i> , 1999, 57, 342-349.	2.9	61
43	Altered Astrocyte—Neuronal Interactions After Hypoxia-Ischemia in the Neonatal Brain in Female and Male Rats. <i>Stroke</i> , 2014, 45, 2777-2785.	2.0	61
44	Pyruvate recycling in cultured neurons from cerebellum. <i>Journal of Neuroscience Research</i> , 2007, 85, 3318-3325.	2.9	58
45	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.	4.3	58
46	MRS study of glutamate metabolism in cultured neurons/glia. <i>Neurochemical Research</i> , 1996, 21, 987-993.	3.3	57
47	[U- <sup>13</sup> C]glutamate metabolism in astrocytes during hypoglycemia and hypoxia. <i>Journal of Neuroscience Research</i> , 1998, 51, 636-645.	2.9	57
48	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.	4.3	57
49	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.	2.9	55
50	Differential roles of alanine in GABAergic and glutamatergic neurons. <i>Neurochemistry International</i> , 2003, 43, 311-315.	3.8	54
51	Quantitative Importance of the Pentose Phosphate Pathway Determined by Incorporation of <sup>13</sup> C from [2- <sup>13</sup> C]- and [3- <sup>13</sup> 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.	4.3	54
52	Glutamate Metabolism is Impaired in Transgenic Mice with Tau Hyperphosphorylation. <i>Journal of Cerebral Blood Flow and Metabolism</i> , 2013, 33, 684-691.	4.3	54
53	Availability of neurotransmitter glutamate is diminished when $\beta$ -hydroxybutyrate replaces glucose in cultured neurons. <i>Journal of Neurochemistry</i> , 2009, 110, 80-91.	3.9	51
54	Inhibitors of the $\alpha$ -ketoglutarate dehydrogenase complex alter [1- <sup>13</sup> C]glucose and [U- <sup>13</sup> C]glutamate metabolism in cerebellar granule neurons. <i>Journal of Neuroscience Research</i> , 2006, 83, 450-458.	2.9	50

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55	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
56	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.	3.9	49
57	First direct demonstration of extensive GABA synthesis in mouse cerebellar neuronal cultures. <i>Journal of Neurochemistry</i> , 2004, 91, 796-803.	3.9	48
58	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
59	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
60	Mild reduction in the activity of the $\alpha$ -ketoglutarate dehydrogenase complex elevates GABA shunt and glycolysis. <i>Journal of Neurochemistry</i> , 2009, 109, 214-221.	3.9	46
61	The $\text{GLT-1}$ ( $\text{EAAT2}$ ; $\text{slc1a2}$ ) glutamate transporter is essential for glutamate homeostasis in the neocortex of the mouse. <i>Journal of Neurochemistry</i> , 2014, 128, 641-649.	3.9	45
62	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
63	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.	4.3	43
64	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.	2.9	42
65	Intracellular metabolic compartmentation assessed by $^{13}\text{C}$ magnetic resonance spectroscopy. <i>Neurochemistry International</i> , 2004, 45, 305-310.	3.8	42
66	Deletion of Neuronal $\text{GLT-1}$ in Mice Reveals Its Role in Synaptic Glutamate Homeostasis and Mitochondrial Function. <i>Journal of Neuroscience</i> , 2019, 39, 4847-4863.	3.6	42
67	Lactate formation from $[\text{U-}^{13}\text{C}]\text{aspartate}$ in cultured astrocytes: compartmentation of pyruvate metabolism. <i>Neuroscience Letters</i> , 1997, 237, 117-120.	2.1	40
68	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.	4.3	40
69	Neuron-Astrocyte Interactions, Pyruvate Carboxylation and the Pentose Phosphate Pathway in the Neonatal Rat Brain. <i>Neurochemical Research</i> , 2014, 39, 556-569.	3.3	38
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.	4.3	37
71	Glucose and Intermediary Metabolism and Astrocyte-Neuron Interactions Following Neonatal Hypoxia-Ischemia in Rat. <i>Neurochemical Research</i> , 2017, 42, 115-132.	3.3	37
72	Astrocytic pyruvate carboxylation: Status after 35 years. <i>Journal of Neuroscience Research</i> , 2019, 97, 890-896.	2.9	37

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73	[U-13C]aspartate metabolism in cultured cortical astrocytes and cerebellar granule neurons studied by NMR spectroscopy. , 1998, 23, 271-277.		36
74	Alterations in brain metabolism, CNS morphology and CSF dynamics in adult rats with kaolin-induced hydrocephalus. Brain Research, 2002, 927, 35-41.	2.2	36
75	Pentylentetrazole decreases metabolic glutamate turnover in rat brain. Journal of Neurochemistry, 2003, 85, 1200-1207.	3.9	36
76	A comprehensive metabolic profile of cultured astrocytes using isotopic transient metabolic flux analysis and 13C-labeled glucose. Frontiers in Neuroenergetics, 2011, 3, 5.	5.3	35
77	Introduction to the Glutamateâ€“Glutamine Cycle. Advances in Neurobiology, 2016, 13, 1-7.	1.8	35
78	Proton magnetic resonance spectroscopy of cerebrospinal fluid in neurodegenerative disease: Indication of glial energy impairment in Huntington chorea, but not Parkinson disease. Journal of Neuroscience Research, 2000, 60, 779-782.	2.9	34
79	Hypoglutamatergic activity in the STOP knockout mouse: A potential model for chronic untreated schizophrenia. Journal of Neuroscience Research, 2007, 85, 3487-3493.	2.9	34
80	Altered neurochemical profile in the <sc>M</sc>cGillâ€“<sc>R</sc>â€“<sc>T</sc>hy1â€“<sc>APP</sc> rat model of <sc>A</sc>lzheimer's disease: a longitudinal <i>in vivo</i><sup>1</sup>H<sc>MRS</sc> study. Journal of Neurochemistry, 2012, 123, 532-541.	3.9	34
81	Role of Astrocytes in Glutamate Homeostasis. Advances in Experimental Medicine and Biology, 1997, 429, 195-206.	1.6	34
82	Pyruvate Carboxylation in Different Model Systems Studied by 13C MRS. Neurochemical Research, 2010, 35, 1916-1921.	3.3	33
83	Glutamate neurotransmission is affected in prenatally stressed offspring. Neurochemistry International, 2015, 88, 73-87.	3.8	32
84	Metabolic Mapping of Astrocytes and Neurons in Culture Using Stable Isotopes and Gas Chromatography-Mass Spectrometry (GC-MS). Neuromethods, 2014, , 73-105.	0.3	31
85	Glialâ€“neuronal interactions following kainate injection in rats. Neurochemistry International, 2003, 42, 101-106.	3.8	30
86	Reduced Astrocytic Contribution to the Turnover of Glutamate, Glutamine, and GABA Characterizes the Latent Phase in the Kainate Model of Temporal Lobe Epilepsy. Journal of Cerebral Blood Flow and Metabolism, 2011, 31, 1675-1686.	4.3	30
87	Decreased glutamate metabolism in cultured astrocytes in the presence of thiopental. Biochemical Pharmacology, 1999, 58, 1075-1080.	4.4	29
88	Estimation of intracellular fluxes in cerebellar neurons after hypoglycemia: Importance of the pyruvate recycling pathway and glutamine oxidation. Journal of Neuroscience Research, 2011, 89, 700-710.	2.9	29
89	Quantification of Metabolic Rearrangements During Neural Stem Cells Differentiation into Astrocytes by Metabolic Flux Analysis. Neurochemical Research, 2017, 42, 244-253.	3.3	28
90	Lactate metabolism in mouse brain astrocytes studied by [13C]NMR spectroscopy. NeuroReport, 1995, 6, 2201-2204.	1.2	27

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91	Impaired glutamine metabolism in NMDA receptor hypofunction induced by MK801. <i>Journal of Neurochemistry</i> , 2005, 94, 1594-1603.	3.9	27
92	Alteration of glial-neuronal metabolic interactions in a mouse model of Alexander disease. <i>Glia</i> , 2010, 58, 1228-1234.	4.9	26
93	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.	4.4	24
94	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.	4.3	24
95	[U-13C]Glutamate metabolism in rat brain mitochondria reveals malic enzyme activity. <i>NeuroReport</i> , 1997, 8, 1567-1570.	1.2	23
96	±-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.	3.9	23
97	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.	3.8	23
98	Glutamate: Where does it come from and where does it go?. <i>Neurochemistry International</i> , 2015, 88, 47-52.	3.8	23
99	Changes of glial-neuronal interaction and metabolism after a subconvulsive dose of pentylentetrazole. <i>Neurochemistry International</i> , 2004, 45, 739-745.	3.8	22
100	Carbon monoxide improves neuronal differentiation and yield by increasing the functioning and number of mitochondria. <i>Journal of Neurochemistry</i> , 2016, 138, 423-435.	3.9	22
101	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
102	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.	3.9	21
103	Amino acid neurotransmitter metabolism in neurones and glia following kainate injection in rats. <i>Neuroscience Letters</i> , 2000, 279, 169-172.	2.1	20
104	Direct measurement of backflux between oxaloacetate and fumarate following pyruvate carboxylation. <i>Glia</i> , 2012, 60, 147-158.	4.9	20
105	Metabolism of <sup>13</sup> C-Malate in Primary Cultures of Mouse Astrocytes. <i>Developmental Neuroscience</i> , 2000, 22, 456-462.	2.0	19
106	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.	4.3	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.	3.8	18
108	±-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.	3.8	18

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109	Brain [ <sup>13</sup> C]glucose metabolism in mice with decreased $\pm$ ketoglutarate dehydrogenase complex activity. <i>Journal of Neuroscience Research</i> , 2011, 89, 1997-2007.	2.9	18
110	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.	3.9	18
111	Astrocyte metabolism is disturbed in the early development of experimental hydrocephalus. <i>Journal of Neurochemistry</i> , 2003, 85, 274-281.	3.9	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.	3.9	17
113	Acetyl-L-carnitine versus placebo for migraine prophylaxis: A randomized, triple-blind, crossover study. <i>Cephalalgia</i> , 2015, 35, 987-995.	3.9	17
114	Oligodendrocytes: Development, Physiology and Glucose Metabolism. <i>Advances in Neurobiology</i> , 2016, 13, 275-294.	1.8	17
115	Mitochondrial Compartmentation at the Cellular Level: Astrocytes and Neurons. <i>Annals of the New York Academy of Sciences</i> , 1999, 893, 421-426.	3.8	16
116	Astrocyte-neuronal interactions in epileptogenesis. <i>Journal of Neuroscience Research</i> , 2015, 93, 1157-1164.	2.9	16
117	Functional metabolic interactions of human neuron-astrocyte 3D in vitro networks. <i>Scientific Reports</i> , 2016, 6, 33285.	3.3	16
118	NMR spectroscopy study of the effect of 3-nitropropionic acid on glutamate metabolism in cultured astrocytes. , 1997, 47, 642-649.		15
119	[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	15
120	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.	4.3	15
121	Oligodendrocytes Do Not Export NAA-Derived Aspartate In Vitro. <i>Neurochemical Research</i> , 2017, 42, 827-837.	3.3	15
122	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.	2.9	14
123	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.	3.8	14
124	Dietary supplementation with acetyl-L-carnitine in seizure treatment of pentylenetetrazole kindled mice. <i>Neurochemistry International</i> , 2012, 61, 444-454.	3.8	14
125	Energy and Amino Acid Neurotransmitter Metabolism in Astrocytes. , 2009, , 177-200.		13
126	Anaplerosis for Glutamate Synthesis in the Neonate and in Adulthood. <i>Advances in Neurobiology</i> , 2016, 13, 43-58.	1.8	12



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127	Pentylentetrazole affects metabolism of astrocytes in culture. <i>Journal of Neuroscience Research</i> , 2005, 79, 48-54.	2.9	11
128	The anticonvulsant actions of carisbamate associate with alterations in astrocyte glutamine metabolism in the lithiumâ€“pilocarpine epilepsy model. <i>Journal of Neurochemistry</i> , 2015, 132, 532-545.	3.9	11
129	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	11
130	Effect of orotic acid on the metabolism of cerebral cortical astrocytes during hypoxia and reoxygenation: an NMR spectroscopy study. , 1998, 51, 103.		9
131	Effects of potassium and glutamine on metabolism of glucose in astrocytes. <i>Neurochemical Research</i> , 2002, 27, 167-171.	3.3	9
132	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.	2.9	8
133	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
134	Citrate, beneficial or deleterious in the CNS?. <i>Neurochemical Research</i> , 2002, 27, 155-159.	3.3	4
135	Long-term kainic acid exposure reveals compartmentation of glutamate and glutamine metabolism in cultured cerebellar neurons. <i>Neurochemistry International</i> , 2007, 50, 1004-1013.	3.8	3
136	<sup>13</sup> C NMR Spectroscopy as a Tool in Neurobiology. <i>Advances in Neurobiology</i> , 2012, , 221-253.	1.8	2
137	Synthesis of vesicular GABA from glutamine involves TCA cycle metabolism in neocortical neurons. <i>Journal of Neuroscience Research</i> , 1999, 57, 342-349.	2.9	1
138	The Neuron-Glia Unit in Neuropathology: Is it a Double-Edged Sword?. No Junkan Taisha = Cerebral Blood Flow and Metabolism, 2003, 15, 95-100.	0.0	0