Igor Allaman

List of Publications by Year
in descending order

Source: https://exaly.com/author-pdf/5996429/publications.pdf

Version: 2024-02-01

45 papers	7,130 citations	159585 30 h-index	302126 39 g-index
45 all docs	45 docs citations	45 times ranked	10143 citing authors

#	Article	IF	Citations
1	Brain Energy Metabolism: Focus on Astrocyte-Neuron Metabolic Cooperation. Cell Metabolism, 2011, 14, 724-738.	16.2	1,727
2	A Cellular Perspective on Brain Energy Metabolism and Functional Imaging. Neuron, 2015, 86, 883-901.	8.1	871
3	Lactate in the brain: from metabolic end-product to signalling molecule. Nature Reviews Neuroscience, 2018, 19, 235-249.	10.2	724
4	Astrocyteâ€“neuron metabolic relationships: for better and for worse. Trends in Neurosciences, 2011, 34, 76-87.	8.6	542
5	Methylglyoxal, the dark side of glycolysis. Frontiers in Neuroscience, 2015, 9, 23.	2.8	381
6	Lactate promotes plasticity gene expression by potentiating NMDA signaling in neurons. Proceedings of the National Academy of Sciences of the United States of America, 2014, 111, 12228-12233.	7.1	364
7	Amyloid-Î² Aggregates Cause Alterations of Astrocytic Metabolic Phenotype: Impact on Neuronal Viability. Journal of Neuroscience, 2010, 30, 3326-3338.	3.6	252
8	Fluoxetine regulates the expression of neurotrophic/growth factors and glucose metabolism in astrocytes. Psychopharmacology, 2011, 216, 75-84.	3.1	176
9	AÎ²42 Neurotoxicity Is Mediated by Ongoing Nucleated Polymerization Process Rather than by Discrete AÎ²42 Species. Journal of Biological Chemistry, 2011, 286, 8585-8596.	3.4	168
10	Pro-inflammatory cytokines induce the transcription factors C/EBP? and C/EBP? in astrocytes. Glia, 2000, 29, 91-97.	4.9	164
11	Brain-Derived Neurotrophic Factor Stimulates Energy Metabolism in Developing Cortical Neurons. Journal of Neuroscience, 2003, 23, 8212-8220.	3.6	120
12	Modulation of astrocytic metabolic phenotype by proinflammatory cytokines. Glia, 2008, 56, 975-989.	4.9	116
13	Role of the Glyoxalase System in Astrocyte-Mediated Neuroprotection. Journal of Neuroscience, 2011, 31, 18338-18352.	3.6	106
14	Learning-Induced Gene Expression in the Hippocampus Reveals a Role of Neuron -Astrocyte Metabolic Coupling in Long Term Memory. PLoS ONE, 2015, 10, e0141568.	2.5	95
15	Multi-timescale Modeling of Activity-Dependent Metabolic Coupling in the Neuron-Glia-Vasculature Ensemble. PLoS Computational Biology, 2015, 11, e1004036.	3.2	86
16	Threeâ€dimensional immersive virtual reality for studying cellular compartments in 3D models from EM preparations of neural tissues. Journal of Comparative Neurology, 2016, 524, 23-38.	1.6	85
17	Olfaction in birds: differential embryonic expression of nine putative odorant receptor genes in the avian olfactory system. Mechanisms of Development, 1996, 55, 65-77.	1.7	83
18	L-Lactate protects neurons against excitotoxicity: implication of an ATP-mediated signaling cascade. Scientific Reports, 2016, 6, 21250.	3.3	83

#	Article	IF	Citations
19	Protein targeting to glycogen mRNA expression is stimulated by noradrenaline in mouse cortical astrocytes. , 2000, 30, 382-391.		79
20	Sleep deprivation modulates brain mRNAs encoding genes of glycogen metabolism. European Journal of Neuroscience, 2002, 16, 1163-1167.	2.6	76
21	Comment on Recent Modeling Studies of Astrocyteâ€“Neuron Metabolic Interactions. Journal of Cerebral Blood Flow and Metabolism, 2010, 30, 1982-1986.	4.3	70
22	Glucocorticoids modulate neurotransmitterâ€induced glycogen metabolism in cultured cortical astrocytes. Journal of Neurochemistry, 2004, 88, 900-908.	3.9	69
23	Regulation of neuronâ€“astrocyte metabolic coupling across the sleepâ€“wake cycle. Neuroscience, 2016, 323, 135-156.	2.3	67
24	Reactive Oxygen Species: Beyond Their Reactive Behavior. Neurochemical Research, 2021, 46, 77-87.	3.3	60
25	A_{2B} receptor activation promotes glycogen synthesis in astrocytes through modulation of gene expression. American Journal of Physiology - Cell Physiology, 2003, 284, C696-C704.	4.6	57
26	Differential effects of pro- and anti-inflammatory cytokines alone or in combinations on the metabolic profile of astrocytes. Journal of Neurochemistry, 2011, 116, 564-576.	3.9	55
27	Glycogen metabolism and the homeostatic regulation of sleep. Metabolic Brain Disease, 2015, 30, 263-279.	2.9	49
28	Brain Energy Metabolism. , 2013, , 1591-1620.		44
29	Dual action of L-Lactate on the activity of NR2B-containing NMDA receptors: from potentiation to neuroprotection. Scientific Reports, 2018, 8, 13472.	3.3	44
30	Metabolic gene expression changes in astrocytes in Multiple Sclerosis cerebral cortex are indicative of immune-mediated signaling. Brain, Behavior, and Immunity, 2015, 48, 313-325.	4.1	39
31	Expression of brain-derived neurotrophic factor is not modulated by chronic mild stress in the rat hippocampus and amygdala. Pharmacological Reports, 2008, 60, 1001-7.	3.3	34
32	Glycogen: a Trojan horse for neurons. Nature Neuroscience, 2007, 10, 1341-1342.	14.8	31
33	Regulation of Neurotrophic Factors and Energy Metabolism by Antidepressants in Astrocytes. Current Drug Targets, 2013, 14, 1308-1321.	2.1	31
34	Glycogen Metabolism as a Marker of Astrocyte Differentiation. Journal of Cerebral Blood Flow and Metabolism, 2010, 30, 51-55.	4.3	26
35	Protein targeting to glycogen mRNA expression is stimulated by noradrenaline in mouse cortical astrocytes. Glia, 2000, 30, 382-91.	4.9	26
36	Brain Energy Metabolism. , 2013, , 261-284.		24

#	Article	IF	Citations
37	Altered Glycogen Metabolism in Cultured Astrocytes from Mice with Chronic Glutathione Deficit; Relevance for Neuroenergetics in Schizophrenia. PLoS ONE, 2011, 6, e22875.	2.5	22
38	Imaging brain aerobic glycolysis as a marker of synaptic plasticity. Proceedings of the National Academy of Sciences of the United States of America, 2016, 113, 7015-7016.	7.1	20
39	Brain glycogen metabolism: A possible link between sleep disturbances, headache and depression. Sleep Medicine Reviews, 2021, 59, 101449.	8.5	20
40	Protein targeting to glycogen is a master regulator of glycogen synthesis in astrocytes. IBRO Reports, 2016, 1, 46-53.	0.3	18
41	Gut microbiota modulates expression of genes involved in the astrocyte-neuron lactate shuttle in the hippocampus. European Neuropsychopharmacology, 2020, 41, 152-159.	0.7	17
42	A Role for Lactate in the Consolidation of Drug-Related Associative Memories. Biological Psychiatry, 2016, 79, 875-877.	1.3	6
43	Glial Glycogen Metabolism. , 2009, , 811-818.		2
44	Brain Energy and Metabolism. , 2016, , 1879-1909.		1
45	Glial Glycogen Metabolismâ˜†. , 2015, , .		0