Yuri Zilberter

List of Publications by Year
in descending order

#	Article	IF	Citations
1	Unifying mechanism behind the onset of acquired epilepsy. Trends in Pharmacological Sciences, 2022, 43, 87-96.	4.0	17
2	AÎ² initiates brain hypometabolism, network dysfunction and behavioral abnormalities via NOX2-induced oxidative stress in mice. Communications Biology, 2021, 4, 1054.	2.0	23
3	Glucose-Sparing Action of Ketones Boosts Functions Exclusive to Glucose in the Brain. ENeuro, 2020, 7, ENEURO.0303-20.2020.	0.9	10
4	Activation of nicotinamide adenine dinucleotide phosphate oxidase is the primary trigger of epileptic seizures in rodent models. Annals of Neurology, 2019, 85, 907-920.	2.8	25
5	Seizure-induced reduction in glucose utilization promotes brain hypometabolism during epileptogenesis. Neurobiology of Disease, 2018, 116, 28-38.	2.1	22
6	Ketogenic Ratio Determines Metabolic Effects of Macronutrients and Prevents Interpretive Bias. Frontiers in Nutrition, 2018, 5, 75.	1.6	24
7	Chronic inhibition of brain glycolysis initiates epileptogenesis. Journal of Neuroscience Research, 2017, 95, 2195-2206.	1.3	41
8	The vicious circle of hypometabolism in neurodegenerative diseases: Ways and mechanisms of metabolic correction. Journal of Neuroscience Research, 2017, 95, 2217-2235.	1.3	149
9	Metabolic correction by pyruvate halts acquired epilepsy in multiple rodent models. Neurobiology of Disease, 2017, 106, 244-254.	2.1	33
10	Chronic Pyruvate Supplementation Increases Exploratory Activity and Brain Energy Reserves in Young and Middle-Aged Mice. Frontiers in Aging Neuroscience, 2016, 8, 41.	1.7	29
11	A unique array of neuroprotective effects of pyruvate in neuropathology. Frontiers in Neuroscience, 2015, 9, 17.	1.4	44
12	Commentary: GABA Depolarizes Immature Neurons and Inhibits Network Activity in the Neonatal Neocortex In vivo. Frontiers in Pharmacology, 2015, 6, 294.	1.6	5
13	O2-14-04: Triple-target treatment for Alzheimer's: Correcting hypometabolism, oxidative stress, and neuroinflammation. , 2015, 11, P209-P209.		2
14	Optogenetics to help exploring the cerebral blood flow regulation. Frontiers in Pharmacology, 2014, 5, 107.	1.6	5
15	Glycolysis and Oxidative Phosphorylation in Neurons and Astrocytes during Network Activity in Hippocampal Slices. Journal of Cerebral Blood Flow and Metabolism, 2014, 34, 397-407.	2.4	95
16	Reactive Oxygen Species Initiate a Metabolic Collapse in Hippocampal Slices: Potential Trigger of Cortical Spreading Depression. Journal of Cerebral Blood Flow and Metabolism, 2014, 34, 1540-1549.	2.4	35
17	Dietary energy substrates reverse early neuronal hyperactivity in a mouse model of Alzheimer's disease. Journal of Neurochemistry, 2013, 125, 157-171.	2.1	79
18	Adenosine Receptor Antagonists Including Caffeine Alter Fetal Brain Development in Mice. Science Translational Medicine, 2013, 5, 197ra104.	5.8	148

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19	Understanding How the Brain Ensures Its Energy Supply. Frontiers in Neuroenergetics, 2012, 4, 9.	5.3	1
20	Lactate Effectively Covers Energy Demands during Neuronal Network Activity in Neonatal Hippocampal Slices. Frontiers in Neuroenergetics, 2011, 3, 2.	5.3	49
21	Critical State of Energy Metabolism in Brain Slices: The Principal Role of Oxygen Delivery and Energy Substrates in Shaping Neuronal Activity. Frontiers in Neuroenergetics, 2011, 3, 9.	5.3	58
22	Inhibition of spontaneous network activity in neonatal hippocampal slices by energy substrates is not correlated with intracellular acidification. Journal of Neurochemistry, 2011, 116, 316-321.	2.1	24
23	Energy substrate availability as a determinant of neuronal resting potential, GABA signaling and spontaneous network activity in the neonatal cortex <i>in vitro</i>. Journal of Neurochemistry, 2010, 112, 900-912.	2.1	78
24	Neuronal activity in vitro and the in vivo reality: the role of energy homeostasis. Trends in Pharmacological Sciences, 2010, 31, 394-401.	4.0	87
25	Amyloid Î²-Induced Neuronal Hyperexcitability Triggers Progressive Epilepsy. Journal of Neuroscience, 2009, 29, 3453-3462.	1.7	545
26	Inhibitory actions of the gammaâ€aminobutyric acid in pediatric Sturgeâ€Weber syndrome. Annals of Neurology, 2009, 66, 209-218.	2.8	26
27	GABA action in immature neocortical neurons directly depends on the availability of ketone bodies. Journal of Neurochemistry, 2009, 110, 1330-1338.	2.1	78
28	Input Specificity and Dependence of Spike Timingâ€“Dependent Plasticity on Preceding Postsynaptic Activity at Unitary Connections between Neocortical Layer 2/3 Pyramidal Cells. Cerebral Cortex, 2009, 19, 2308-2320.	1.6	34
29	Postnatal changes in somatic Î³â€aminobutyric acid signalling in the rat hippocampus. European Journal of Neuroscience, 2008, 27, 2515-2528.	1.2	117
30	(R)-roscovitine, a cyclin-dependent kinase inhibitor, enhances tonic GABA inhibition in rat hippocampus. Neuroscience, 2008, 156, 277-288.	1.1	7
31	Excitatory GABA in Rodent Developing Neocortex In Vitro. Journal of Neurophysiology, 2008, 100, 609-619.	0.9	125
32	Layer-Specific Generation and Propagation of Seizures in Slices of Developing Neocortex: Role of Excitatory GABAergic Synapses. Journal of Neurophysiology, 2008, 100, 620-628.	0.9	36
33	Non-fibrillar Î²-amyloid abates spike-timing-dependent synaptic potentiation at excitatory synapses in layer 2/3 of the neocortex by targeting postsynaptic AMPA receptors. European Journal of Neuroscience, 2006, 23, 2035-2047.	1.2	76
34	Subthreshold inactivation of voltage-gated K+channels modulates action potentials in neocortical bitufted interneurones from rats. Journal of Physiology, 2005, 562, 421-437.	1.3	19
35	Dendritic Release of Retrograde Messengers Controls Synaptic Transmission in Local Neocortical Networks. Neuroscientist, 2005, 11, 334-344.	2.6	32
36	Classical Neurotransmitters as Retrograde Messengers in Layer 2/3 of the Neocortex: Emphasis on Glutamate and Gaba. , 2005, , 117-131.		0

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37	Endocannabinoid-Independent Retrograde Signaling at Inhibitory Synapses in Layer 2/3 of Neocortex: Involvement of Vesicular Glutamate Transporter 3. Journal of Neuroscience, 2004, 24, 4978-4988.	1.7	90
38	Postsynaptic Calcium Influx at Single Synaptic Contacts between Pyramidal Neurons and Bitufted Interneurons in Layer 2/3 of Rat Neocortex Is Enhanced by Backpropagating Action Potentials. Journal of Neuroscience, 2004, 24, 1319-1329.	1.7	44
39	Brain-derived neurotrophic factor controls functional differentiation and microcircuit formation of selectively isolated fast-spiking GABAergic interneurons. European Journal of Neuroscience, 2004, 20, 1290-1306.	1.2	88
40	Region-specific generation of functional neurons from naive embryonic stem cells in adult brain. Journal of Neurochemistry, 2004, 88, 1229-1239.	2.1	41
41	Complementary distribution of type 1 cannabinoid receptors and vesicular glutamate transporter 3 in basal forebrain suggests input-specific retrograde signalling by cholinergic neurons. European Journal of Neuroscience, 2003, 18, 1979-1992.	1.2	69
42	Neurotrophin-4 mediated TrkB activation reinforces morphine-induced analgesia. Nature Neuroscience, 2003, 6, 221-222.	7.1	18
43	Effects of short-term synaptic plasticity in a local microcircuit on cell firing. Neurocomputing, 2003, 52-54, 7-12.	3.5	2
44	Pyramidal cell communication within local networks in layer 2/3 of rat neocortex. Journal of Physiology, 2003, 551, 139-153.	1.3	508
45	Coincident Spiking Activity Induces Long-Term Changes in Inhibition of Neocortical Pyramidal Cells. Journal of Neuroscience, 2001, 21, 8270-8277.	1.7	136
46	Dendritic GABA Release Depresses Excitatory Transmission between Layer 2/3 Pyramidal and Bitufted Neurons in Rat Neocortex. Neuron, 1999, 24, 979-988.	3.8	126
47	Facilitation of currents through rat Ca2+-permeable AMPA receptor channels by activity-dependent relief from polyamine block. Journal of Physiology, 1998, 511, 361-377.	1.3	101
48	Wavelet formation in excitable cardiac tissue: the role of wavefront-obstacle interactions in initiating high-frequency fibrillatory-like arrhythmias. Biophysical Journal, 1996, 70, 581-594.	0.2	74
49	Proarrhythmic Response to Potassium Channel Blockade. Circulation, 1995, 92, 595-605.	1.6	62
50	Vulnerability in one-dimensional excitable media. Physica D: Nonlinear Phenomena, 1994, 70, 321-341.	1.3	42
51	Kinetics of interaction of disopyramide with the cardiac sodium channel: Fast dissociation from open channels at normal rest potentials. Journal of Membrane Biology, 1993, 136, 199-214.	1.0	18
52	Potentiation of glutamate-activated currents in isolated hippocampal neurons. Neuron, 1990, 5, 597-602.	3.8	15