Karin Borges

List of Publications by Year
in descending order

67 papers	2,725 citations	147801 31 h-index	189892 50 g-index
68 all docs	68 docs citations	68 times ranked	3398 citing authors

#	Article	IF	Citations
1	Brain glycogen content is increased in the acute and interictal chronic stages of the mouse pilocarpine model of epilepsy. Epilepsia Open, 2022, 7, 361-367.	2.4	6
2	Alterations in mitochondrial glucose carbon metabolism in epilepsy and targeted metabolic treatments. , 2021, , 653-677.		2
3	CNS glucose metabolism in Amyotrophic Lateral Sclerosis: a therapeutic target?. Cell and Bioscience, 2021, 11, 14.	4.8	56
4	Dietary medium chain triglycerides for management of epilepsy: New data from human, dog, and rodent studies. Epilepsia, 2021, 62, 1790-1806.	5.1	40
5	Fructose 1,6-bisphosphate is anticonvulsant and improves oxidative glucose metabolism within the hippocampus and liver in the chronic pilocarpine mouse epilepsy model. Epilepsy and Behavior, 2021, 122, 108223.	1.7	8
6	Astrocyte metabolism of the medium-chain fatty acids octanoic acid and decanoic acid promotes GABA synthesis in neurons via elevated glutamine supply. Molecular Brain, 2021, 14, 132.	2.6	39
7	Sustained-release ketamine-loaded lipid-particulate system: in vivo assessment in mice. Drug Delivery and Translational Research, 2021, , 1.	5.8	0
8	Triheptanoin alters [U-¹³C₆]-glucose incorporation into glycolytic intermediates and increases TCA cycling by normalizing the activities of pyruvate dehydrogenase and oxoglutarate dehydrogenase in a chronic epilepsy mouse model. Journal of Cerebral Blood Flow and Metabolism, 2020, 40, 678-691.	4.3	16
9	Combined Diffusion Tensor Imaging and Quantitative Susceptibility Mapping Discern Discrete Facets of White Matter Pathology Post-injury in the Rodent Brain. Frontiers in Neurology, 2020, 11, 153.	2.4	14
10	Prenatal betamethasone exposure increases corticotropin-releasing hormone expression along with increased hippocampal slice excitability in the developing hippocampus. Epilepsy Research, 2020, 160, 106276.	1.6	2
11	Openâ€label longâ€term treatment of addâ€on triheptanoin in adults with drugâ€resistant epilepsy. Epilepsia Open, 2020, 5, 230-239.	2.4	9
12	Impaired Pentose Phosphate Pathway in the Spinal Cord of the hSOD1G93A Mouse Model of Amyotrophic Lateral Sclerosis. Molecular Neurobiology, 2019, 56, 5844-5855.	4.0	22
13	Randomized trial of addâ€on triheptanoin vs medium chain triglycerides in adults with refractory epilepsy. Epilepsia Open, 2019, 4, 153-163.	2.4	24
14	Diffusion Magnetic Resonance Imaging Unveils the Spatiotemporal Microstructural Gray Matter Changes following Injury in the Rodent Brain. Journal of Neurotrauma, 2019, 36, 1306-1317.	3.4	15
15	Neuronal glucose metabolism is impaired while astrocytic TCA cycling is unaffected at symptomatic stages in the hSOD1^{G93A} mouse model of amyotrophic lateral sclerosis. Journal of Cerebral Blood Flow and Metabolism, 2019, 39, 1710-1724.	4.3	35
16	ACTH and PMX53 recover synaptic transcriptome alterations in a rat model of infantile spasms. Scientific Reports, 2018, 8, 5722.	3.3	22
17	Triheptanoin protects against status epilepticusâ€induced hippocampal mitochondrial dysfunctions, oxidative stress and neuronal degeneration. Journal of Neurochemistry, 2018, 144, 431-442.	3.9	23
18	A companion to the preclinical common data elements for physiologic data in rodent epilepsy models. A report of the <scp>TASK</scp>3 Physiology Working Group of the <scp>ILAE</scp>/<scp>AES</scp> Joint Translational Task Force. Epilepsia Open, 2018, 3, 69-89.	2.4	15

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19	Impairments in Oxidative Glucose Metabolism in Epilepsy and Metabolic Treatments Thereof. Frontiers in Cellular Neuroscience, 2018, 12, 274.	3.7	54
20	The effect of dichloroacetate in mouse models of epilepsy. Epilepsy Research, 2018, 145, 77-81.	1.6	12
21	Heptanoate is neuroprotective in vitro but triheptanoin post-treatment did not protect against middle cerebral artery occlusion in rats. Neuroscience Letters, 2018, 683, 207-214.	2.1	6
22	A pilot study of add-on oral triheptanoin treatment for children with medically refractory epilepsy. European Journal of Paediatric Neurology, 2018, 22, 1074-1080.	1.6	29
23	The effects of C5aR1 on leukocyte infiltration following pilocarpineâ€induced status epilepticus. Epilepsia, 2017, 58, e54-e58.	5.1	9
24	Impaired hippocampal glucose metabolism during and after flurothylâ€induced seizures in mice: Reduced phosphorylation coincides with reduced activity of pyruvate dehydrogenase. Epilepsia, 2017, 58, 1172-1180.	5.1	13
25	Tridecanoin is anticonvulsant, antioxidant, and improves mitochondrial function. Journal of Cerebral Blood Flow and Metabolism, 2017, 37, 2035-2048.	4.3	55
26	Alternative Fuels in Epilepsy and Amyotrophic Lateral Sclerosis. Neurochemical Research, 2017, 42, 1610-1620.	3.3	21
27	Sulforaphane Protects against High Cholesterol-Induced Mitochondrial Bioenergetics Impairments, Inflammation, and Oxidative Stress and Preserves Pancreatic<i>Î²</i>-Cells Function. Oxidative Medicine and Cellular Longevity, 2017, 2017, 1-14.	4.0	32
28	Alterations in Cytosolic and Mitochondrial [U-¹³C]Glucose Metabolism in a Chronic Epilepsy Mouse Model. ENeuro, 2017, 4, ENEURO.0341-16.2017.	1.9	39
29	The deleterious effect of cholesterol and protection by quercetin on mitochondrial bioenergetics of pancreatic Î²-cells, glycemic control and inflammation: In vitro and in vivo studies. Redox Biology, 2016, 9, 229-243.	9.0	76
30	Modification of Astrocyte Metabolism as an Approach to the Treatment of Epilepsy: Triheptanoin and Acetyl-l-Carnitine. Neurochemical Research, 2016, 41, 86-95.	3.3	11
31	Metabolic Dysfunctions in Amyotrophic Lateral Sclerosis Pathogenesis and Potential Metabolic Treatments. Frontiers in Neuroscience, 2016, 10, 611.	2.8	73
32	Triheptanoin Protects Motor Neurons and Delays the Onset of Motor Symptoms in a Mouse Model of Amyotrophic Lateral Sclerosis. PLoS ONE, 2016, 11, e0161816.	2.5	49
33	Sulforaphane is anticonvulsant and improves mitochondrial function. Journal of Neurochemistry, 2015, 135, 932-942.	3.9	56
34	High Caloric Diets in Amyotrophic Lateral Sclerois. , 2015, , 355-361.		0
35	Metabolic Dysfunctions in Epilepsy and Novel Metabolic Treatment Approaches. , 2015, , 461-473.		7
36	A novel anticonvulsant mechanism via inhibition of complement receptor C5ar1 in murine epilepsy models. Neurobiology of Disease, 2015, 76, 87-97.	4.4	55

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37	Complex alterations in microglial M1/M2 markers during the development of epilepsy in two mouse models. Epilepsia, 2015, 56, 895-905.	5.1	133
38	Triheptanoin partially restores levels of tricarboxylic acid cycle intermediates in the mouse pilocarpine model of epilepsy. Journal of Neurochemistry, 2014, 129, 107-119.	3.9	49
39	Alterations of Hippocampal Glucose Metabolism by Even versus Uneven Medium Chain Triglycerides. Journal of Cerebral Blood Flow and Metabolism, 2014, 34, 153-160.	4.3	27
40	Slc10A4 â€" what do we know about the function of this â€œsecret ligand carrierâ€• protein?. Experimental Neurology, 2013, 248, 258-261.	4.1	5
41	Anticonvulsant screening of luteolin in four mouse seizure models. Neuroscience Letters, 2013, 550, 195-199.	2.1	25
42	Triheptanoin reduces seizure susceptibility in a syndrome-specific mouse model of generalized epilepsy. Epilepsy Research, 2013, 103, 101-105.	1.6	33
43	Brain Mitochondrial Metabolic Dysfunction and Glutamate Level Reduction in the Pilocarpine Model of Temporal Lobe Epilepsy in Mice. Journal of Cerebral Blood Flow and Metabolism, 2013, 33, 1090-1097.	4.3	57
44	Chronic acetyl-l-carnitine alters brain energy metabolism and increases noradrenaline and serotonin content in healthy mice. Neurochemistry International, 2012, 61, 100-107.	3.8	65
45	Triheptanoinâ€"A medium chain triglyceride with odd chain fatty acids: A new anaplerotic anticonvulsant treatment?. Epilepsy Research, 2012, 100, 239-244.	1.6	68
46	Triheptanoin in acute mouse seizure models. Epilepsy Research, 2012, 99, 312-317.	1.6	34
47	The ketogenic diet changes metabolite levels in hippocampal extracellular fluid. Neurochemistry International, 2011, 58, 5-8.	3.8	29
48	Protective effect of the ketogenic diet in Scn1a mutant mice. Epilepsia, 2011, 52, 2050-2056.	5.1	51
49	Anticonvulsant effects of a triheptanoin diet in two mouse chronic seizure models. Neurobiology of Disease, 2010, 40, 565-572.	4.4	80
50	Quantitative transcriptional neuroanatomy of the rat hippocampus: Evidence for wideâ€ranging, pathwayâ€specific heterogeneity among three principal cell layers. Hippocampus, 2009, 19, 253-264.	1.9	48
51	Eicosapentaenoic and docosahexaenoic acids are not anticonvulsant or neuroprotective in acute mouse seizure models. Epilepsia, 2009, 50, 138-142.	5.1	32
52	Anticonvulsant profile of a balanced ketogenic diet in acute mouse seizure models. Epilepsy Research, 2008, 81, 119-127.	1.6	55
53	Characterization of osteopontin expression and function after status epilepticus. Epilepsia, 2008, 49, 1675-1685.	5.1	21
54	Mouse models: The ketogenic diet and polyunsaturated fatty acids. Epilepsia, 2008, 49, 64-66.	5.1	11

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55	Using WebCt to Implement a Basic Science Competency Education Course. American Journal of Pharmaceutical Education, 2008, 72, 39.	2.1	11
56	Formulation of Spray-Dried Phenytoin Loaded Poly(Îµ-Caprolactone) Microcarrier Intended for Brain Delivery to Treat Epilepsy. Journal of Pharmaceutical Sciences, 2007, 96, 1018-1030.	3.3	24
57	Gene expression changes after seizure preconditioning in the three major hippocampal cell layers. Neurobiology of Disease, 2007, 26, 66-77.	4.4	41
58	Degeneration and proliferation of astrocytes in the mouse dentate gyrus after pilocarpine-induced status epilepticus. Experimental Neurology, 2006, 201, 416-427.	4.1	66
59	Reciprocal changes of CD44 and GAP-43 expression in the dentate gyrus inner molecular layer after status epilepticus in mice. Experimental Neurology, 2004, 188, 1-10.	4.1	41
60	Activity of the rat GluR4 promoter in transfected cortical neurons and glia. Journal of Neurochemistry, 2003, 86, 1162-1173.	3.9	8
61	Neuronal and glial pathological changes during epileptogenesis in the mouse pilocarpine model. Experimental Neurology, 2003, 182, 21-34.	4.1	352
62	Functional Organization of the GluR1 Glutamate Receptor Promoter. Journal of Biological Chemistry, 2001, 276, 25929-25938.	3.4	46
63	GENETIC REGULATION OF GLUTAMATE RECEPTOR ION CHANNELS. Annual Review of Pharmacology and Toxicology, 1999, 39, 221-241.	9.4	98
64	Chapter 11 AMPA receptors: Molecular and functional diversity. Progress in Brain Research, 1998, 116, 153-170.	1.4	93
65	Adult rat optic nerve oligodendrocyte progenitor cells express a distinct repertoire of voltage- and ligand-gated ion channels. Journal of Neuroscience Research, 1995, 40, 591-605.	2.9	31
66	Blockade of K+ channels induced by AMPA/kainate receptor activation in mouse oligodendrocyte precursor cells is mediated by NA+ entry. Journal of Neuroscience Research, 1995, 42, 579-593.	2.9	54
67	Ampa/kainate receptor activation in murine oligodendrocyte precursor cells leads to activation of a cation conductance, calcium influx and blockade of delayed rectifying K+ channels. Neuroscience, 1994, 63, 135-149.	2.3	92