Oliver Kann

List of Publications by Year
in descending order

62 papers	4,734 citations	117571 34 h-index	143943 57 g-index
63 all docs	63 docs citations	63 times ranked	6447 citing authors

#	Article	IF	Citations
1	Priming of microglia by type II interferon is lasting and resistant to modulation by interleukin-10 in situ. Journal of Neuroimmunology, 2022, 368, 577881.	1.1	3
2	Microglia and lipids: how metabolism controls brain innate immunity. Seminars in Cell and Developmental Biology, 2021, 112, 137-144.	2.3	75
3	TLR2- and TLR3-activated microglia induce different levels of neuronal network dysfunction in a context-dependent manner. Brain, Behavior, and Immunity, 2021, 96, 80-91.	2.0	32
4	The mitochondrial calcium uniporter is crucial for the generation of fast cortical network rhythms. Journal of Cerebral Blood Flow and Metabolism, 2020, 40, 2225-2239.	2.4	20
5	Mild metabolic stress is sufficient to disturb the formation of pyramidal cell ensembles during gamma oscillations. Journal of Cerebral Blood Flow and Metabolism, 2020, 40, 2401-2415.	2.4	11
6	Lactate Attenuates Synaptic Transmission and Affects Brain Rhythms Featuring High Energy Expenditure. IScience, 2020, 23, 101316.	1.9	33
7	Brain energy rescue: an emerging therapeutic concept for neurodegenerative disorders of ageing. Nature Reviews Drug Discovery, 2020, 19, 609-633.	21.5	441
8	GM-CSF induces noninflammatory proliferation of microglia and disturbs electrical neuronal network rhythms in situ. Journal of Neuroinflammation, 2020, 17, 235.	3.1	34
9	Neuronal gamma oscillations and activityâ€dependent potassium transients remain regular after depletion of microglia in postnatal cortex tissue. Journal of Neuroscience Research, 2020, 98, 1953-1967.	1.3	8
10	Selective inhibition of mitochondrial respiratory complexes controls the transition of microglia into a neurotoxic phenotype in situ. Brain, Behavior, and Immunity, 2020, 88, 802-814.	2.0	36
11	Persistent increase in ventral hippocampal longâ€term potentiation by juvenile stress: A role for astrocytic glutamine synthetase. Glia, 2019, 67, 2279-2293.	2.5	10
12	Priming of microglia with IFN-Î³ slows neuronal gamma oscillations in situ. Proceedings of the National Academy of Sciences of the United States of America, 2019, 116, 4637-4642.	3.3	87
13	Early alterations in hippocampal perisomatic GABAergic synapses and network oscillations in a mouse model of Alzheimerâ€™s disease amyloidosis. PLoS ONE, 2019, 14, e0209228.	1.1	66
14	Local oxygen homeostasis during various neuronal network activity states in the mouse hippocampus. Journal of Cerebral Blood Flow and Metabolism, 2019, 39, 859-873.	2.4	26
15	<scp>A</scp>strocytic glutamine synthetase is expressed in the neuronal somatic layers and downâ€regulated proportionally to neuronal loss in the human epileptic hippocampus. Glia, 2018, 66, 920-933.	2.5	27
16	Metabolic modulation of neuronal gamma-band oscillations. Pflugers Archiv European Journal of Physiology, 2018, 470, 1377-1389.	1.3	10
17	Possible neurotoxicity of the anesthetic propofol: evidence for the inhibition of complex II of the respiratory chain in area CA3 of rat hippocampal slices. Archives of Toxicology, 2018, 92, 3191-3205.	1.9	33
18	â€žSchmerznervenâ€œ â€" wie aus SchÃ¤digungen von KÃ¶rpergewebe Schmerzen werden. WissenKompakt Medizin, 2018, , 21-29.	0.0	0

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19	Energy and Potassium Ion Homeostasis during Gamma Oscillations. Frontiers in Molecular Neuroscience, 2016, 9, 47.	1.4	26
20	Brain Endothelial- and Epithelial-Specific Interferon Receptor Chain 1 Drives Virus-Induced Sickness Behavior and Cognitive Impairment. Immunity, 2016, 44, 901-912.	6.6	143
21	Amyloid Precursor Protein Protects Neuronal Network Function after Hypoxia via Control of Voltage-Gated Calcium Channels. Journal of Neuroscience, 2016, 36, 8356-8371.	1.7	37
22	TLR4-activated microglia require IFN-Î³ to induce severe neuronal dysfunction and death in situ. Proceedings of the National Academy of Sciences of the United States of America, 2016, 113, 212-217.	3.3	160
23	The interneuron energy hypothesis: Implications for brain disease. Neurobiology of Disease, 2016, 90, 75-85.	2.1	197
24	Drug Resistance in Cortical and Hippocampal Slices from Resected Tissue of Epilepsy Patients: No Significant Impact of P-Glycoprotein and Multidrug Resistance-Associated Proteins. Frontiers in Neurology, 2015, 6, 30.	1.1	55
25	Physiology-Based Kinetic Modeling of Neuronal Energy Metabolism Unravels the Molecular Basis of NAD(P)H Fluorescence Transients. Journal of Cerebral Blood Flow and Metabolism, 2015, 35, 1494-1506.	2.4	38
26	A reliable model for gamma oscillations in hippocampal tissue. Journal of Neuroscience Research, 2015, 93, 1067-1078.	1.3	32
27	Widespread activation of microglial cells in the hippocampus of chronic epileptic rats correlates only partially with neurodegeneration. Brain Structure and Function, 2015, 220, 2423-2439.	1.2	32
28	Energy substrates that fuel fast neuronal network oscillations. Frontiers in Neuroscience, 2014, 8, 398.	1.4	50
29	Highly Energized Inhibitory Interneurons are a Central Element for Information Processing in Cortical Networks. Journal of Cerebral Blood Flow and Metabolism, 2014, 34, 1270-1282.	2.4	219
30	Oxygen Consumption Rates during Three Different Neuronal Activity States in the Hippocampal CA3 Network. Journal of Cerebral Blood Flow and Metabolism, 2013, 33, 263-271.	2.4	63
31	Phosphorylation of the Actin Binding Protein Drebrin at S647 Is Regulated by Neuronal Activity and PTEN. PLoS ONE, 2013, 8, e71957.	1.1	33
32	Energy Demand of Synaptic Transmission at the Hippocampal Schaffer-Collateral Synapse. Journal of Cerebral Blood Flow and Metabolism, 2012, 32, 2076-2083.	2.4	37
33	Muscarinic receptor activation determines the effects of store-operated Ca2+-entry on excitability and energy metabolism in pyramidal neurons. Cell Calcium, 2012, 51, 40-50.	1.1	16
34	Redistribution of astrocytic glutamine synthetase in the hippocampus of chronic epileptic rats. Glia, 2011, 59, 1706-1718.	2.5	41
35	Reply: Impaired mitochondrial function abolishes gamma oscillations in the hippocampus through an effect on fast-spiking interneurons. Brain, 2011, 134, e181-e181.	3.7	0
36	Gamma oscillations in the hippocampus require high complex I gene expression and strong functional performance of mitochondria. Brain, 2011, 134, 345-358.	3.7	156

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37	The Energy Demand of Fast Neuronal Network Oscillations: Insights from Brain Slice Preparations. Frontiers in Pharmacology, 2011, 2, 90.	1.6	37
38	Complex III-dependent superoxide production of brain mitochondria contributes to seizure-related ROS formation. Biochimica Et Biophysica Acta - Bioenergetics, 2010, 1797, 1163-1170.	0.5	70
39	Endogenous Nitric Oxide Is a Key Promoting Factor for Initiation of Seizure-Like Events in Hippocampal and Entorhinal Cortex Slices. Journal of Neuroscience, 2009, 29, 8565-8577.	1.7	86
40	GABAergic activities enhance macrophage inflammatory proteinâ€•1Î± release from microglia (brain) Tj ETQq0 0 0 rgBT /Overlock 10 Tf 5	1.3	31
41	MODELS | Seizure Models in Acute and Organotypic Slices. , 2009, , 786-792.		0
42	Gamma Oscillations and Spontaneous Network Activity in the Hippocampus Are Highly Sensitive to Decreases in pO₂and Concomitant Changes in Mitochondrial Redox State. Journal of Neuroscience, 2008, 28, 1153-1162.	1.7	101
43	Mitochondria and neuronal activity. American Journal of Physiology - Cell Physiology, 2007, 292, C641-C657.	2.1	673
44	ERK activation causes epilepsy by stimulating NMDA receptor activity. EMBO Journal, 2007, 26, 4891-4901.	3.5	126
45	Carbamazepine-resistance in the epileptic dentate gyrus of human hippocampal slices. Brain, 2006, 129, 3290-3306.	3.7	63
46	An Overview of In Vitro Seizure Models in Acute and Organotypic Slices. , 2006, , 35-44.		13
47	Mitochondrial Calcium Ion and Membrane Potential Transients Follow the Pattern of Epileptiform Discharges in Hippocampal Slice Cultures. Journal of Neuroscience, 2005, 25, 4260-4269.	1.7	88
48	Metabolic dysfunction during neuronal activation in the ex vivo hippocampus from chronic epileptic rats and humans. Brain, 2005, 128, 2396-2407.	3.7	123
49	The tyrosine kinase inhibitor AG126 restores receptor signaling and blocks release functions in activated microglia (brain macrophages) by preventing a chronic rise in the intracellular calcium level. Journal of Neurochemistry, 2004, 90, 513-525.	2.1	18
50	Coupling of neuronal activity and mitochondrial metabolism as revealed by nad(p)h fluorescence signals in organotypic hippocampal slice cultures of the rat. Neuroscience, 2003, 119, 87-100.	1.1	93
51	Metabotropic Receptor-Mediated Ca2+ Signaling Elevates Mitochondrial Ca2+ and Stimulates Oxidative Metabolism in Hippocampal Slice Cultures. Journal of Neurophysiology, 2003, 90, 613-621.	0.9	35
52	Elevation of Basal Intracellular Calcium as a Central Element in the Activation of Brain Macrophages (Microglia): Suppression of Receptor-Evoked Calcium Signaling and Control of Release Function. Journal of Neuroscience, 2003, 23, 4410-4419.	1.7	229
53	Free Radicalâ€"Mediated Cell Damage After Experimental Status Epilepticus in Hippocampal Slice Cultures. Journal of Neurophysiology, 2002, 88, 2909-2918.	0.9	134
54	Cell death and metabolic activity during epileptiform discharges and status epilepticus in the hippocampus. Progress in Brain Research, 2002, 135, 197-210.	0.9	45

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55	Coupling of Electrical and Metabolic Activity During Epileptiform Discharges. Epilepsia, 2002, 43, 168-173.	2.6	23
56	Monitoring NAD(P)H autofluorescence to assess mitochondrial metabolic functions in rat hippocampalâ€"entorhinal cortex slices. Brain Research Protocols, 2001, 7, 267-276.	1.7	68
57	The protein tyrosine kinase inhibitor AG126 prevents the massive microglial cytokine induction by pneumococcal cell walls. European Journal of Immunology, 2001, 31, 2104-2115.	1.6	74
58	Distinct Physiologic Properties of Microglia and Blood-Borne Cells in Rat Brain Slices After Permanent Middle Cerebral Artery Occlusion. Journal of Cerebral Blood Flow and Metabolism, 2000, 20, 1537-1549.	2.4	65
59	Activation of mouse microglial cells affects P2 receptor signaling. Brain Research, 2000, 853, 49-59.	1.1	116
60	Microglial Activation by Components of Gram-Positive and -Negative Bacteria: Distinct and Common Routes to the Induction of Ion Channels and Cytokines. Journal of Neuropathology and Experimental Neurology, 1999, 58, 1078-1089.	0.9	95
61	Endothelin-induced calcium signaling in cultured mouse microglial cells is mediated through ETB receptors. NeuroReport, 1997, 8, 2127-2131.	0.6	34
62	APPsÎ± rescues Tau-induced synaptic pathology. Journal of Neuroscience, 0, , JN-RM-2200-21.	1.7	7