Jan-oliver Hollnagel

List of Publications by Year
in descending order

50 papers	3,682 citations	212478 28 h-index	214428 50 g-index
51 all docs	51 docs citations	51 times ranked	5741 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	Synchronicity of excitatory inputs drives hippocampal networks to distinct oscillatory patterns. Hippocampus, 2020, 30, 1044-1057.	0.9	6
10	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
11	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
12	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
13	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
14	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
15	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
16	<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
17	Metabolic modulation of neuronal gamma-band oscillations. Pflugers Archiv European Journal of Physiology, 2018, 470, 1377-1389.	1.3	10
18	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

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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	Adenosine A₁ receptorâ€"mediated suppression of carbamazepineâ€resistant seizureâ€like events in human neocortical slices. Epilepsia, 2016, 57, 746-756.	2.6	30
22	Synaptic plasticity in area CA1 of rat hippocampal slices following intraventricular application of albumin. Neurobiology of Disease, 2016, 91, 155-165.	2.1	19
23	Identification of Parvalbumin Interneurons as Cellular Substrate of Fear Memory Persistence. Cerebral Cortex, 2016, 26, 2325-2340.	1.6	79
24	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
25	Serotonin dependent masking of hippocampal sharp wave ripples. Neuropharmacology, 2016, 101, 188-203.	2.0	20
26	The interneuron energy hypothesis: Implications for brain disease. Neurobiology of Disease, 2016, 90, 75-85.	2.1	197
27	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
28	Long-term changes in the CA3 associative network of fear-conditioned mice. Stress, 2015, 18, 188-197.	0.8	5
29	Gating of hippocampal output by Î²-adrenergic receptor activation in the pilocarpine model of epilepsy. Neuroscience, 2015, 286, 325-337.	1.1	4
30	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
31	A reliable model for gamma oscillations in hippocampal tissue. Journal of Neuroscience Research, 2015, 93, 1067-1078.	1.3	32
32	No evidence for role of extracellular choline-acetyltransferase in generation of gamma oscillations in rat hippocampal slices in vitro. Neuroscience, 2015, 284, 459-469.	1.1	6
33	Energy substrates that fuel fast neuronal network oscillations. Frontiers in Neuroscience, 2014, 8, 398.	1.4	50
34	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
35	GABAB receptor dependent modulation of sharp wave-ripple complexes in the rat hippocampus in vitro. Neuroscience Letters, 2014, 574, 15-20.	1.0	17
36	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

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37	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
38	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
39	Partial Disinhibition Is Required for Transition of Stimulus-Induced Sharp Waveâ€“Ripple Complexes Into Recurrent Epileptiform Discharges in Rat Hippocampal Slices. Journal of Neurophysiology, 2011, 105, 172-187.	0.9	51
40	Redistribution of astrocytic glutamine synthetase in the hippocampus of chronic epileptic rats. Glia, 2011, 59, 1706-1718.	2.5	41
41	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
42	The Energy Demand of Fast Neuronal Network Oscillations: Insights from Brain Slice Preparations. Frontiers in Pharmacology, 2011, 2, 90.	1.6	37
43	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
44	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
45	Mitochondria and neuronal activity. American Journal of Physiology - Cell Physiology, 2007, 292, C641-C657.	2.1	673
46	Carbamazepine-resistance in the epileptic dentate gyrus of human hippocampal slices. Brain, 2006, 129, 3290-3306.	3.7	63
47	Metabolic dysfunction during neuronal activation in the ex vivo hippocampus from chronic epileptic rats and humans. Brain, 2005, 128, 2396-2407.	3.7	123
48	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
49	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
50	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