# Jan-oliver Hollnagel

List of Publications by Year
in descending order



| 50 | 3,682 | 186265 28 | 189892 50 |
|---|---|---|---|
| papers | citations | h-index | g-index |

| 51 | 51 | 51 | 5233 |
|---|---|---|---|
| all docs | docs citations | times ranked | 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. | 2.3 | 3 |
| 2 | Microglia and lipids: how metabolism controls brain innate immunity. Seminars in Cell and Developmental Biology, 2021, 112, 137-144. | 5.0 | 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. | 4.1 | 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. | 4.3 | 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. | 4.3 | 11 |
| 6 | Lactate Attenuates Synaptic Transmission and Affects Brain Rhythms Featuring High Energy Expenditure. IScience, 2020, 23, 101316. | 4.1 | 33 |
| 7 | Brain energy rescue: an emerging therapeutic concept for neurodegenerative disorders of ageing. Nature Reviews Drug Discovery, 2020, 19, 609-633. | 46.4 | 441 |
| 8 | GM-CSF induces noninflammatory proliferation of microglia and disturbs electrical neuronal network rhythms in situ. Journal of Neuroinflammation, 2020, 17, 235. | 7.2 | 34 |
| 9 | Synchronicity of excitatory inputs drives hippocampal networks to distinct oscillatory patterns. Hippocampus, 2020, 30, 1044-1057. | 1.9 | 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. | 2.9 | 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. | 4.1 | 36 |
| 12 | Persistent increase in ventral hippocampal longâ€term potentiation by juvenile stress: A role for astrocytic glutamine synthetase. Glia, 2019, 67, 2279-2293. | 4.9 | 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. | 7.1 | 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. | 2.5 | 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. | 4.3 | 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. | 4.9 | 27 |
| 17 | Metabolic modulation of neuronal gamma-band oscillations. Pflugers Archiv European Journal of Physiology, 2018, 470, 1377-1389. | 2.8 | 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. | 4.2 | 33 |

| # | Article | IF | Citations |
|---|---|---|---|
| 19 | Energy and Potassium Ion Homeostasis during Gamma Oscillations. Frontiers in Molecular Neuroscience, 2016, 9, 47. | 2.9 | 26 |
| 20 | Brain Endothelial- and Epithelial-Specific Interferon Receptor Chain 1 Drives Virus-Induced Sickness Behavior and Cognitive Impairment. Immunity, 2016, 44, 901-912. | 14.3 | 143 |
| 21 | Adenosine A<sub>1</sub> receptorâ€“mediated suppression of carbamazepineâ€resistant seizureâ€like events in human neocortical slices. Epilepsia, 2016, 57, 746-756. | 5.1 | 30 |
| 22 | Synaptic plasticity in area CA1 of rat hippocampal slices following intraventricular application of albumin. Neurobiology of Disease, 2016, 91, 155-165. | 4.4 | 19 |
| 23 | Identification of Parvalbumin Interneurons as Cellular Substrate of Fear Memory Persistence. Cerebral Cortex, 2016, 26, 2325-2340. | 2.9 | 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. | 7.1 | 160 |
| 25 | Serotonin dependent masking of hippocampal sharp wave ripples. Neuropharmacology, 2016, 101, 188-203. | 4.1 | 20 |
| 26 | The interneuron energy hypothesis: Implications for brain disease. Neurobiology of Disease, 2016, 90, 75-85. | 4.4 | 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. | 2.4 | 55 |
| 28 | Long-term changes in the CA3 associative network of fear-conditioned mice. Stress, 2015, 18, 188-197. | 1.8 | 5 |
| 29 | Gating of hippocampal output by Î²-adrenergic receptor activation in the pilocarpine model of epilepsy. Neuroscience, 2015, 286, 325-337. | 2.3 | 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. | 4.3 | 38 |
| 31 | A reliable model for gamma oscillations in hippocampal tissue. Journal of Neuroscience Research, 2015, 93, 1067-1078. | 2.9 | 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. | 2.3 | 6 |
| 33 | Energy substrates that fuel fast neuronal network oscillations. Frontiers in Neuroscience, 2014, 8, 398. | 2.8 | 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. | 4.3 | 219 |
| 35 | GABAB receptor dependent modulation of sharp wave-ripple complexes in the rat hippocampus in vitro. Neuroscience Letters, 2014, 574, 15-20. | 2.1 | 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. | 4.3 | 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. | 4.3 | 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. | 2.4 | 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. | 1.8 | 51 |
| 40 | Redistribution of astrocytic glutamine synthetase in the hippocampus of chronic epileptic rats. Glia, 2011, 59, 1706-1718. | 4.9 | 41 |
| 41 | Gamma oscillations in the hippocampus require high complex I gene expression and strong functional performance of mitochondria. Brain, 2011, 134, 345-358. | 7.6 | 156 |
| 42 | The Energy Demand of Fast Neuronal Network Oscillations: Insights from Brain Slice Preparations. Frontiers in Pharmacology, 2011, 2, 90. | 3.5 | 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. | 3.6 | 86 |
| 44 | Gamma Oscillations and Spontaneous Network Activity in the Hippocampus Are Highly Sensitive to Decreases in pO<sub>2</sub>and Concomitant Changes in Mitochondrial Redox State. Journal of Neuroscience, 2008, 28, 1153-1162. | 3.6 | 101 |
| 45 | Mitochondria and neuronal activity. American Journal of Physiology - Cell Physiology, 2007, 292, C641-C657. | 4.6 | 673 |
| 46 | Carbamazepine-resistance in the epileptic dentate gyrus of human hippocampal slices. Brain, 2006, 129, 3290-3306. | 7.6 | 63 |
| 47 | Metabolic dysfunction during neuronal activation in the ex vivo hippocampus from chronic epileptic rats and humans. Brain, 2005, 128, 2396-2407. | 7.6 | 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. | 1.8 | 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. | 1.6 | 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. | 2.9 | 74 |