Torkel Hafting

List of Publications by Year
in descending order

29 papers	10,931 citations	393982 19 h-index	500791 28 g-index
32 all docs	32 docs citations	32 times ranked	9226 citing authors

#	Article	IF	Citations
1	Microstructure of a spatial map in the entorhinal cortex. Nature, 2005, 436, 801-806.	13.7	3,257
2	Conjunctive Representation of Position, Direction, and Velocity in Entorhinal Cortex. Science, 2006, 312, 758-762.	6.0	1,464
3	Perineuronal nets stabilize the grid cell network. Nature Communications, 2021, 12, 253.	5.8	1,386
4	Frequency of gamma oscillations routes flow of information in the hippocampus. Nature, 2009, 462, 353-357.	13.7	1,206
5	Hippocampal remapping and grid realignment in entorhinal cortex. Nature, 2007, 446, 190-194.	13.7	610
6	Finite Scale of Spatial Representation in the Hippocampus. Science, 2008, 321, 140-143.	6.0	562
7	Fragmentation of grid cell maps in a multicompartment environment. Nature Neuroscience, 2009, 12, 1325-1332.	7.1	551
8	Hippocampus-independent phase precession in entorhinal grid cells. Nature, 2008, 453, 1248-1252.	13.7	399
9	Grid cells in mice. Hippocampus, 2008, 18, 1230-1238.	0.9	394
10	Grid cells require excitatory drive from the hippocampus. Nature Neuroscience, 2013, 16, 309-317.	7.1	320
11	Removal of Perineuronal Nets Unlocks Juvenile Plasticity Through Network Mechanisms of Decreased Inhibition and Increased Gamma Activity. Journal of Neuroscience, 2017, 37, 1269-1283.	1.7	201
12	Aggrecan Directs Extracellular Matrix-Mediated Neuronal Plasticity. Journal of Neuroscience, 2018, 38, 10102-10113.	1.7	128
13	Differential Expression and Cell-Type Specificity of Perineuronal Nets in Hippocampus, Medial Entorhinal Cortex, and Visual Cortex Examined in the Rat and Mouse. ENeuro, 2017, 4, ENEURO.0379-16.2017.	0.9	95
14	Removal of perineuronal nets disrupts recall of a remote fear memory. Proceedings of the National Academy of Sciences of the United States of America, 2018, 115, 607-612.	3.3	88
15	ViSAPy: A Python tool for biophysics-based generation of virtual spiking activity for evaluation of spike-sorting algorithms. Journal of Neuroscience Methods, 2015, 245, 182-204.	1.3	45
16	Open source modules for tracking animal behavior and closed-loop stimulation based on Open Ephys and Bonsai. Journal of Neural Engineering, 2018, 15, 055002.	1.8	31
17	The Glutamine Transporter Slc38a1 Regulates GABAergic Neurotransmission and Synaptic Plasticity. Cerebral Cortex, 2019, 29, 5166-5179.	1.6	27
18	CA2 beyond social memory: Evidence for a fundamental role in hippocampal information processing. Neuroscience and Biobehavioral Reviews, 2021, 126, 398-412.	2.9	27

#	Article	IF	Citations
19	Purinergic activation of BK channels in clonal kidney cells (Vero cells). Acta Physiologica Scandinavica, 2000, 170, 99-109.	2.3	21
20	Temporal Processing in the Visual Cortex of the Awake and Anesthetized Rat. ENeuro, 2017, 4, ENEURO.0059-17.2017.	0.9	18
21	Selective neuromodulation and mutual inhibition within the <scp>CA3–CA2</scp> system can prioritize sequences for replay. Hippocampus, 2020, 30, 1228-1238.	0.9	16
22	Optogenetic pacing of medial septum parvalbumin-positive cells disrupts temporal but not spatial firing in grid cells. Science Advances, 2021, 7, .	4.7	16
23	Experimental Directory Structure (Exdir): An Alternative to HDF5 Without Introducing a New File Format. Frontiers in Neuroinformatics, 2018, 12, 16.	1.3	15
24	Hypotonic stress activates BK channels in clonal kidney cells via purinergic receptors, presumably of the P2Y1 subtype. Acta Physiologica, 2006, 188, 21-31.	1.8	13
25	Inhibition of BK channels contributes to the second phase of the response to TRH in clonal rat anterior pituitary cells. Acta Physiologica Scandinavica, 2004, 180, 347-357.	2.3	9
26	Firing-rate based network modeling of the dLGN circuit: Effects of cortical feedback on spatiotemporal response properties of relay cells. PLoS Computational Biology, 2018, 14, e1006156.	1.5	8
27	Neuronify: An Educational Simulator for Neural Circuits. ENeuro, 2017, 4, ENEURO.0022-17.2017.	0.9	7
28	Experimental Pipeline (Expipe): A Lightweight Data Management Platform to Simplify the Steps From Experiment to Data Analysis. Frontiers in Neuroinformatics, 2020, 14, 30.	1.3	6
29	Entorhinal Grid Cells and the Neural Basis of Navigation. , 2008, , 237-252.		4