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List of Publications by Year in descending order

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Version: 2024-02-01

39
papers

2,366
citations

331670

21
h-index

330143

37
g-index

51
all docs

51
docs citations

51
times ranked

2935
citing authors

#	ARTICLE	IF	CITATIONS
1	GABAergic Hub Neurons Orchestrate Synchrony in Developing Hippocampal Networks. <i>Science</i> , 2009, 326, 1419-1424.	12.6	593
2	Sequential Generation of Two Distinct Synapse-Driven Network Patterns in Developing Neocortex. <i>Journal of Neuroscience</i> , 2008, 28, 12851-12863.	3.6	240
3	On the Dynamics of the Spontaneous Activity in Neuronal Networks. <i>PLoS ONE</i> , 2007, 2, e439.	2.5	224
4	Dissecting functional connectivity of neuronal microcircuits: experimental and theoretical insights. <i>Trends in Neurosciences</i> , 2011, 34, 225-236.	8.6	159
5	Pioneer GABA Cells Comprise a Subpopulation of Hub Neurons in the Developing Hippocampus. <i>Neuron</i> , 2011, 71, 695-709.	8.1	133
6	Toward the Neurocomputer: Image Processing and Pattern Recognition With Neuronal Cultures. <i>IEEE Transactions on Biomedical Engineering</i> , 2005, 52, 371-383.	4.2	110
7	A novel brain partition highlights the modular skeleton shared by structure and function. <i>Scientific Reports</i> , 2015, 5, 10532.	3.3	82
8	In vitro large-scale experimental and theoretical studies for the realization of bi-directional brain-prostheses. <i>Frontiers in Neural Circuits</i> , 2013, 7, 40.	2.8	72
9	Statistical properties of information processing in neuronal networks. <i>European Journal of Neuroscience</i> , 2005, 22, 2953-2964.	2.6	59
10	Pioneer glutamatergic cells develop into a morpho-functionally distinct population in the juvenile CA3 hippocampus. <i>Nature Communications</i> , 2012, 3, 1316.	12.8	52
11	Embryonic Stem Cell-Derived Neurons Form Functional Networks In Vitro. <i>Stem Cells</i> , 2007, 25, 738-749.	3.2	51
12	Early alterations in a mouse model of Rett syndrome: the GABA developmental shift is abolished at birth. <i>Scientific Reports</i> , 2019, 9, 9276.	3.3	50
13	Simultaneous high-speed imaging and optogenetic inhibition in the intact mouse brain. <i>Scientific Reports</i> , 2017, 7, 40041.	3.3	48
14	A Neuromorphic Prosthesis to Restore Communication in Neuronal Networks. <i>iScience</i> , 2019, 19, 402-414.	4.1	48
15	Structure–function multi-scale connectomics reveals a major role of the fronto-striato-thalamic circuit in brain aging. <i>Human Brain Mapping</i> , 2018, 39, 4663-4677.	3.6	45
16	Silicon Chip for Electronic Communication Between Nerve Cells by Non-invasive Interfacing and Analog–Digital Processing. <i>Advanced Materials</i> , 2002, 14, 1190-1193.	21.0	38
17	Group-Level Progressive Alterations in Brain Connectivity Patterns Revealed by Diffusion-Tensor Brain Networks across Severity Stages in Alzheimer’s Disease. <i>Frontiers in Aging Neuroscience</i> , 2017, 9, 215.	3.4	34
18	Clique of Functional Hubs Orchestrates Population Bursts in Developmentally Regulated Neural Networks. <i>PLoS Computational Biology</i> , 2014, 10, e1003823.	3.2	32

#	ARTICLE	IF	CITATIONS
19	Enhanced prefrontal functional structural networks to support postural control deficits after traumatic brain injury in a pediatric population. <i>Network Neuroscience</i> , 2017, 1, 116-142.	2.6	32
20	The GABA Developmental Shift Is Abolished by Maternal Immune Activation Already at Birth. <i>Cerebral Cortex</i> , 2019, 29, 3982-3992.	2.9	29
21	Editorial: Closed-Loop Systems for Next-Generation Neuroprostheses. <i>Frontiers in Neuroscience</i> , 2018, 12, 26.	2.8	27
22	Astrocytes restore connectivity and synchronization in dysfunctional cerebellar networks. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2018, 115, 8025-8030.	7.1	23
23	Toward neuroprosthetic real-time communication from in silico to biological neuronal network via patterned optogenetic stimulation. <i>Scientific Reports</i> , 2020, 10, 7512.	3.3	22
24	Pyramidal neuron growth and increased hippocampal volume during labor and birth in autism. <i>Science Advances</i> , 2019, 5, eaav0394.	10.3	21
25	Structure-Function Connectomics Reveals Aberrant Developmental Trajectory Occurring at Preadolescence in the Autistic Brain. <i>Cerebral Cortex</i> , 2020, 30, 5028-5037.	2.9	20
26	Interaction Information Along Lifespan of the Resting Brain Dynamics Reveals a Major Redundant Role of the Default Mode Network. <i>Entropy</i> , 2018, 20, 742.	2.2	17
27	A QUBO Formulation of the Stereo Matching Problem for D-Wave Quantum Annealers. <i>Entropy</i> , 2018, 20, 786.	2.2	15
28	The Role of the Neuro-Astro-Vascular Unit in the Etiology of Ataxia Telangiectasia. <i>Frontiers in Pharmacology</i> , 2012, 3, 157.	3.5	13
29	Modeling driver cells in developing neuronal networks. <i>PLoS Computational Biology</i> , 2018, 14, e1006551.	3.2	13
30	Microglial phagocytosis dysfunction in the dentate gyrus is related to local neuronal activity in a genetic model of epilepsy. <i>Epilepsia</i> , 2020, 61, 2593-2608.	5.1	10
31	Small variation in dynamic functional connectivity in cerebellar networks. <i>Neurocomputing</i> , 2021, 461, 751-761.	5.9	9
32	Modulation of Neural Network Activity through Single Cell Ablation: An in Vitro Model of Minimally Invasive Neurosurgery. <i>Molecules</i> , 2016, 21, 1018.	3.8	8
33	Quantifying network properties in multi-electrode recordings: spatiotemporal characterization and inter-trial variation of evoked gamma oscillations in mouse somatosensory cortex in vitro. <i>Frontiers in Computational Neuroscience</i> , 2013, 7, 134.	2.1	7
34	Design, Surface Treatment, Cellular Plating, and Culturing of Modular Neuronal Networks Composed of Functionally Inter-connected Circuits. <i>Journal of Visualized Experiments</i> , 2015, , .	0.3	6
35	Reconstruction of Functional Connectivity from Multielectrode Recordings and Calcium Imaging. <i>Advances in Neurobiology</i> , 2019, 22, 207-231.	1.8	6
36	Brain Mapping of Behavioral Domains Using Multi-Scale Networks and Canonical Correlation Analysis. <i>Frontiers in Neuroscience</i> , 0, 16, .	2.8	4

#	ARTICLE	IF	CITATIONS
37	Building Bridges through Science. Neuron, 2017, 96, 730-735.	8.1	2
38	Functional Cliques in Developmentally Correlated Neural Networks. PoliTO Springer Series, 2019, , 53-64.	0.5	0
39	Multiscale network regression for associations between brain connectivity and cognitive and behavioural indices. , 2021, , .		0