

Armen Stepanyants

List of Publications by Year in descending order

Source: <https://exaly.com/author-pdf/6887049/publications.pdf>

Version: 2024-02-01

24
papers

1,715
citations

623734

14
h-index

713466

21
g-index

29
all docs

29
docs citations

29
times ranked

1903
citing authors

#	ARTICLE	IF	CITATIONS
1	Geometry and Structural Plasticity of Synaptic Connectivity. <i>Neuron</i> , 2002, 34, 275-288.	8.1	276
2	Geometric and functional organization of cortical circuits. <i>Nature Neuroscience</i> , 2005, 8, 782-790.	14.8	236
3	Neurogeometry and potential synaptic connectivity. <i>Trends in Neurosciences</i> , 2005, 28, 387-394.	8.6	225
4	The fractions of short- and long-range connections in the visual cortex. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2009, 106, 3555-3560.	7.1	184
5	Local Potential Connectivity in Cat Primary Visual Cortex. <i>Cerebral Cortex</i> , 2008, 18, 13-28.	2.9	124
6	Maximization of the connectivity repertoire as a statistical principle governing the shapes of dendritic arbors. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2009, 106, 12536-12541.	7.1	117
7	Class-Specific Features of Neuronal Wiring. <i>Neuron</i> , 2004, 43, 251-259.	8.1	111
8	Automated Tracing of Neurites from Light Microscopy Stacks of Images. <i>Neuroinformatics</i> , 2011, 9, 263-278.	2.8	87
9	Detection of the optimal neuron traces in confocal microscopy images. <i>Journal of Neuroscience Methods</i> , 2009, 178, 197-204.	2.5	50
10	Active learning of neuron morphology for accurate automated tracing of neurites. <i>Frontiers in Neuroanatomy</i> , 2014, 8, 37.	1.7	50
11	DNA bridging and looping by HMO1 provides a mechanism for stabilizing nucleosome-free chromatin. <i>Nucleic Acids Research</i> , 2014, 42, 8996-9004.	14.5	49
12	Cooperative synapse formation in the neocortex. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2009, 106, 16463-16468.	7.1	47
13	Efficient associative memory storage in cortical circuits of inhibitory and excitatory neurons. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2012, 109, E3614-22.	7.1	42
14	Structural Plasticity of Circuits in Cortical Neuropil. <i>Journal of Neuroscience</i> , 2008, 28, 8477-8488.	3.6	31
15	Computer assisted detection of axonal bouton structural plasticity in in vivo time-lapse images. <i>ELife</i> , 2017, 6, .	6.0	18
16	Robust Associative Learning Is Sufficient to Explain the Structural and Dynamical Properties of Local Cortical Circuits. <i>Journal of Neuroscience</i> , 2019, 39, 6888-6904.	3.6	16
17	Effects of homeostatic constraints on associative memory storage and synaptic connectivity of cortical circuits. <i>Frontiers in Computational Neuroscience</i> , 2015, 9, 74.	2.1	11
18	Neocortex: a lean mean memory storage machine. <i>Nature Neuroscience</i> , 2016, 19, 643-644.	14.8	9

#	ARTICLE	IF	CITATIONS
19	Automated reconstruction of neural trees using front re-initialization. Proceedings of SPIE, 2012, 8314, .	0.8	7
20	Statistical Traces of Long-Term Memories Stored in Strengths and Patterns of Synaptic Connections. Journal of Neuroscience, 2011, 31, 7657-7669.	3.6	6
21	Noise in Neurons and Synapses Enables Reliable Associative Memory Storage in Local Cortical Circuits. ENeuro, 2021, 8, ENEURO.0302-20.2020.	1.9	5
22	Accurate registration of in vivo time-lapse images. , 2019, 10949, .		5
23	Artificial neural network filters for enhancing 3D optical microscopy images of neurites. , 2019, 10949, .		3
24	Correction of topological errors in automated traces of neurites. , 2021, 11596, .		0