

Ronen Segev

List of Publications by Year in descending order

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Version: 2024-02-01

61
papers

4,412
citations

201575

27
h-index

133188

59
g-index

64
all docs

64
docs citations

64
times ranked

4184
citing authors

#	ARTICLE	IF	CITATIONS
1	Weak pairwise correlations imply strongly correlated network states in a neural population. Nature, 2006, 440, 1007-1012.	13.7	1,377
2	General properties of transcriptional time series in Escherichia coli. Nature Genetics, 2011, 43, 554-560.	9.4	360
3	How silent is the brain: is there a "dark matter" problem in neuroscience?. Journal of Comparative Physiology A: Neuroethology, Sensory, Neural, and Behavioral Physiology, 2006, 192, 777-784.	0.7	197
4	Recording spikes from a large fraction of the ganglion cells in a retinal patch. Nature Neuroscience, 2004, 7, 1155-1162.	7.1	195
5	How Much the Eye Tells the Brain. Current Biology, 2006, 16, 1428-1434.	1.8	193
6	Long Term Behavior of Lithographically Prepared In Vitro Neuronal Networks. Physical Review Letters, 2002, 88, 118102.	2.9	186
7	Sparse low-order interaction network underlies a highly correlated and learnable neural population code. Proceedings of the National Academy of Sciences of the United States of America, 2011, 108, 9679-9684.	3.3	181
8	A method for spike sorting and detection based on wavelet packets and Shannon's mutual information. Journal of Neuroscience Methods, 2002, 117, 1-12.	1.3	170
9	Hidden Neuronal Correlations in Cultured Networks. Physical Review Letters, 2004, 92, 118102.	2.9	130
10	Observations and modeling of synchronized bursting in two-dimensional neural networks. Physical Review E, 2001, 64, 011920.	0.8	110
11	Functional Organization of Ganglion Cells in the Salamander Retina. Journal of Neurophysiology, 2006, 95, 2277-2292.	0.9	103
12	Formation of Electrically Active Clusterized Neural Networks. Physical Review Letters, 2003, 90, 168101.	2.9	80
13	Stimulus-dependent Maximum Entropy Models of Neural Population Codes. PLoS Computational Biology, 2013, 9, e1002922.	1.5	80
14	The Architecture of Functional Interaction Networks in the Retina. Journal of Neuroscience, 2011, 31, 3044-3054.	1.7	79
15	Detection and Sorting of Neural Spikes Using Wavelet Packets. Physical Review Letters, 2000, 85, 4637-4640.	2.9	71
16	Synergy from Silence in a Combinatorial Neural Code. Journal of Neuroscience, 2011, 31, 15732-15741.	1.7	64
17	Pop-out in visual search of moving targets in the archer fish. Nature Communications, 2015, 6, 6476.	5.8	60
18	Inhibition of return in the archer fish. Nature Communications, 2013, 4, 1657.	5.8	52

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19	Representation of edges, head direction, and swimming kinematics in the brain of freely-navigating fish. <i>Scientific Reports</i> , 2020, 10, 14762.	1.6	50
20	Generic modeling of chemotactic based self-wiring of neural networks. <i>Neural Networks</i> , 2000, 13, 185-199.	3.3	46
21	A thesaurus for a neural population code. <i>ELife</i> , 2015, 4, .	2.8	45
22	Role of Eye Movements in the Retinal Code for a Size Discrimination Task. <i>Journal of Neurophysiology</i> , 2007, 98, 1380-1391.	0.9	41
23	Self-Regulated Complexity in Cultured Neuronal Networks. <i>Physical Review Letters</i> , 2004, 92, 198105.	2.9	36
24	Magnetic Tracking of Eye Motion in Small, Fast-Moving Animals. <i>IEEE Transactions on Magnetics</i> , 2008, 44, 4492-4495.	1.2	32
25	Orientation saliency without visual cortex and target selection in archer fish. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2010, 107, 16726-16731.	3.3	30
26	Visual acuity in the archerfish: Behavior, anatomy, and neurophysiology. <i>Journal of Vision</i> , 2012, 12, 18-18.	0.1	30
27	Modeling of Synchronized Bursting Events: The Importance of Inhomogeneity. <i>Neural Computation</i> , 2004, 16, 2577-2595.	1.3	29
28	The Brain of the Archerfish <i>Toxotes chatareus</i> : A Nissl-Based Neuroanatomical Atlas and Catecholaminergic/Cholinergic Systems. <i>Frontiers in Neuroanatomy</i> , 2016, 10, 106.	0.9	28
29	Decorrelation of retinal response to natural scenes by fixational eye movements. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2015, 112, 3110-3115.	3.3	27
30	Wireless electrophysiology of the brain of freely swimming goldfish. <i>Journal of Neuroscience Methods</i> , 2017, 278, 76-86.	1.3	26
31	Coding "What" and "When" in the Archer Fish Retina. <i>PLoS Computational Biology</i> , 2010, 6, e1000977.	1.5	23
32	Spontaneous synchronized bursting in 2D neural networks. <i>Physica A: Statistical Mechanics and Its Applications</i> , 2001, 302, 64-69.	1.2	21
33	Archer fish fast hunting maneuver may be guided by directionally selective retinal ganglion cells. <i>European Journal of Neuroscience</i> , 2012, 35, 436-444.	1.2	20
34	Visual receptive field properties of cells in the optic tectum of the archer fish. <i>Journal of Neurophysiology</i> , 2013, 110, 748-759.	0.9	20
35	Predictive saccade in the absence of smooth pursuit: interception of moving targets in the archer fish. <i>Journal of Experimental Biology</i> , 2012, 215, 4248-54.	0.8	19
36	Measuring and tracking eye movements of a behaving archer fish by real-time stereo vision. <i>Journal of Neuroscience Methods</i> , 2009, 184, 235-243.	1.3	18

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37	What a predator can teach us about visual processing: a lesson from the archerfish. <i>Current Opinion in Neurobiology</i> , 2018, 52, 80-87.	2.0	18
38	Self-wiring of neural networks. <i>Physics Letters, Section A: General, Atomic and Solid State Physics</i> , 1998, 237, 307-313.	0.9	16
39	Adaptation to Changes in Higher-Order Stimulus Statistics in the Salamander Retina. <i>PLoS ONE</i> , 2014, 9, e85841.	1.1	15
40	Evolvable hardware: genetic search in a physical realm. <i>Physica A: Statistical Mechanics and Its Applications</i> , 2003, 326, 265-285.	1.2	12
41	Retinal Metric: A Stimulus Distance Measure Derived from Population Neural Responses. <i>Physical Review Letters</i> , 2013, 110, 058104.	2.9	12
42	Symbol-value association and discrimination in the archerfish. <i>PLoS ONE</i> , 2017, 12, e0174044.	1.1	12
43	Feature integration theory in non-humans: Spotlight on the archerfish. <i>Attention, Perception, and Psychophysics</i> , 2020, 82, 752-774.	0.7	11
44	Neural modeling of synchronized bursting events. <i>Neurocomputing</i> , 2004, 58-60, 179-184.	3.5	10
45	What pops out for you pops out for fish: Four common visual features. <i>Journal of Vision</i> , 2019, 19, 1.	0.1	9
46	Spike Triggered Covariance in Strongly Correlated Gaussian Stimuli. <i>PLoS Computational Biology</i> , 2013, 9, e1003206.	1.5	8
47	A Generalized Linear Model of a Navigation Network. <i>Frontiers in Neural Circuits</i> , 2020, 14, 56.	1.4	8
48	From fish out of water to new insights on navigation mechanisms in animals. <i>Behavioural Brain Research</i> , 2022, 419, 113711.	1.2	8
49	From Neurons to Brain: Adaptive Self-Wiring of Neurons. <i>International Journal of Modeling, Simulation, and Scientific Computing</i> , 1998, 01, 67-78.	0.9	6
50	Wireless Electrophysiological Recording of Neurons by Movable Tetrodes in Freely Swimming Fish. <i>Journal of Visualized Experiments</i> , 2019, , .	0.2	6
51	Adaptive Colour Contrast Coding in the Salamander Retina Efficiently Matches Natural Scene Statistics. <i>PLoS ONE</i> , 2013, 8, e79163.	1.1	4
52	Coding Schemes in the Archerfish Optic Tectum. <i>Frontiers in Neural Circuits</i> , 2018, 12, 18.	1.4	4
53	Recognition of natural objects in the archerfish. <i>Journal of Experimental Biology</i> , 2022, 225, .	0.8	4
54	How fast can we learn maximum entropy models of neural populations?. <i>Journal of Physics: Conference Series</i> , 2009, 197, 012020.	0.3	3

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55	The Natural Variation of a Neural Code. PLoS ONE, 2012, 7, e33149.	1.1	3
56	Chemical waves and internal energy during cooperative self-wiring of neural nets. Neurocomputing, 2001, 38-40, 875-879.	3.5	2
57	Pharmacological study of direction selectivity in the archer fish retina. Journal of Integrative Neuroscience, 2015, 14, 473-490.	0.8	2
58	Long-range neural inhibition and stimulus competition in the archerfish optic tectum. Journal of Comparative Physiology A: Neuroethology, Sensory, Neural, and Behavioral Physiology, 2019, 205, 537-552.	0.7	2
59	Addendum to: "From Neurons to Brain: Adaptive Self-Wiring of Neurons". International Journal of Modeling, Simulation, and Scientific Computing, 1998, 01, 283-285.	0.9	1
60	Feature Integration Theory. , 2021, , 1-11.		0
61	Feature Integration Theory. , 2022, , 2639-2649.		0