Ido Kanter

List of Publications by Year
in descending order

51 papers	1,356 citations	430874 18 h-index	345221 36 g-index
53 all docs	53 docs citations	53 times ranked	1014 citing authors

#	Article	IF	Citations
1	Long anisotropic absolute refractory periods with rapid rise times to reliable responsiveness. Physical Review E, 2022, 105, 014401.	2.1	4
2	Efficient dendritic learning as an alternative to synaptic plasticity hypothesis. Scientific Reports, 2022, 12, 6571.	3.3	20
3	Significant anisotropic neuronal refractory period plasticity. Europhysics Letters, 2021, 134, 60007.	2.0	4
4	Power-law scaling to assist with key challenges in artificial intelligence. Scientific Reports, 2020, 10, 19628.	3.3	9
5	Brain experiments imply adaptation mechanisms which outperform common AI learning algorithms. Scientific Reports, 2020, 10, 6923.	3.3	6
6	A minority of self-organizing autonomous vehicles significantly increase freeway traffic flow. Journal of Physics A: Mathematical and Theoretical, 2020, 53, 414001.	2.1	6
7	Biological learning curves outperform existing ones in artificial intelligence algorithms. Scientific Reports, 2019, 9, 11558.	3.3	9
8	Mutual coupling and synchronization of optically coupled quantum-dot micropillar lasers at ultra-low light levels. Nature Communications, 2019, 10, 1539.	12.8	25
9	Dendritic Learning as a Paradigm Shift in Brain Learning. ACS Chemical Neuroscience, 2018, 9, 1230-1232.	3.5	5
10	Adaptive nodes enrich nonlinear cooperative learning beyond traditional adaptation by links. Scientific Reports, 2018, 8, 5100.	3.3	19
11	Stationary log-normal distribution of weights stems from spontaneous ordering in adaptive node networks. Scientific Reports, 2018, 8, 13091.	3.3	4
12	Less Might Be More: Conduction Failure as a Factor Possibly Limiting the Efficacy of Higher Frequencies in rTMS Protocols. Frontiers in Neuroscience, 2018, 12, 358.	2.8	5
13	Oscillations in networks of networks stem from adaptive nodes with memory. Scientific Reports, 2017, 7, 2700.	3.3	4
14	Fast reversible learning based on neurons functioning as anisotropic multiplex hubs. Europhysics Letters, 2017, 118, 46002.	2.0	7
15	New Types of Experiments Reveal that a Neuron Functions as Multiple Independent Threshold Units. Scientific Reports, 2017, 7, 18036.	3.3	47
16	Mimicking Collective Firing Patterns of Hundreds of Connected Neurons using a Single-Neuron Experiment. Frontiers in Neuroscience, 2016, 9, 508.	2.8	4
17	Simultaneous multi-patch-clamp and extracellular-array recordings: Single neuron reflects network activity. Scientific Reports, 2016, 6, 36228.	3.3	30
18	Vitality of Neural Networks under Reoccurring Catastrophic Failures. Scientific Reports, 2016, 6, 31674.	3.3	5

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19	Neuronal response impedance mechanism implementing cooperative networks with low firing rates and ÃŽÂ¼s precision. Frontiers in Neural Circuits, 2015, 9, 29.	2.8	18
20	Broadband macroscopic cortical oscillations emerge from intrinsic neuronal response failures. Frontiers in Neural Circuits, 2015, 9, 65.	2.8	13
21	Synchronization among neuronal pools without common inputs: in vivo study. Brain Structure and Function, 2015, 220, 3721-3731.	2.3	11
22	Chaos synchronization in networks of semiconductor superlattices. Europhysics Letters, 2015, 112, 30007.	2.0	12
23	A computational paradigm for dynamic logic-gates in neuronal activity. Frontiers in Computational Neuroscience, 2014, 8, 52.	2.1	32
24	Error correction and fast detectors implemented by ultrafast neuronal plasticity. Physical Review E, 2014, 89, 042712.	2.1	4
25	Chaotic and non-chaotic phases in experimental responses of a single neuron. Europhysics Letters, 2014, 106, 46002.	2.0	4
26	Cluster synchronization in large laser networks. IEICE Proceeding Series, 2014, 1, 61-64.	0.0	0
27	Synthetic reverberating activity patterns embedded in networks of cortical neurons. IEICE Proceeding Series, 2014, 1, 386-386.	0.0	0
28	Fast Physical Random-Number Generation Based on Room-Temperature Chaotic Oscillations in Weakly Coupled Superlattices. Physical Review Letters, 2013, 111, 044102.	7.8	63
29	Synchronization by elastic neuronal latencies. Physical Review E, 2013, 87, 012724.	2.1	9
30	Strong and Weak Chaos in Nonlinear Networks with Time-Delayed Couplings. Physical Review Letters, 2011, 107, 234102.	7.8	111
31	Nonlocal Mechanism for Synchronization of Time Delay Networks. Journal of Statistical Physics, 2011, 145, 713-733.	1.2	6
32	An optical ultrafast random bit generator. Nature Photonics, 2010, 4, 58-61.	31.4	413
33	Synchronization of random bit generators based on coupled chaotic lasers and application to cryptography. Optics Express, 2010, 18, 18292.	3.4	59
34	Public Channel Cryptography: Chaos Synchronization and Hilbertâ€™s Tenth Problem. Physical Review Letters, 2008, 101, 084102.	7.8	56
35	Spiking optical patterns and synchronization. Physical Review E, 2007, 76, 046207.	2.1	23
36	Synchronization of Mutually Coupled Chaotic Lasers in the Presence of a Shutter. Physical Review Letters, 2007, 98, 154101.	7.8	28

#	Article	IF	Citations
37	Identifying universals of text translation*. Journal of Quantitative Linguistics, 2006, 13, 35-43.	1.2	12
38	Outsourcing the Complexity of Detection in MIMO Channels. , 2006, , .		0
39	The Entropy of a Binary Hidden Markov Process. Journal of Statistical Physics, 2005, 121, 343-360.	1.2	32
40	THE THEORY OF NEURAL NETWORKS AND CRYPTOGRAPHY. , 2003, , .		18
41	Mutual learning in a tree parity machine and its application to cryptography. Physical Review E, 2002, 66, 066135.	2.1	54
42	Title is missing!. Journal of Statistical Physics, 2001, 105, 719-720.	1.2	0
43	Multichoice minority game. Physical Review E, 2001, 63, 066103.	2.1	15
44	Multilayer Neural Networks with Extensively Many Hidden Units. Physical Review Letters, 2001, 87, 078101.	7.8	7
45	Cascading parity-check error-correcting codes. Physical Review E, 2000, 61, 2137-2140.	2.1	25
46	Statistical properties of contact maps. Physical Review E, 1999, 59, 977-984.	2.1	36
47	Error-Correcting Codes That Nearly Saturate Shannon's Bound. Physical Review Letters, 1999, 83, 2660-2663.	7.8	46
48	Learnability of periodic activation functions: General results. Physical Review E, 1998, 58, 3606-3609.	2.1	11
49	ON THE EQUIVALENCE OF TWO-LAYERED PERCEPTRONS WITH BINARY NEURONS. International Journal of Neural Systems, 1995, 06, 225-231.	5.2	2
50	Computational capabilities of restricted two-layered perceptrons. Physical Review E, 1994, 50, 577-595.	2.1	19
51	Secure Communication with Chaos Synchronization. , 0, , 301-324.		4