Yakov B Kazanovich

List of Publications by Year
in descending order

28 papers	544 citations	687363 13 h-index	642732 23 g-index
28 all docs	28 docs citations	28 times ranked	342 citing authors

#	Article	IF	Citations
1	Synchronization in a neural network of phase oscillators with the central element. Biological Cybernetics, 1994, 71, 177-185.	1.3	74
2	Models of neural dynamics in brain information processing â€" the developments of 'the decade'. Physics-Uspekhi, 2002, 45, 1073-1095.	2.2	61
3	Oscillatory model of attention-guided object selection and novelty detection. Neural Networks, 2004, 17, 899-915.	5.9	51
4	Dynamics of neural networks with a central element. Neural Networks, 1999, 12, 441-454.	5.9	47
5	An Oscillatory Neural Model of Multiple Object Tracking. Neural Computation, 2006, 18, 1413-1440.	2.2	46
6	Object selection by an oscillatory neural network. BioSystems, 2002, 67, 103-111.	2.0	33
7	Visual perception of ambiguous figures: synchronization based neural models. Biological Cybernetics, 2009, 100, 491-504.	1.3	24
8	A neural model of selective attention and object segmentation in the visual scene: An approach based on partial synchronization and star-like architecture of connections. Neural Networks, 2009, 22, 707-719.	5.9	22
9	An oscillatory neural network model of sparse distributed memory and novelty detection. BioSystems, 2000, 58, 265-272.	2.0	20
10	Oscillatory neural network model of attention focus formation and control. BioSystems, 2003, 71, 29-38.	2.0	17
11	Selective attention model with spiking elements. Neural Networks, 2009, 22, 890-900.	5.9	17
12	Bifurcation study of phase oscillator systems with attractive and repulsive interaction. Physical Review E, 2014, 90, 022911.	2.1	16
13	Bifurcations in phase oscillator networks with a central element. Physica D: Nonlinear Phenomena, 2012, 241, 1072-1089.	2.8	14
14	Phase relations of theta oscillations in a computer model of the hippocampal CA1 field: Key role of Schaffer collaterals. Neural Networks, 2019, 116, 119-138.	5.9	14
15	Spiking neural network model for memorizing sequences with forward and backward recall. BioSystems, 2013, 112, 214-223.	2.0	13
16	Synchronization of neural activity and information processing. Behavioral and Brain Sciences, 1998, 21, 833-833.	0.7	12
17	Competition for synchronization in a phase oscillator system. Physica D: Nonlinear Phenomena, 2013, 261, 114-124.	2.8	12
18	Reaction times in visual search can be explained by a simple model of neural synchronization. Neural Networks, 2017, 87, 1-7.	5.9	12

#	Article	IF	Citations
19	Winner-take-all in a phase oscillator system with adaptation. Scientific Reports, 2018, 8, 416.	3.3	10
20	Oscillations and waves in the models of interactive neural populations. BioSystems, 2006, 86, 53-62.	2.0	7
21	A computational model of familiarity detection for natural pictures, abstract images, and random patterns: Combination of deep learning and anti-Hebbian training. Neural Networks, 2021, 143, 628-637.	5.9	6
22	A combinatorial approach to the problem of self-assembly. Discrete Applied Mathematics, 1995, 57, 45-65.	0.9	5
23	Oscillatory model of novelty detection. Network: Computation in Neural Systems, 2001, 12, 1-20.	3.6	3
24	Partial synchronization of neural activity and information processing. , 2009, , .		2
25	Selective Attention Model of Moving Objects. Lecture Notes in Computer Science, 2008, , 358-367.	1.3	2
26	Temporal Structure of Neural Activity and Modelling of Information Processing in the Brain. Lecture Notes in Computer Science, 2001, , 237-254.	1.3	2
27	Modeling ?preattention? and ?attention? information processing by synchronization of neural activity. Radiophysics and Quantum Electronics, 1994, 37, 607-614.	0.5	1
28	Modeling Brain Cognitive Functions by Oscillatory Neural Networks. Optical Memory and Neural Networks (Information Optics), 2019, 28, 175-184.	1.0	1