Ali A Minai

List of Publications by Year
in descending order

85 papers	1,702 citations	393982 19 h-index	329751 37 g-index
91 all docs	91 docs citations	91 times ranked	1514 citing authors

#	Article	IF	Citations
1	Spatial Processing in the Brain: The Activity of Hippocampal Place Cells. Annual Review of Neuroscience, 2001, 24, 459-486.	5.0	173
2	Diagnosing Autism Spectrum Disorder from Brain Resting-State Functional Connectivity Patterns Using a Deep Neural Network with a Novel Feature Selection Method. Frontiers in Neuroscience, 2017, 11, 460.	1.4	152
3	Investigating the predictability of essential genes across distantly related organisms using an integrative approach. Nucleic Acids Research, 2011, 39, 795-807.	6.5	120
4	Efficient associative memory using small-world architecture. Neurocomputing, 2001, 38-40, 489-496.	3.5	104
5	Balancing search and target response in cooperative unmanned aerial vehicle (UAV) teams. IEEE Transactions on Systems, Man, and Cybernetics, 2006, 36, 571-587.	5.5	100
6	Synchronization of Randomly Multiplexed Chaotic Systems with Application to Communication. Physical Review Letters, 2000, 85, 5456-5459.	2.9	84
7	Multi-UAV Cooperative Search Using an Opportunistic Learning Method. Journal of Dynamic Systems, Measurement and Control, Transactions of the ASME, 2007, 129, 716-728.	0.9	82
8	Latent Attractors: A Model for Context-Dependent Place Representations in the Hippocampus. Neural Computation, 2000, 12, 1009-1043.	1.3	52
9	Inferring causal networks using fuzzy cognitive maps and evolutionary algorithms with application to gene regulatory network reconstruction. Applied Soft Computing Journal, 2015, 37, 667-679.	4.1	52
10	Neural dynamics of idea generation and the effects of priming. Neural Networks, 2009, 22, 674-686.	3.3	50
11	Connectivity and thought: The influence of semantic network structure in a neurodynamical model of thinking. Neural Networks, 2012, 32, 147-158.	3.3	48
12	The dynamics of sparse random networks. Biological Cybernetics, 1993, 70, 177-187.	0.6	38
13	On the derivatives of the sigmoid. Neural Networks, 1993, 6, 845-853.	3.3	38
14	Setting the Activity Level in Sparse Random Networks. Neural Computation, 1994, 6, 85-99.	1.3	38
15	One-Shot Recognition of Manufacturing Defects in Steel Surfaces. Procedia Manufacturing, 2020, 48, 1064-1071.	1.9	37
16	Presurgical language localization with visual naming associated ECoG highâ€•gamma modulation in pediatric drugâ€•resistant epilepsy. Epilepsia, 2017, 58, 663-673.	2.6	34
17	Modeling Ideational Creativity in Groups: Connecting Cognitive, Neural, and Computational Approaches. Small Group Research, 2010, 41, 688-724.	1.8	33
18	Impact of Heterogeneity on Coverage and Broadcast Reachability in Wireless Sensor Networks. Computer Communications and Networks (IC3N), Proceedings of the IEEE International Conference on, 2006, , .	0.0	26

#	Article	IF	Citations
19	Communicating with noise: How chaos and noise combine to generate secure encryption keys. Chaos, 1998, 8, 621-628.	1.0	25
20	Decentralized Cooperative Search in UAV's Using Opportunistic Learning. , 2002, , .		25
21	Effects of relevant and irrelevant primes on idea generation: A computational model. , 2009, , .		19
22	Temporally Sequenced Intelligent Block-Matching and Motion-Segmentation Using Locally Coupled Networks. IEEE Transactions on Neural Networks, 2004, 15, 1202-1214.	4.8	17
23	A modular neural model of motor synergies. Neural Networks, 2012, 32, 96-108.	3.3	16
24	Connectivity and creativity in semantic neural networks. , 2011, , .		15
25	Thinking in prose and poetry: A semantic neural model. , 2013, , .		15
26	Editorial IEEE Transactions on Neural Networks and Learning Systems 2016 and Beyond. IEEE Transactions on Neural Networks and Learning Systems, 2016, 27, 1-7.	7.2	15
27	Chaos-induced synchronization in discrete-time oscillators driven by a random input. Physical Review E, 1998, 57, 1559-1562.	0.8	14
28	Covariance Learning of Correlated Patterns in Competitive Networks. Neural Computation, 1997, 9, 667-681.	1.3	13
29	Stimulus-induced bifurcations in discrete-time neural oscillators. Biological Cybernetics, 1998, 79, 87-96.	0.6	13
30	To Pass or Not to Pass: Modeling the Movement and Affordance Dynamics of a Pick and Place Task. Frontiers in Psychology, 2017, 8, 1061.	1.1	13
31	Phase transition in a swarm algorithm for self-organized construction. Physical Review E, 2003, 68, 046111.	0.8	12
32	A conceptual neural model of idea generation. , 2009, , .		12
33	Chunks of thought: Finding salient semantic structures in texts. , 2014, , .		12
34	Perturbation response in feedforward networks. Neural Networks, 1994, 7, 783-796.	3.3	10
35	A latent attractors model of context selection in the dentate gyrusâ€“hilus system. Neurocomputing, 1999, 26-27, 671-676.	3.5	10
36	Adaptive Dynamic Modularity in a Connectionist Model of Context-Dependent Idea Generation. Neural Networks (IJCNN), International Joint Conference on, 2007, , .	0.0	10

#	Article	IF	Citations
37	A dynamical connectionist model of idea generation. , 2009, , .		9
38	Synchronization of chaotic maps through a noisy coupling channel with application to digital communication. Physical Review E, 1999, 59, 312-320.	0.8	8
39	A synergistic view of autonomous cognitive systems. , 2010, , .		8
40	Effect of associative rules on the dynamics of conceptual combination in a neurodynamical model. , 2015, , .		8
41	A Hierarchical Behavioral Dynamic Approach for Naturally Adaptive Human-Agent Pick-and-Place Interactions. Complexity, 2019, 2019, 1-16.	0.9	8
42	Neurocognitive spotlights: Configuring domains for ideation. , 2010, , .		6
43	A cognitive inspired method for assessing novelty of short-text ideas. , 2020, , .		6
44	Synchronizing multiple chaotic maps with a randomized scalar coupling. Physica D: Nonlinear Phenomena, 1999, 125, 241-259.	1.3	5
45	A multi-agent model for the co-evolution of ideas and communities. , 2010, , .		5
46	Self-Organization of Sensor Networks with Heterogeneous Connectivity. Signals and Communication Technology, 2010, , 39-59.	0.4	5
47	A year of neural network research: Special Issue on the 2011 International Joint Conference on Neural Networks. Neural Networks, 2012, 32, 1-2.	3.3	5
48	Whatâ€™s in a Word? Detecting Partisan Affiliation from Word Use in Congressional Speeches. , 2019, , .		5
49	A Comparative Study of Methods for Visualizable Semantic Embedding of Small Text Corpora. , 2021, , .		5
50	An attractor model for hippocampal place cell hysteresis. Neurocomputing, 2001, 38-40, 1185-1191.	3.5	4
51	A computational model of the interaction between external and internal cues for the control of hippocampal place cells. Neurocomputing, 2003, 52-54, 371-379.	3.5	4
52	Network capacity analysis for latent attractor computation. Network: Computation in Neural Systems, 2003, 14, 273-302.	2.2	4
53	Guest Editorial Special Issue on Temporal Coding for Neural Information Processing. IEEE Transactions on Neural Networks, 2004, 15, 953-956.	4.8	4
54	ANSWER: An unsupervised attractor network method for detecting salient words in text corpora. , 2015, , .		4

#	Article	IF	Citations
55	Computational Models of Cognitive and Motor Control. , 2015, , 665-682.		4
56	PAPAc. , 2017, , .		4
57	Using Semantic Clustering And Autoencoders For Detecting Novelty In Corpora Of Short Texts. , 2018, , .		4
58	Robust Deep Reinforcement Learning for Quadcopter Control. IFAC-PapersOnLine, 2021, 54, 90-95.	0.5	4
59	A comparison of context-dependent hippocampal place codes in 1-layer and 2-layer recurrent networks. Neurocomputing, 2000, 32-33, 353-358.	3.5	3
60	A neurodynamical model of context-dependent category learning. , 2011, , .		3
61	Semantic knowledge inference from online news media using an LDA-NLP approach. , 2011, , .		3
62	Divergent thinking in a neurodynamical model of ideation. , 2016, , .		3
63	Feature selection using multiple auto-encoders. , 2017, , .		3
64	A Lexical Network Approach for Identifying Suicidal Ideation inÂClinical Interview Transcripts. Springer Proceedings in Complexity, 2018, , 165-172.	0.2	3
65	Self-Organized Circle Formation around an Unknown Target by a Multi-Robot Swarm using a Local Communication Strategy. , 2018, , .		3
66	Latent Attractors: A General Paradigm for Context-Dependent Neural Computation. , 2007, , 135-169.		3
67	Learning Complex Population-Coded Sequences. Lecture Notes in Computer Science, 2009, , 296-305.	1.0	3
68	Using chaos to produce synchronized stochastic dynamics in non-homogeneous map arrays with a random scalar coupling. Physics Letters, Section A: General, Atomic and Solid State Physics, 1999, 251, 31-38.	0.9	2
69	Stable-yet-switchable (SyS) attractor networks. , 2009, , .		2
70	A spiking neural model for the spatial coding of cognitive response sequences. , 2010, , .		2
71	Modeling the effect of hint timing on the idea generation process. , 2013, , .		2
72	Memristive device based learning for navigation in robots. Bioinspiration and Biomimetics, 2017, 12, 066011.	1.5	2

#	Article	IF	Citations
73	Implicit Learning and Creativity in Human Networks: A Computational Model. Springer Proceedings in Complexity, 2018, , 147-154.	0.2	2
74	Mining the Temporal Structure of Thought from Text. Springer Proceedings in Complexity, 2018, , 291-298.	0.2	2
75	Synergistic organization of action: A computational model. , 2011, , .		1
76	Reliable storage and recall of aperiodic spatiotemporal activity patterns using scaffolded attractors. , 2016, , .		1
77	The Paths We Pick Together. , 2018, , .		1
78	One Shot Spatial Learning through Replay in a Hippocampus-Inspired Reinforcement Learning Model. , 2020, , .		1
79	Different Hippocampal Place Cell Maps for Different Environments. , 2002, , 23-40.		1
80	Network capacity analysis for latent attractor computation. Network: Computation in Neural Systems, 2003, 14, 273-302.	2.2	1
81	Self-Organized Hebbian Inference of Environment Topology by Distributed Sensor Networks. Neural Networks (IJCNN), International Joint Conference on, 2007, , .	0.0	0
82	On the varying benefit of communication between mobile agents in a decentralized team. , 2009, , .		0
83	Editorial â€" Special Issue on Autonomous Learning. Neural Networks, 2013, 41, 1-2.	3.3	0
84	A hierarchical model of synergistic motor control. , 2013, , .		0
85	Reading the Mediaâ€™s Mind. Springer Proceedings in Complexity, 2018, , 398-405.	0.2	0