Alberto Testolin

List of Publications by Year
in descending order

36 papers	638 citations	623734 14 h-index	642732 23 g-index
40 all docs	40 docs citations	40 times ranked	574 citing authors

#	ARTICLE	IF	CITATIONS
1	Cognition-Based Networks: A New Perspective on Network Optimization Using Learning and Distributed Intelligence. IEEE Access, 2015, 3, 1512-1530.	4.2	90
2	Modeling language and cognition with deep unsupervised learning: a tutorial overview. Frontiers in Psychology, 2013, 4, 515.	2.1	56
3	An emergentist perspective on the origin of number sense. Philosophical Transactions of the Royal Society B: Biological Sciences, 2018, 373, 20170043.	4.0	48
4	Letter perception emerges from unsupervised deep learning and recycling of natural image features. Nature Human Behaviour, 2017, 1, 657-664.	12.0	42
5	Probabilistic Models and Generative Neural Networks: Towards an Unified Framework for Modeling Normal and Impaired Neurocognitive Functions. Frontiers in Computational Neuroscience, 2016, 10, 73.	2.1	37
6	A machine learning approach to QoE-based video admission control and resource allocation in wireless systems. , 2014, , .		33
7	Numerosity discrimination in deep neural networks: Initial competence, developmental refinement and experience statistics. Developmental Science, 2020, 23, e12940.	2.4	33
8	On the Relationship Between the Underwater Acoustic and Optical Channels. IEEE Transactions on Wireless Communications, 2017, 16, 8037-8051.	9.2	31
9	Deep Unsupervised Learning on a Desktop PC: A Primer for Cognitive Scientists. Frontiers in Psychology, 2013, 4, 251.	2.1	28
10	Visual sense of number vs. sense of magnitude in humans and machines. Scientific Reports, 2020, 10, 10045.	3.3	23
11	Combining Denoising Autoencoders and Dynamic Programming for Acoustic Detection and Tracking of Underwater Moving Targets. Sensors, 2020, 20, 2945.	3.8	21
12	QoE Multi-Stage Machine Learning for Dynamic Video Streaming. IEEE Transactions on Cognitive Communications and Networking, 2018, 4, 146-161.	7.9	19
13	Detecting Submerged Objects Using Active Acoustics and Deep Neural Networks: A Test Case for Pelagic Fish. IEEE Transactions on Mobile Computing, 2022, 21, 2776-2788.	5.8	18
14	Distributed Reinforcement Learning for Flexible and Efficient UAV Swarm Control. IEEE Transactions on Cognitive Communications and Networking, 2021, 7, 955-969.	7.9	17
15	Learning Orthographic Structure With Sequential Generative Neural Networks. Cognitive Science, 2016, 40, 579-606.	1.7	14
16	Neural Networks for Sequential Data: a Pre‐training Approach based on Hidden Markov Models. Neurocomputing, 2015, 169, 323-333.	5.9	12
17	Machine Learning-Aided Design Of Thinned Antenna Arrays For Optimized Network Level Performance. , 2020, , .		11
18	A comparison of feature extraction methods for prediction of neuropsychological scores from functional connectivity data of stroke patients. Brain Informatics, 2021, 8, 8.	3.0	11

#	ARTICLE	IF	CITATIONS
19	Distributed reinforcement learning for flexible UAV swarm control with transfer learning capabilities. , 2020, , .		10
20	Learning representation hierarchies by sharing visual features: a computational investigation of Persian character recognition with unsupervised deep learning. Cognitive Processing, 2017, 18, 273-284.	1.4	9
21	The Challenge of Modeling the Acquisition of Mathematical Concepts. Frontiers in Human Neuroscience, 2020, 14, 100.	2.0	9
22	Do estimates of numerosity really adhere to Weber's law? A reexamination of two case studies. Psychonomic Bulletin and Review, 2021, 28, 158-168.	2.8	9
23	The Role of Architectural and Learning Constraints in Neural Network Models: A Case Study on Visual Space Coding. Frontiers in Computational Neuroscience, 2017, 11, 13.	2.1	7
24	Underwater Acoustic Detection and Localization with a Convolutional Denoising Autoencoder. , 2019, , .		7
25	The phase space of meaning model of psychopathology: A computer simulation modelling study. PLoS ONE, 2021, 16, e0249320.	2.5	7
26	Emergence of Network Motifs in Deep Neural Networks. Entropy, 2020, 22, 204.	2.2	6
27	Cognition-based networks: Applying cognitive science to multimedia wireless networking. , 2014, , .		5
28	COBANETS: A new paradigm for cognitive communications systems. , 2016, , .		4
29	Deep learning systems as complex networks. Journal of Complex Networks, 2019, , .	1.8	4
30	Poor numerical performance of guppies tested in a Skinner box. Scientific Reports, 2020, 10, 16724.	3.3	4
31	Numerosity Representation in InfoGAN: An Empirical Study. Lecture Notes in Computer Science, 2019, , 49-60.	1.3	2
32	Enabling Simulation-Based Optimization through Machine Learning: A Case Study on Antenna Design. , 2019, , .		2
33	Learning Numerosity Representations with Transformers: Number Generation Tasks and Out-of-Distribution Generalization. Entropy, 2021, 23, 857.	2.2	2
34	A Systematic Assessment of Feature Extraction Methods for Robust Prediction of Neuropsychological Scores from Functional Connectivity Data. Lecture Notes in Computer Science, 2020, , 29-40.	1.3	2
35	Bilingualism advantage in handwritten character recognition: A deep learning investigation on Persian and Latin scripts. , 2017, , .		1
36	Long-Term Prediction of Physical Interactions: A Challenge for Deep Generative Models. Lecture Notes in Computer Science, 2020, , 83-94.	1.3	0