# Alberto Testolin

List of Publications by Year
in descending order



| | | | |
|---|---|---|---|
| 36 papers | 638 citations | 623188 14 h-index | 642321 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. | 2.6 | 90 |
| 2 | Modeling language and cognition with deep unsupervised learning: a tutorial overview. Frontiers in Psychology, 2013, 4, 515. | 1.1 | 56 |
| 3 | An emergentist perspective on the origin of number sense. Philosophical Transactions of the Royal Society B: Biological Sciences, 2018, 373, 20170043. | 1.8 | 48 |
| 4 | Letter perception emerges from unsupervised deep learning and recycling of natural image features. Nature Human Behaviour, 2017, 1, 657-664. | 6.2 | 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. | 1.2 | 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. | 1.3 | 33 |
| 8 | On the Relationship Between the Underwater Acoustic and Optical Channels. IEEE Transactions on Wireless Communications, 2017, 16, 8037-8051. | 6.1 | 31 |
| 9 | Deep Unsupervised Learning on a Desktop PC: A Primer for Cognitive Scientists. Frontiers in Psychology, 2013, 4, 251. | 1.1 | 28 |
| 10 | Visual sense of number vs. sense of magnitude in humans and machines. Scientific Reports, 2020, 10, 10045. | 1.6 | 23 |
| 11 | Combining Denoising Autoencoders and Dynamic Programming for Acoustic Detection and Tracking of Underwater Moving Targets. Sensors, 2020, 20, 2945. | 2.1 | 21 |
| 12 | QoE Multi-Stage Machine Learning for Dynamic Video Streaming. IEEE Transactions on Cognitive Communications and Networking, 2018, 4, 146-161. | 4.9 | 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. | 3.9 | 18 |
| 14 | Distributed Reinforcement Learning for Flexible and Efficient UAV Swarm Control. IEEE Transactions on Cognitive Communications and Networking, 2021, 7, 955-969. | 4.9 | 17 |
| 15 | Learning Orthographic Structure With Sequential Generative Neural Networks. Cognitive Science, 2016, 40, 579-606. | 0.8 | 14 |
| 16 | Neural Networks for Sequential Data: a Preâ€training Approach based on Hidden Markov Models. Neurocomputing, 2015, 169, 323-333. | 3.5 | 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. | 1.8 | 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. | 0.7 | 9 |
| 21 | The Challenge of Modeling the Acquisition of Mathematical Concepts. Frontiers in Human Neuroscience, 2020, 14, 100. | 1.0 | 9 |
| 22 | Do estimates of numerosity really adhere to Weberâ€™s law? A reexamination of two case studies. Psychonomic Bulletin and Review, 2021, 28, 158-168. | 1.4 | 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. | 1.2 | 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. | 1.1 | 7 |
| 26 | Emergence of Network Motifs in Deep Neural Networks. Entropy, 2020, 22, 204. | 1.1 | 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, , . | 1.1 | 4 |
| 30 | Poor numerical performance of guppies tested in a Skinner box. Scientific Reports, 2020, 10, 16724. | 1.6 | 4 |
| 31 | Numerosity Representation in InfoGAN: An Empirical Study. Lecture Notes in Computer Science, 2019, , 49-60. | 1.0 | 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. | 1.1 | 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. | 1.0 | 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. | 1.0 | 0 |