

# Nicola Amoroso

## List of Publications by Year in descending order

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Version: 2024-02-01

79  
papers

1,763  
citations

304602

22  
h-index

315616

38  
g-index

80  
all docs

80  
docs citations

80  
times ranked

2335  
citing authors

| #  | ARTICLE  | IF  | CITATIONS |
|----|--|-----|-----------|
| 1  | Satellite data and machine learning reveal a significant correlation between NO <sub>2</sub> and COVID-19 mortality. <i>Environmental Research</i> , 2022, 204, 111970.  | 3.7 | 6         |
| 2  | Sustainable development goals: conceptualization, communication and achievement synergies in a complex network framework. <i>Applied Network Science</i> , 2022, 7, 14.  | 0.8 | 12        |
| 3  | High-concentration methane and ethane QEPAS detection employing partial least squares regression to filter out energy relaxation dependence on gas matrix composition. <i>Photoacoustics</i> , 2022, 26, 100349. | 4.4 | 41        |
| 4  | Territorial bias in university rankings: a complex network approach. <i>Scientific Reports</i> , 2022, 12, 4995.   | 1.6 | 15        |
| 5  | Psychological counseling in the Italian academic context: Expected needs, activities, and target population in a large sample of students. <i>PLoS ONE</i> , 2022, 17, e0266895.                                 | 1.1 | 6         |
| 6  | A Machine Learning Approach to Parkinson's Disease Blood Transcriptomics. <i>Genes</i> , 2022, 13, 727.  | 1.0 | 10        |
| 7  | Predicting brain age with complex networks: From adolescence to adulthood. <i>NeuroImage</i> , 2021, 225, 117458.  | 2.1 | 39        |
| 8  | A primer on machine learning techniques for genomic applications. <i>Computational and Structural Biotechnology Journal</i> , 2021, 19, 4345-4359.   | 1.9 | 8         |
| 9  | From complex to neural networks. , 2021, , 137-154.  |     | 0         |
| 10 | A Proposal of Quantum-Inspired Machine Learning for Medical Purposes: An Application Case. <i>Mathematics</i> , 2021, 9, 410.  | 1.1 | 7         |
| 11 | Economic Interplay Forecasting Business Success. <i>Complexity</i> , 2021, 2021, 1-12.   | 0.9 | 9         |
| 12 | A Roadmap towards Breast Cancer Therapies Supported by Explainable Artificial Intelligence. <i>Applied Sciences (Switzerland)</i> , 2021, 11, 4881.  | 1.3 | 24        |
| 13 | Complex Network Modelling of Origin-Destination Commuting Flows for the COVID-19 Epidemic Spread Analysis in Italian Lombardy Region. <i>Applied Sciences (Switzerland)</i> , 2021, 11, 4381.                    | 1.3 | 7         |
| 14 | Explainable Deep Learning for Personalized Age Prediction With Brain Morphology. <i>Frontiers in Neuroscience</i> , 2021, 15, 674055.  | 1.4 | 38        |
| 15 | Characterization of real-world networks through quantum potentials. <i>PLoS ONE</i> , 2021, 16, e0254384.  | 1.1 | 5         |
| 16 | Random Forests Highlight the Combined Effect of Environmental Heavy Metals Exposure and Genetic Damages for Cardiovascular Diseases. <i>Applied Sciences (Switzerland)</i> , 2021, 11, 8405.                     | 1.3 | 3         |
| 17 | Machine learning reveals that prolonged exposure to air pollution is associated with SARS-CoV-2 mortality and infectivity in Italy. <i>Environmental Pollution</i> , 2020, 267, 115471.                          | 3.7 | 42        |
| 18 | Association between Structural Connectivity and Generalized Cognitive Spectrum in Alzheimer's Disease. <i>Brain Sciences</i> , 2020, 10, 879.  | 1.1 | 11        |

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|----|---|-----|-----------|
| 19 | PSI Clustering for the Assessment of Underground Infrastructure Deterioration. Remote Sensing, 2020, 12, 3681.  | 1.8 | 5         |
| 20 | An equity-oriented rethink of global rankings with complex networks mapping development. Scientific Reports, 2020, 10, 18046.   | 1.6 | 13        |
| 21 | Potential energy of complex networks: a quantum mechanical perspective. Scientific Reports, 2020, 10, 18387.  | 1.6 | 9         |
| 22 | Machine Learning for Cloud Detection of Globally Distributed Sentinel-2 Images. Remote Sensing, 2020, 12, 2355.   | 1.8 | 18        |
| 23 | <i>De Novo</i> Drug Design of Targeted Chemical Libraries Based on Artificial Intelligence and Pair-Based Multiobjective Optimization. Journal of Chemical Information and Modeling, 2020, 60, 4582-4593. | 2.5 | 55        |
| 24 | Multiplex Networks to Characterize Seizure Development in Traumatic Brain Injury Patients. Frontiers in Neuroscience, 2020, 14, 591662.   | 1.4 | 9         |
| 25 | Multi-Time-Scale Features for Accurate Respiratory Sound Classification. Applied Sciences (Switzerland), 2020, 10, 8606.  | 1.3 | 27        |
| 26 | Individual Topological Analysis of Synchronization-Based Brain Connectivity. Applied Sciences (Switzerland), 2020, 10, 3275.  | 1.3 | 1         |
| 27 | Machine Learning and DWI Brain Communicability Networks for Alzheimer's Disease Detection. Applied Sciences (Switzerland), 2020, 10, 934.   | 1.3 | 20        |
| 28 | Extensive Evaluation of Morphological Statistical Harmonization for Brain Age Prediction. Brain Sciences, 2020, 10, 364.  | 1.1 | 12        |
| 29 | Estimating and comparing biodiversity with a single universal metric. Ecological Modelling, 2020, 424, 109020.  | 1.2 | 8         |
| 30 | Brain Age Prediction With Morphological Features Using Deep Neural Networks: Results From Predictive Analytic Competition 2019. Frontiers in Psychiatry, 2020, 11, 619629.                                | 1.3 | 11        |
| 31 | Diffusion-weighted imaging (DWI) tractography and Alzheimer's disease. , 2020, , 313-325.   |     | 3         |
| 32 | Identifying potential gene biomarkers for Parkinson's disease through an information entropy based approach. Physical Biology, 2020, 18, 016003.  | 0.8 | 16        |
| 33 | Mapping digital governance projects through complex networks. , 2020, , .   |     | 0         |
| 34 | Communicability disruption in Alzheimer's disease connectivity networks. Journal of Complex Networks, 2019, 7, 83-100.  | 1.1 | 26        |
| 35 | Association between miRNAs expression and cognitive performances of Pediatric Multiple Sclerosis patients: A pilot study. Brain and Behavior, 2019, 9, e01199.  | 1.0 | 26        |
| 36 | Communicability Characterization of Structural DWI Subcortical Networks in Alzheimer's Disease. Entropy, 2019, 21, 475.   | 1.1 | 14        |

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|----|---|-----|-----------|
| 37 | Deep Learning and Multiplex Networks for Accurate Modeling of Brain Age. <i>Frontiers in Aging Neuroscience</i> , 2019, 11, 115.  | 1.7 | 41        |
| 38 | Modelling cognitive loads in schizophrenia by means of new functional dynamic indexes. <i>NeuroImage</i> , 2019, 195, 150-164.  | 2.1 | 24        |
| 39 | Thalamic connectivity measured with fMRI is associated with a polygenic index predicting thalamo-prefrontal gene co-expression. <i>Brain Structure and Function</i> , 2019, 224, 1331-1344.                                     | 1.2 | 18        |
| 40 | Shannon entropy approach reveals relevant genes in Alzheimer's disease. <i>PLoS ONE</i> , 2019, 14, e0226190.   | 1.1 | 19        |
| 41 | The PERSON project: a serious brain-computer interface game for treatment in cognitive impairment. <i>Health and Technology</i> , 2019, 9, 123-133.   | 2.1 | 12        |
| 42 | Multidimensional Neuroimaging Processing in ReCaS Datacenter. <i>Lecture Notes in Computer Science</i> , 2019, , 468-477.   | 1.0 | 2         |
| 43 | Age Related Topological Analysis of Synchronization-Based Functional Connectivity. <i>Studies in Computational Intelligence</i> , 2019, , 652-662.  | 0.7 | 0         |
| 44 | Deep learning reveals Alzheimer's disease onset in MCI subjects: Results from an international challenge. <i>Journal of Neuroscience Methods</i> , 2018, 302, 3-9.  | 1.3 | 104       |
| 45 | 24. Alzheimer pattern recognition in brain images using complex networks. <i>Physica Medica</i> , 2018, 56, 76.   | 0.4 | 1         |
| 46 | Salient networks: a novel application to study Alzheimer disease. <i>BioMedical Engineering OnLine</i> , 2018, 17, 162.   | 1.3 | 1         |
| 47 | Multiplex Networks for Early Diagnosis of Alzheimer's Disease. <i>Frontiers in Aging Neuroscience</i> , 2018, 10, 365.  | 1.7 | 43        |
| 48 | Applying Big Data Methods to Understanding Human Behavior and Health. <i>Frontiers in Computational Neuroscience</i> , 2018, 12, 84.  | 1.2 | 10        |
| 49 | Complex networks reveal early MRI markers of Parkinson's disease. <i>Medical Image Analysis</i> , 2018, 48, 12-24.  | 7.0 | 112       |
| 50 | A novel approach to brain connectivity reveals early structural changes in Alzheimer's disease. <i>Physiological Measurement</i> , 2018, 39, 074005.  | 1.2 | 22        |
| 51 | Transcriptomic context of <i>DRD1</i> is associated with prefrontal activity and behavior during working memory. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2018, 115, 5582-5587. | 3.3 | 18        |
| 52 | Alzheimer's disease diagnosis based on the Hippocampal Unified Multi-Atlas Network (HUMAN) algorithm. <i>BioMedical Engineering OnLine</i> , 2018, 17, 6.   | 1.3 | 28        |
| 53 | A complex network approach reveals a pivotal substructure of genes linked to schizophrenia. <i>PLoS ONE</i> , 2018, 13, e0190110.   | 1.1 | 22        |
| 54 | DTI measurements for Alzheimer's classification. <i>Physics in Medicine and Biology</i> , 2017, 62, 2361-2375.  | 1.6 | 57        |

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|----|---|-----|-----------|
| 55 | Salient Networks: A Novel Application to Study Brain Connectivity. Lecture Notes in Computer Science, 2017, , 444-453.  | 1.0 | 1         |
| 56 | A Multiplex Network Model to Characterize Brain Atrophy in Structural MRI. Springer Proceedings in Physics, 2017, , 189-198.                                      | 0.1 | 8         |
| 57 | Topological Complex Networks Properties for Gene Community Detection Strategy: DRD2 Case Study. Springer Proceedings in Physics, 2017, , 199-208.                 | 0.1 | 3         |
| 58 | A fuzzy-based system reveals Alzheimer's Disease onset in subjects with Mild Cognitive Impairment. Physica Medica, 2017, 38, 36-44.                               | 0.4 | 18        |
| 59 | Grey matter volume patterns in thalamic nuclei are associated with familial risk for schizophrenia. Schizophrenia Research, 2017, 180, 13-20.                     | 1.1 | 40        |
| 60 | Topological Measurements of DWI Tractography for Alzheimer's Disease Detection. Computational and Mathematical Methods in Medicine, 2017, 2017, 1-10.             | 0.7 | 13        |
| 61 | Multivariate regression analysis of structural MRI connectivity matrices in Alzheimer's disease. PLoS ONE, 2017, 12, e0187281.                                    | 1.1 | 15        |
| 62 | Integrating Supervised Classification in Social Participation Systems for Disaster Response. A Pilot Study. Lecture Notes in Computer Science, 2017, , 675-686.   | 1.0 | 1         |
| 63 | Machine learning for the assessment of Alzheimer's disease through DTI. , 2017, , .   |     | 2         |
| 64 | A multi-layer MRI description of Parkinson's disease. , 2017, , .   |     | 0         |
| 65 | Association between MRI structural features and cognitive measures in pediatric multiple sclerosis. , 2017, , .   |     | 0         |
| 66 | Computer Aided Detection System for Prediction of the Malaise during Hemodialysis. Computational and Mathematical Methods in Medicine, 2016, 2016, 1-10.          | 0.7 | 4         |
| 67 | Crowdsourced estimation of cognitive decline and resilience in Alzheimer's disease. Alzheimer's and Dementia, 2016, 12, 645-653.                                  | 0.4 | 72        |
| 68 | MRI analysis for hippocampus segmentation on a distributed infrastructure. , 2016, , .  |     | 0         |
| 69 | Automated hippocampal segmentation in 3D MRI using random undersampling with boosting algorithm. Pattern Analysis and Applications, 2016, 19, 579-591.            | 3.1 | 24        |
| 70 | Integrating longitudinal information in hippocampal volume measurements for the early detection of Alzheimer's disease. NeuroImage, 2016, 125, 834-847.           | 2.1 | 76        |
| 71 | Multiple RF classifier for the hippocampus segmentation: Method and validation on EADC-ADNI Harmonized Hippocampal Protocol. Physica Medica, 2015, 31, 1085-1091. | 0.4 | 15        |
| 72 | Complex networks and public funding: the case of the 2007-2013 Italian program. EPJ Data Science, 2015, 4, .  | 1.5 | 3         |

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|----|--|-----|-----------|
| 73 | Hippocampal unified multi-atlas network (HUMAN): protocol and scale validation of a novel segmentation tool. <i>Physics in Medicine and Biology</i> , 2015, 60, 8851-8867. | 1.6 | 31        |
| 74 | Feature Selection Based on Machine Learning in MRIs for Hippocampal Segmentation. <i>Computational and Mathematical Methods in Medicine</i> , 2015, 2015, 1-10.            | 0.7 | 25        |
| 75 | Standardized evaluation of algorithms for computer-aided diagnosis of dementia based on structural MRI: The CADDementia challenge. <i>NeuroImage</i> , 2015, 111, 562-579. | 2.1 | 266       |
| 76 | An Hippocampal Segmentation Tool Within an Open Cloud Infrastructure. <i>Lecture Notes in Computer Science</i> , 2015, , 193-200.  | 1.0 | 0         |
| 77 | Automated voxel-by-voxel tissue classification for hippocampal segmentation: Methods and validation. <i>Physica Medica</i> , 2014, 30, 878-887.                            | 0.4 | 31        |
| 78 | Random Forest Classification for Hippocampal Segmentation in 3D MR Images. , 2013, , .   |     | 9         |
| 79 | Alzheimer's disease markers from structural MRI and FDG-PET brain images. <i>European Physical Journal Plus</i> , 2012, 127, 1.  | 1.2 | 15        |