# Vincenzo Nicosia

List of Publications by Year
in descending order

| 62 papers | 4,396 citations | 201674 27 h-index | 161849 54 g-index |
|---|---|---|---|
| 67 all docs | 67 docs citations | 67 times ranked | 3933 citing authors |

| # | Article | IF | Citations |
|---|---------|-----|-----------|
| 1 | Structural measures for multiplex networks. Physical Review E, 2014, 89, 032804. | 2.1 | 517 |
| 2 | Structural reducibility of multilayer networks. Nature Communications, 2015, 6, 6864. | 12.8 | 400 |
| 3 | Extending the definition of modularity to directed graphs with overlapping communities. Journal of Statistical Mechanics: Theory and Experiment, 2009, 2009, P03024. | 2.3 | 296 |
| 4 | Growing Multiplex Networks. Physical Review Letters, 2013, 111, 058701. | 7.8 | 234 |
| 5 | Elementary processes governing the evolution of road networks. Scientific Reports, 2012, 2, 296. | 3.3 | 230 |
| 6 | Remote Synchronization Reveals Network Symmetries and Functional Modules. Physical Review Letters, 2013, 110, 174102. | 7.8 | 209 |
| 7 | Measuring and modeling correlations in multiplex networks. Physical Review E, 2015, 92, 032805. | 2.1 | 185 |
| 8 | Graph Metrics for Temporal Networks. Understanding Complex Systems, 2013, , 15-40. | 0.6 | 159 |
| 9 | Network structure of multivariate time series. Scientific Reports, 2015, 5, 15508. | 3.3 | 158 |
| 10 | Defecting or Not Defecting: How to â€œReadâ€•Human Behavior during Cooperative Games by EEG Measurements. PLoS ONE, 2010, 5, e14187. | 2.5 | 151 |
| 11 | Multilayer motif analysis of brain networks. Chaos, 2017, 27, 047404. | 2.5 | 141 |
| 12 | Analysing information flows and key mediators through temporal centrality metrics. , 2010, , . | | 114 |
| 13 | Collective Phenomena Emerging from the Interactions between Dynamical Processes in Multiplex Networks. Physical Review Letters, 2017, 118, 138302. | 7.8 | 107 |
| 14 | The new challenges of multiplex networks: Measures and models. European Physical Journal: Special Topics, 2017, 226, 401-416. | 2.6 | 101 |
| 15 | Maximal-entropy random walks in complex networks with limited information. Physical Review E, 2011, 83, 030103. | 2.1 | 94 |
| 16 | Components in time-varying graphs. Chaos, 2012, 22, 023101. | 2.5 | 94 |
| 17 | Assessment of Urban Ecosystem Resilience through Hybrid Socialâ€"Physical Complex Networks. Computer-Aided Civil and Infrastructure Engineering, 2014, 29, 608-625. | 9.8 | 76 |
| 18 | Phase transition in the economically modeled growth of a cellular nervous system. Proceedings of the National Academy of Sciences of the United States of America, 2013, 110, 7880-7885. | 7.1 | 67 |

| # | Article | IF | Citations |
|---|---------|-----|-----------|
| 19 | Characteristic times of biased random walks on complex networks. Physical Review E, 2014, 89, 012803. | 2.1 | 67 |
| 20 | Controlling centrality in complex networks. Scientific Reports, 2012, 2, 218. | 3.3 | 60 |
| 21 | Irreducibility of multilayer network dynamics: the case of the voter model. New Journal of Physics, 2016, 18, 023010. | 2.9 | 57 |
| 22 | The Multiplex Dependency Structure of Financial Markets. Complexity, 2017, 2017, 1-13. | 1.6 | 49 |
| 23 | Social Cohesion, Structural Holes, and a Tale of Two Measures. Journal of Statistical Physics, 2013, 151, 745-764. | 1.2 | 43 |
| 24 | Efficient exploration of multiplex networks. New Journal of Physics, 2016, 18, 043035. | 2.9 | 39 |
| 25 | Nonlinear growth and condensation in multiplex networks. Physical Review E, 2014, 90, 042807. | 2.1 | 38 |
| 26 | Evolutionary dynamics of time-resolved social interactions. Physical Review E, 2014, 90, 052825. | 2.1 | 38 |
| 27 | Layered social influence promotes multiculturality in the Axelrod model. Scientific Reports, 2017, 7, 1809. | 3.3 | 38 |
| 28 | Emergence of Multiplex Communities in Collaboration Networks. PLoS ONE, 2016, 11, e0147451. | 2.5 | 33 |
| 29 | Characteristic exponents of complex networks. Europhysics Letters, 2014, 106, 58005. | 2.0 | 27 |
| 30 | The importance of being placefriends. , 2012, , . |  | 24 |
| 31 | Hybrid recommendation methods in complex networks. Physical Review E, 2015, 92, 012811. | 2.1 | 24 |
| 32 | Applications of Temporal Graph Metrics to Real-World Networks. Understanding Complex Systems, 2013, , 135-159. | 0.6 | 23 |
| 33 | Social and place-focused communities in location-based online social networks. European Physical Journal B, 2013, 86, 1. | 1.5 | 20 |
| 34 | Interplay between consensus and coherence in a model of interacting opinions. Physica D: Nonlinear Phenomena, 2016, 323-324, 12-19. | 2.8 | 19 |
| 35 | Impact of network structure on a model of diffusion and competitive interaction. Europhysics Letters, 2011, 94, 68009. | 2.0 | 18 |
| 36 | First-passage times to quantify and compare structural correlations and heterogeneity in complex systems. Communications Physics, 2021, 4, . | 5.3 | 18 |

| # | Article | IF | Citations |
|---|---------|-----|-----------|
| 37 | Emerging structures of P2P networks induced by social relationships. Computer Communications, 2008, 31, 620-628. | 5.1 | 16 |
| 38 | Multiplex Decomposition of Non-Markovian Dynamics and the Hidden Layer Reconstruction Problem. Physical Review X, 2018, 8, . | 8.9 | 16 |
| 39 | An adaptive overlay network inspired by social behaviour. Journal of Parallel and Distributed Computing, 2010, 70, 282-295. | 4.1 | 15 |
| 40 | Motion-induced synchronization in metapopulations of mobile agents. Physical Review E, 2013, 87, . | 2.1 | 15 |
| 41 | Impact of urban structure on infectious disease spreading. Scientific Reports, 2022, 12, 3816. | 3.3 | 15 |
| 42 | Nonparametric resampling of random walks for spectral network clustering. Physical Review E, 2014, 89, 012802. | 2.1 | 14 |
| 43 | Diffusion segregation and the disproportionate incidence of COVID-19 in African American communities. Journal of the Royal Society Interface, 2021, 18, 20200961. | 3.4 | 14 |
| 44 | Algorithmic Complexity of Multiplex Networks. Physical Review X, 2020, 10, . | 8.9 | 10 |
| 45 | Social Behaviours in P2P Systems: An Efficient Algorithm for Resource Organisation. , 2006, , . | | 9 |
| 46 | Pareto Optimality in Multilayer Network Growth. Physical Review Letters, 2018, 121, 128302. | 7.8 | 9 |
| 47 | Optimal percolation in correlated multilayer networks with overlap. Physical Review Research, 2020, 2, . | 3.6 | 9 |
| 48 | Online visibility graphs: Encoding visibility in a binary search tree. Physical Review Research, 2020, 2, . | 3.6 | 7 |
| 49 | Towards hard real-time erlang. , 2007, , . | | 6 |
| 50 | PROSA: P2P Resource Organisation by Social Acquaintances. Lecture Notes in Computer Science, 2006, , 135-142. | 1.3 | 6 |
| 51 | Flexible Robot Strategy Design Using Belief-Desire-Intention Model. Communications in Computer and Information Science, 2011, , 57-71. | 0.5 | 6 |
| 52 | Spatio-Temporal Analysis of Micro Economic Activities in Rome Reveals Patterns of Mixed-Use Urban Evolution. PLoS ONE, 2016, 11, e0151681. | 2.5 | 5 |
| 53 | Evaluating the Dynamic Behaviour of PROSA P2P Network. Lecture Notes in Computer Science, 2006, , 904-915. | 1.3 | 4 |
| 54 | Efficient Searching and Retrieval of Documents in PROSA. , 2006, , 298-309. | | 4 |

| # | Article | IF | Citations |
|---|---------|-----|-----------|
| 55 | Self-Organisation of Resources in PROSA P2P Network. Lecture Notes in Computer Science, 2006, , 171-174. | 1.3 | 3 |
| 56 | Applying Social Behaviours to Model Trusting. Studies in Computational Intelligence, 2008, , 105-114. | 0.9 | 3 |
| 57 | Optimizing the mitigation of epidemic spreading through targeted adoption of contact tracing apps. Physical Review Research, 2022, 4, . | 3.6 | 3 |
| 58 | An Approach to Trust Based on Social Networks. , 2007, , 50-61. | | 2 |
| 59 | Co-evolution of networks and quantum dynamics: a generalization of preferential attachment. Journal of Statistical Mechanics: Theory and Experiment, 2013, 2013, P08016. | 2.3 | 2 |
| 60 | On robustness and self-adaptiveness of a socially inspired P2P network. , 2007, , . | | 1 |
| 61 | The Agreement Utopia. , 2007, , . | | 0 |
| 62 | Evolutionary Dynamics of Time-Resolved Social Interactions. SSRN Electronic Journal, 0, , . | 0.4 | 0 |