# Yamir Moreno

List of Articles by Year
in descending order

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|---|---|---|---|
| 269<br>peer-reviewed articles | 29,992<br>peer-reviewed citations | 16129<br>64<br>peer-reviewed h-index | 274199<br>4.87<br>score |
| 296<br>documents | 36639<br>doc citations | 17325<br>68<br>h-index | 29512<br>citing authors |

| # | Article | IF | Citations |
|---|---|---|---|
| 1 | A machine learning approach to predicting dynamical observables from network structure. Proceedings of the Royal Society A: Mathematical, Physical and Engineering Sciences, 2025, 481, . | 1.4 | 3 |
| 2 | Dynamical opinion clusters exploration suite: Modeling social media opinion dynamics. SoftwareX, 2025, 30, 102136. | 1.1 | 1 |
| 3 | Predicting the critical behavior of complex dynamic systems via learning the governing mechanisms. Chaos, Solitons and Fractals, 2025, 198, 116515. | 3.8 | 1 |
| 4 | Co-evolution of cooperation and resource allocation in the advantageous environment-based spatial multi-game using adaptive control. Chaos, Solitons and Fractals, 2025, 199, 116552. | 3.8 | 6 |
| 5 | Interplay of epidemic spreading and vaccine uptake under complex social contagion. Physical Review E, 2025, 112, . | 1.5 | 3 |
| 6 | Sample-specific network analysis identifies gene co-expression patterns of immunotherapy response in clear cell renal cell carcinoma. IScience, 2025, 28, 113061. | 2.4 | 2 |
| 7 | Multilayer networks describing urban interactions for building the digital twins of five cities in Spain. Scientific Data, 2025, 12, . | 3.8 | 3 |
| 8 | Identifying central nodes in multiplex networks by embracing layer-specific heterogeneity via DomiRank. Journal of Complex Networks, 2025, 13, . | 0.9 | 1 |
| 9 | Contest dynamics between cooperation and exploitation. Chaos, Solitons and Fractals, 2025, 200, 117049. | 3.8 | 2 |
| 10 | DomiRank Centrality reveals structural fragility of complex networks via node dominance. Nature Communications, 2024, 15, . | 10.8 | 104 |
| 11 | Contests in two fronts. Chaos, Solitons and Fractals, 2024, 179, 114418. | 3.8 | 0 |
| 12 | Model-based impact evaluation of new tuberculosis vaccines in aging populations under different modeling scenarios: the case of China. Frontiers in Public Health, 2024, 12, . | 1.8 | 0 |
| 13 | Beyond the aggregated paradigm: phenology and structure in mutualistic networks. Journal of Physics Complexity, 2024, 5, 025013. | 1.0 | 3 |
| 14 | From unbiased to maximal-entropy random walks on hypergraphs. Physical Review E, 2024, 109, . | 1.5 | 4 |
| 15 | Exploring the interplay of technology, pro-family and prosocial behavior in settlement formation. Journal of Physics Complexity, 2024, 5, 025027. | 1.0 | 0 |
| 16 | Unveiling the reproduction number scaling in characterizing social contagion coverage. Chaos, Solitons and Fractals, 2024, 185, 115119. | 3.8 | 1 |
| 17 | Contagion dynamics on higher-order networks. Nature Reviews Physics, 2024, 6, 468-482. | 31.5 | 97 |
| 18 | Modeling natural resources exploitation in low-information environments. Journal of Physics Complexity, 2024, 5, 035002. | 1.0 | 2 |

| # | Article | IF | Citations |
|---|---|---|---|
| 19 | Characteristics of the vegetable oil debate in social-media and its implications for sustainability. Communications Earth & Environment, 2024, 5, . | 4.9 | 18 |
| 20 | Echo chamber formation sharpened by priority users. IScience, 2024, 27, 111098. | 2.4 | 6 |
| 21 | LLMs and generative agent-based models for complex systems research. Physics of Life Reviews, 2024, 51, 283-293. | 1.2 | 76 |
| 22 | Informational approach to uncover the age group interactions in epidemic spreading from macro analysis. Physical Review E, 2024, 110, . | 1.5 | 0 |
| 23 | Food composition databases in the era of Big Data: Vegetable oils as a case study. Frontiers in Nutrition, 2023, 9, . | 2.8 | 19 |
| 24 | Unraveling the COVID-19 hospitalization dynamics in Spain using Bayesian inference. BMC Medical Research Methodology, 2023, 23, . | 1.7 | 1 |
| 25 | Digital cities and the spread of COVID-19: Characterizing the impact of non-pharmaceutical interventions in five cities in Spain. Frontiers in Public Health, 2023, 11, . | 1.8 | 6 |
| 26 | Multistability, intermittency, and hybrid transitions in social contagion models on hypergraphs. Nature Communications, 2023, 14, . | 10.8 | 80 |
| 27 | Assessing the effectiveness of perimeter lockdowns as a response to epidemics at the urban scale. Scientific Reports, 2023, 13, . | 2.7 | 2 |
| 28 | Deterrence through punishment can resolve collective risk dilemmas in carbon emission games. Chaos, 2023, 33, . | 2.0 | 20 |
| 29 | Sustainable nutrition and the case of vegetable oils to match present and future dietary needs. Frontiers in Public Health, 2023, 11, . | 1.8 | 37 |
| 30 | Interspecific competition shapes the structural stability of mutualistic networks. Chaos, Solitons and Fractals, 2023, 172, 113507. | 3.8 | 11 |
| 31 | Addressing mechanism bias in model-based impact forecasts of new tuberculosis vaccines. Nature Communications, 2023, 14, . | 10.8 | 7 |
| 32 | Replanting unproductive palm oil with smallholder plantations can help achieve Sustainable Development Goals in Sumatra, Indonesia. Communications Earth & Environment, 2023, 4, . | 4.9 | 11 |
| 33 | Robustness and Complexity of Directed and Weighted Metabolic Hypergraphs. Entropy, 2023, 25, 1537. | 1.2 | 9 |
| 34 | Characterizing the role of human behavior in the effectiveness of contact-tracing applications. Frontiers in Public Health, 2023, 11, . | 1.8 | 1 |
| 35 | The unequal effects of the health–economy trade-off during the COVID-19 pandemic. Nature Human Behaviour, 2023, 8, 264-275. | 6.8 | 57 |
| 36 | Modelling how social network algorithms can influence opinion polarization. Information Sciences, 2022, 588, 265-278. | 4.7 | 68 |

| # | Article | IF | Citations |
|---|---|---|---|
| 37 | Indirect influence in social networks as an induced percolation phenomenon. Proceedings of the National Academy of Sciences of the United States of America, 2022, 119, . | 5.2 | 19 |
| 38 | Epidemic spreading in populations of mobile agents with adaptive behavioral response. Chaos, Solitons and Fractals, 2022, 156, 111849. | 3.8 | 23 |
| 39 | Modeling the effects of social distancing on the large-scale spreading of diseases. Epidemics, 2022, 38, 100544. | 1.3 | 10 |
| 40 | Are People Optimistically Biased about the Risk of COVID-19 Infection? Lessons from the First Wave of the Pandemic in Europe. International Journal of Environmental Research and Public Health, 2022, 19, 436. | 2.0 | 49 |
| 41 | Dynamics of economic unions: An agent-based model to investigate the economic and social drivers of withdrawals. Chaos, Solitons and Fractals, 2022, 160, 112223. | 3.8 | 5 |
| 42 | The rise and fall of countries in the global value chains. Scientific Reports, 2022, 12, . | 2.7 | 16 |
| 43 | Impact of vaccine hesitancy on secondary COVID-19 outbreaks in the US: an age-structured SIR model. BMC Infectious Diseases, 2022, 22, . | 1.7 | 38 |
| 44 | From subcritical behavior to a correlation-induced transition in rumor models. Nature Communications, 2022, 13, . | 10.8 | 27 |
| 45 | Assessing the Risk of Spatial Spreading of Diseases in Hospitals. Frontiers in Physics, 2022, 10, . | 1.3 | 2 |
| 46 | Cooperation in costly-access environments. New Journal of Physics, 2022, 24, 083005. | 1.8 | 8 |
| 47 | Quantifying the importance and location of SARS-CoV-2 transmission events in large metropolitan areas. Proceedings of the National Academy of Sciences of the United States of America, 2022, 119, . | 5.2 | 66 |
| 48 | Modeling the impact of COVID-19 on future tuberculosis burden. Communications Medicine, 2022, 2, . | 3.1 | 24 |
| 49 | Multilayer networks with higher-order interaction reveal the impact of collective behavior on epidemic dynamics. Chaos, Solitons and Fractals, 2022, 164, 112735. | 3.8 | 38 |
| 50 | Robustness assessment of complex networks using the idle network. Physical Review Research, 2022, 4, . | 2.5 | 5 |
| 51 | Unique superdiffusion induced by directionality in multiplex networks. New Journal of Physics, 2021, 23, 013016. | 1.8 | 12 |
| 52 | Phase transitions and stability of dynamical processes on hypergraphs. Communications Physics, 2021, 4, . | 3.5 | 97 |
| 53 | Role of time scale in the spreading of asymmetrically interacting diseases. Physical Review Research, 2021, 3, . | 2.5 | 16 |
| 54 | Prediction of new scientific collaborations through multiplex networks. EPJ Data Science, 2021, 10, . | 1.3 | 15 |

| # | Article | IF | Citations |
|---|---|---|---|
| 55 | Framing in multiple public goods games and donation to charities. Royal Society Open Science, 2021, 8, . | 1.6 | 6 |
| 56 | Polarization inhibits the phase transition of Axelrod's model. Physical Review E, 2021, 103, . | 1.5 | 2 |
| 57 | Evolutionary games on simplicial complexes. Chaos, Solitons and Fractals, 2021, 150, 111103. | 3.8 | 74 |
| 58 | Evolutionary dynamics of higher-order interactions in social networks. Nature Human Behaviour, 2021, 5, 586-595. | 6.8 | 575 |
| 59 | Statistical properties of mutualistic-competitive random networks. Chaos, Solitons and Fractals, 2021, 153, 111504. | 3.8 | 3 |
| 60 | Graphlets in multilayer networks. Journal of Complex Networks, 2021, 10, . | 0.9 | 3 |
| 61 | Do zealots increase or decrease the polarization of social networks?. Journal of Complex Networks, 2020, 8, . | 0.9 | 5 |
| 62 | Centrality anomalies in complex networks as a result of model over-simplification. New Journal of Physics, 2020, 22, 013043. | 1.8 | 23 |
| 63 | A data-driven assessment of early travel restrictions related to the spreading of the novel COVID-19 within mainland China. Chaos, Solitons and Fractals, 2020, 139, 110068. | 3.8 | 45 |
| 64 | Data-driven contact structures: From homogeneous mixing to multilayer networks. PLoS Computational Biology, 2020, 16, e1008035. | 1.9 | 36 |
| 65 | Impact of intra and inter-cluster coupling balance on the performance of nonlinear networked systems. Chaos, Solitons and Fractals, 2020, 139, 110065. | 3.8 | 6 |
| 66 | Effect of network topology and node centrality on trading. Scientific Reports, 2020, 10, . | 2.7 | 17 |
| 67 | Measuring nestedness: A comparative study of the performance of different metrics. Ecology and Evolution, 2020, 10, 11906-11921. | 1.4 | 26 |
| 68 | Modelling the impact of testing, contact tracing and household quarantine on second waves of COVID-19. Nature Human Behaviour, 2020, 4, 964-971. | 6.8 | 745 |
| 69 | Linear processes on complex networks. Journal of Complex Networks, 2020, 8, . | 0.9 | 3 |
| 70 | Behavioural patterns behind the demise of the commons across different cultures. Royal Society Open Science, 2020, 7, 201026. | 1.6 | 5 |
| 71 | Disease and information spreading at different speeds in multiplex networks. Physical Review E, 2020, 102, . | 1.5 | 45 |
| 72 | The polarization within and across individuals: the hierarchical Ising opinion model. Journal of Complex Networks, 2020, 8, . | 0.9 | 34 |

| # | Article | IF | Citations |
|---|---|---|---|
| 73 | Evaluation of the potential incidence of COVID-19 and effectiveness of containment measures in Spain: a data-driven approach. BMC Medicine, 2020, 18, . | 4.4 | 68 |
| 74 | Effect of memory, intolerance, and second-order reputation on cooperation. Chaos, 2020, 30, . | 2.0 | 61 |
| 75 | Quantifying uncertainty in a predictive model for popularity dynamics. Physical Review E, 2020, 101, . | 1.5 | 7 |
| 76 | A novel route to cyclic dominance in voluntary social dilemmas. Journal of the Royal Society Interface, 2020, 17, 20190789. | 2.1 | 69 |
| 77 | Phase transitions in information spreading on structured populations. Nature Physics, 2020, 16, 590-596. | 10.6 | 81 |
| 78 | Dynamics of heuristics selection for cooperative behaviour. New Journal of Physics, 2020, 22, 123037. | 1.8 | 5 |
| 79 | Impact of the distribution of recovery rates on disease spreading in complex networks. Physical Review Research, 2020, 2, . | 2.5 | 33 |
| 80 | Collective dynamics of random Janus oscillator networks. Physical Review Research, 2020, 2, . | 2.5 | 7 |
| 81 | Social contagion models on hypergraphs. Physical Review Research, 2020, 2, . | 2.5 | 241 |
| 82 | Link prediction in multiplex networks via triadic closure. Physical Review Research, 2020, 2, . | 2.5 | 27 |
| 83 | Understanding drivers when investing for impact: an experimental study. Palgrave Communications, 2020, 6, . | 3.2 | 14 |
| 84 | Universality of eigenvector delocalization and the nature of the SIS phase transition in multiplex networks. Journal of Statistical Mechanics: Theory and Experiment, 2020, 2020, 103405. | 1.2 | 6 |
| 85 | Layer degradation triggers an abrupt structural transition in multiplex networks. Physical Review E, 2019, 100, . | 1.5 | 4 |
| 86 | Breaking the Spell of Nestedness: The Entropic Origin of Nestedness in Mutualistic Systems. Physical Review X, 2019, 9, . | 7.9 | 47 |
| 87 | The dynamics of collective social behavior in a crowd controlled game. EPJ Data Science, 2019, 8, . | 1.3 | 18 |
| 88 | Directionality reduces the impact of epidemics in multilayer networks. New Journal of Physics, 2019, 21, 093026. | 1.8 | 6 |
| 89 | Crash dynamics of interdependent networks. Scientific Reports, 2019, 9, . | 2.7 | 9 |
| 90 | Onset of synchronization of Kuramoto oscillators in scale-free networks. Physical Review E, 2019, 100, . | 1.5 | 16 |

| # | Article | IF | Citations |
|---|---|---|---|
| 91 | Ten principles to integrate the water-energy-land nexus with climate services for co-producing local and regional integrated assessments. Science of the Total Environment, 2019, 693, 133662. | 5.6 | 49 |
| 92 | Analyzing a networked social algorithm for collective selection of representative committees. PLoS ONE, 2019, 14, e0222945. | 1.5 | 0 |
| 93 | Epidemic spreading with awareness and different timescales in multiplex networks. Physical Review E, 2019, 100, . | 1.5 | 69 |
| 94 | Unsupervised extraction of epidemic syndromes from participatory influenza surveillance self-reported symptoms. PLoS Computational Biology, 2019, 15, e1006173. | 1.9 | 27 |
| 95 | Spreading of computer viruses on time-varying networks. Physical Review E, 2019, 99, . | 1.5 | 7 |
| 96 | The nested structural organization of the worldwide trade multi-layer network. Scientific Reports, 2019, 9, . | 2.7 | 47 |
| 97 | Topical Alignment in Online Social Systems. Frontiers in Physics, 2019, 7, . | 1.3 | 10 |
| 98 | Spectral and localization properties of random bipartite graphs. Chaos, Solitons and Fractals: X, 2019, 3, 100021. | 1.7 | 14 |
| 99 | Bridging the gap between efficacy trials and model-based impact evaluation for new tuberculosis vaccines. Nature Communications, 2019, 10, . | 10.8 | 6 |
| 100 | Replicator population dynamics of group interactions: Broken symmetry, thresholds for metastability, and macroscopic behavior. Physical Review E, 2019, 100, . | 1.5 | 4 |
| 101 | Multilayer Networks in a Nutshell. Annual Review of Condensed Matter Physics, 2019, 10, 45-62. | 18.0 | 210 |
| 102 | Effects of time horizons on influence maximization in the voter dynamics. Journal of Complex Networks, 2019, 7, 445-468. | 0.9 | 9 |
| 103 | Structural transition in interdependent networks with regular interconnections. Physical Review E, 2019, 99, . | 1.5 | 2 |
| 104 | Explore with caution: mapping the evolution of scientific interest in physics. EPJ Data Science, 2019, 8, . | 1.3 | 32 |
| 105 | Data-driven model for the assessment of Mycobacterium tuberculosis transmission in evolving demographic structures. Proceedings of the National Academy of Sciences of the United States of America, 2018, 115, . | 5.2 | 40 |
| 106 | The contagion effects of repeated activation in social networks. Social Networks, 2018, 54, 326-335. | 1.4 | 35 |
| 107 | Unfolding the Complexity of the Global Value Chain: Strength and Entropy in the Single-Layer, Multiplex, and Multi-Layer International Trade Networks. Entropy, 2018, 20, 909. | 1.2 | 41 |
| 108 | Weighted random-geometric and random-rectangular graphs: spectral and eigenfunction properties of the adjacency matrix. Journal of Complex Networks, 2018, 6, 753-766. | 0.9 | 24 |

| # | Article | IF | Citations |
|---|---|---|---|
| 109 | Measurability of the epidemic reproduction number in data-driven contact networks. Proceedings of the National Academy of Sciences of the United States of America, 2018, 115, 12680-12685. | 5.2 | 252 |
| 110 | A polynomial eigenvalue approach for multiplex networks. New Journal of Physics, 2018, 20, 095004. | 1.8 | 9 |
| 111 | Projecting social contact matrices to different demographic structures. PLoS Computational Biology, 2018, 14, e1006638. | 1.9 | 76 |
| 112 | Resource heterogeneity leads to unjust effort distribution in climate change mitigation. PLoS ONE, 2018, 13, e0204369. | 1.5 | 37 |
| 113 | Diffusion Dynamics and Optimal Coupling in Multiplex Networks with Directed Layers. Physical Review X, 2018, 8, . | 7.9 | 50 |
| 114 | Physics of humans, physics for society. Nature Physics, 2018, 14, 870-870. | 10.6 | 23 |
| 115 | Robustness of cultural communities in an open-ended Axelrod's model. Physica A: Statistical Mechanics and Its Applications, 2018, 509, 492-500. | 2.1 | 9 |
| 116 | Fundamentals of spreading processes in single and multilayer complex networks. Physics Reports, 2018, 756, 1-59. | 17.1 | 233 |
| 117 | The joint influence of competition and mutualism on the biodiversity of mutualistic ecosystems. Scientific Reports, 2018, 8, . | 2.7 | 40 |
| 118 | Multiplex Networks: A Framework for Studying Multiprocess Multiscale Connectivity Via Coupled-Network Theory With an Application to River Deltas. Geophysical Research Letters, 2018, 45, 9681-9689. | 2.9 | 27 |
| 119 | A networked voting rule for democratic representation. Royal Society Open Science, 2018, 5, 172265. | 1.6 | 3 |
| 120 | Sparse Power-Law Network Model for Reliable Statistical Predictions Based on Sampled Data. Entropy, 2018, 20, 257. | 1.2 | 4 |
| 121 | Intergenerational cooperation within the household: a Public Good game with three generations. Review of Economics of the Household, 2018, 17, 535-552. | 0.5 | 14 |
| 122 | Emergence of consensus as a modular-to-nested transition in communication dynamics. Scientific Reports, 2017, 7, . | 2.7 | 33 |
| 123 | Disease Localization in Multilayer Networks. Physical Review X, 2017, 7, . | 7.9 | 62 |
| 124 | Human mobility networks and persistence of rapidly mutating pathogens. Royal Society Open Science, 2017, 4, 160914. | 1.6 | 18 |
| 125 | Onymity promotes cooperation in social dilemma experiments. Science Advances, 2017, 3, . | 8.1 | 295 |
| 126 | A Multilayer perspective for the analysis of urban transportation systems. Scientific Reports, 2017, 7, . | 2.7 | 152 |

| # | Article | IF | Citations |
|---|---|---|---|
| 127 | Heterogeneous resource allocation can change social hierarchy in public goods games. Royal Society Open Science, 2017, 4, 170092. | 1.6 | 30 |
| 128 | Evolutionary dynamics of N-person Hawk-Dove games. Scientific Reports, 2017, 7, . | 2.7 | 29 |
| 129 | Scaling properties of multilayer random networks. Physical Review E, 2017, 96, . | 1.5 | 22 |
| 130 | Diluted banded random matrices: scaling behavior of eigenfunction and spectral properties. Journal of Physics A: Mathematical and Theoretical, 2017, 50, 495205. | 1.3 | 9 |
| 131 | Cognitive Hierarchy Theory and Two-Person Games. Games, 2017, 8, 1. | 0.4 | 15 |
| 132 | A general Markov chain approach for disease and rumour spreading in complex networks. Journal of Complex Networks, 2017, 6, 215-242. | 0.9 | 27 |
| 133 | Connectivity of diagnostic technologies: improving surveillance and accelerating tuberculosis elimination. International Journal of Tuberculosis and Lung Disease, 2016, 20, 999-1003. | 1.0 | 33 |
| 134 | Characterization of multiple topological scales in multiplex networks through supra-Laplacian eigengaps. Physical Review E, 2016, 94, . | 1.5 | 17 |
| 135 | Lévy random walks on multiplex networks. Scientific Reports, 2016, 6, . | 2.7 | 48 |
| 136 | From degree-correlated to payoff-correlated activity for an optimal resolution of social dilemmas. Physical Review E, 2016, 94, . | 1.5 | 27 |
| 137 | Epidemic spreading in random rectangular networks. Physical Review E, 2016, 94, . | 1.5 | 34 |
| 138 | The dynamics of information-driven coordination phenomena: A transfer entropy analysis. Science Advances, 2016, 2, . | 8.1 | 88 |
| 139 | Participatory Syndromic Surveillance of Influenza in Europe. Journal of Infectious Diseases, 2016, 214, S386-S392. | 2.2 | 99 |
| 140 | Effects of Network Structure, Competition and Memory Time on Social Spreading Phenomena. Physical Review X, 2016, 6, . | 7.9 | 57 |
| 141 | Humans display a reduced set of consistent behavioral phenotypes in dyadic games. Science Advances, 2016, 2, . | 8.1 | 76 |
| 142 | On degree–degree correlations in multilayer networks. Physica D: Nonlinear Phenomena, 2016, 323-324, 5-11. | 1.8 | 33 |
| 143 | The Role of the Organization Structure in the Diffusion of Innovations. PLoS ONE, 2015, 10, e0126076. | 1.5 | 16 |
| 144 | Sentiment cascades in the 15M movement. EPJ Data Science, 2015, 4, . | 1.3 | 55 |

| # | Article | IF | Citations |
|---|---|---|---|
| 145 | Reputation drives cooperative behaviour and network formation in human groups. Scientific Reports, 2015, 5, . | 2.7 | 135 |
| 146 | Characterising two-pathogen competition in spatially structured environments. Scientific Reports, 2015, 5, . | 2.7 | 40 |
| 147 | Structure of triadic relations in multiplex networks. New Journal of Physics, 2015, 17, 073029. | 1.8 | 97 |
| 148 | Dynamic instability of cooperation due to diverse activity patterns in evolutionary social dilemmas. Europhysics Letters, 2015, 109, 58002. | 1.3 | 96 |
| 149 | Multilayer networks. Journal of Complex Networks, 2014, 2, 203-271. | 0.9 | 3,102 |
| 150 | Role of centrality for the identification of influential spreaders in complex networks. Physical Review E, 2014, 90, . | 1.5 | 144 |
| 151 | Dynamics of Interacting Diseases. Physical Review X, 2014, 4, . | 7.9 | 116 |
| 152 | Intergroup information exchange drives cooperation in the public goods game. Physical Review E, 2014, 90, . | 1.5 | 19 |
| 153 | Transition from reciprocal cooperation to persistent behaviour in social dilemmas at the end of adolescence. Nature Communications, 2014, 5, . | 10.8 | 47 |
| 154 | Dimensionality reduction and spectral properties of multilayer networks. Physical Review E, 2014, 89, . | 1.5 | 64 |
| 155 | Assessing the bias in samples of large online networks. Social Networks, 2014, 38, 16-27. | 1.4 | 203 |
| 156 | A comparative analysis of spatial Prisoner's Dilemma experiments: Conditional cooperation and payoff irrelevance. Scientific Reports, 2014, 4, . | 2.7 | 107 |
| 157 | The role of hidden influentials in the diffusion of online information cascades. EPJ Data Science, 2013, 2, . | 1.3 | 63 |
| 158 | Diffusion Dynamics on Multiplex Networks. Physical Review Letters, 2013, 110, . | 5.8 | 874 |
| 159 | Effects of delayed recovery and nonuniform transmission on the spreading of diseases in complex networks. Physica A: Statistical Mechanics and Its Applications, 2013, 392, 1577-1585. | 2.1 | 105 |
| 160 | Cooperation in changing environments: Irreversibility in the transition to cooperation in complex networks. Chaos, Solitons and Fractals, 2013, 56, 188-193. | 3.8 | 11 |
| 161 | Broadcasters and Hidden Influentials in Online Protest Diffusion. American Behavioral Scientist, 2013, 57, 943-965. | 0.8 | 259 |
| 162 | Evolutionary dynamics of group interactions on structured populations: a review. Journal of the Royal Society Interface, 2013, 10, . | 2.1 | 1,327 |

| # | Article | IF | Citations |
|---|---|---|---|
| 163 | Mathematical Formulation of Multilayer Networks. Physical Review X, 2013, 3, . | 7.9 | 637 |
| 164 | Diffusion Dynamics with Changing Network Composition. Entropy, 2013, 15, 4553-4568. | 1.2 | 11 |
| 165 | Host Mobility Drives Pathogen Competition in Spatially Structured Populations. PLoS Computational Biology, 2013, 9, e1003169. | 1.9 | 51 |
| 166 | Impact of Social Punishment on Cooperative Behavior in Complex Networks. Scientific Reports, 2013, 3, . | 2.7 | 176 |
| 167 | Cascading behaviour in complex socio-technical networks. Journal of Complex Networks, 2013, 1, 3-24. | 0.9 | 123 |
| 168 | Modeling self-sustained activity cascades in socio-technical networks. Europhysics Letters, 2013, 104, 48004. | 1.3 | 16 |
| 169 | Contact-based social contagion in multiplex networks. Physical Review E, 2013, 88, . | 1.5 | 212 |
| 170 | Generalized synchronization in relay systems with instantaneous coupling. Physical Review E, 2013, 88, . | 1.5 | 36 |
| 171 | Data reliability in complex directed networks. Journal of Statistical Mechanics: Theory and Experiment, 2013, 2013, P12008. | 1.2 | 1 |
| 172 | Gender Differences in Cooperation: Experimental Evidence on High School Students. PLoS ONE, 2013, 8, e83700. | 1.5 | 60 |
| 173 | Locating privileged spreaders on an online social network. Physical Review E, 2012, 85, . | 1.5 | 79 |
| 174 | Exploring complex networks by means of adaptive walkers. Physical Review E, 2012, 86, . | 1.5 | 15 |
| 175 | Velocity-enhanced cooperation of moving agents playing public goods games. Physical Review E, 2012, 85, . | 1.5 | 57 |
| 176 | Stability of Boolean multilevel networks. Physical Review E, 2012, 86, . | 1.5 | 71 |
| 177 | Explosive First-Order Transition to Synchrony in Networked Chaotic Oscillators. Physical Review Letters, 2012, 108, . | 5.8 | 180 |
| 178 | Human behavior in Prisoner's Dilemma experiments suppresses network reciprocity. Scientific Reports, 2012, 2, . | 2.7 | 89 |
| 179 | Heterogeneous networks do not promote cooperation when humans play a Prisoner's Dilemma. Proceedings of the National Academy of Sciences of the United States of America, 2012, 109, 12922-12926. | 5.2 | 310 |
| 180 | Evolutionary dynamics on interdependent populations. Physical Review E, 2012, 86, . | 1.5 | 114 |

| # | Article | IF | Citations |
|---|---|---|---|
| 181 | Topological effects of data incompleteness of gene regulatory networks. BMC Systems Biology, 2012, 6, . | 3.1 | 10 |
| 182 | Absence of influential spreaders in rumor dynamics. Physical Review E, 2012, 85, . | 1.5 | 224 |
| 183 | Empathy Emerges Spontaneously in the Ultimatum Game: Small Groups and Networks. PLoS ONE, 2012, 7, e43781. | 1.5 | 66 |
| 184 | Emergence of Influential Spreaders in Modified Rumor Models. Journal of Statistical Physics, 2012, 151, 383-393. | 0.8 | 62 |
| 185 | Modeling human mobility responses to the large-scale spreading of infectious diseases. Scientific Reports, 2011, 1, . | 2.7 | 296 |
| 186 | The Dynamics of Protest Recruitment through an Online Network. Scientific Reports, 2011, 1, . | 2.7 | 477 |
| 187 | Nonperturbative heterogeneous mean-field approach to epidemic spreading in complex networks. Physical Review E, 2011, 84, . | 1.5 | 95 |
| 188 | Selective advantage of tolerant cultural traits in the Axelrod-Schelling model. Physical Review E, 2011, 83, . | 1.5 | 23 |
| 189 | The Transcriptional Regulatory Network of Mycobacterium tuberculosis. PLoS ONE, 2011, 6, e22178. | 1.5 | 61 |
| 190 | Modeling Abnormal Priming in Alzheimer's Patients with a Free Association Network. PLoS ONE, 2011, 6, e22651. | 1.5 | 35 |
| 191 | Structural and Dynamical Patterns on Online Social Networks: The Spanish May 15th Movement as a Case Study. PLoS ONE, 2011, 6, e23883. | 1.5 | 145 |
| 192 | Coordination and growth: the Stag Hunt game on evolutionary networks. Journal of Statistical Mechanics: Theory and Experiment, 2011, 2011, P05008. | 1.2 | 24 |
| 193 | Cooperation in scale-free networks with limited associative capacities. Physical Review E, 2011, 83, . | 1.5 | 56 |
| 194 | Explosive Synchronization Transitions in Scale-Free Networks. Physical Review Letters, 2011, 106, . | 5.8 | 575 |
| 195 | Coevolutionary network approach to cultural dynamics controlled by intolerance. Physical Review E, 2011, 84, . | 1.5 | 23 |
| 196 | Evolution of microscopic and mesoscopic synchronized patterns in complex networks. Chaos, 2011, 21, . | 2.0 | 10 |
| 197 | From Modular to Centralized Organization of Synchronization in Functional Areas of the Cat Cerebral Cortex. PLoS ONE, 2010, 5, e12313. | 1.5 | 83 |
| 198 | Spreading of persistent infections in heterogeneous populations. Physical Review E, 2010, 81, . | 1.5 | 22 |

| # | Article | IF | Citations |
|---|---|---|---|
| 199 | Dynamical organization towards consensus in the Axelrod model on complex networks. Physical Review E, 2010, 81, . | 1.5 | 33 |
| 200 | Discrete-time Markov chain approach to contact-based disease spreading in complex networks. Europhysics Letters, 2010, 89, 38009. | 1.3 | 502 |
| 201 | Effects of mass media action on the Axelrod model with social influence. Physical Review E, 2010, 82, . | 1.5 | 31 |
| 202 | Effects of mobility in a population of prisoner's dilemma players. Physical Review E, 2009, 79, . | 1.5 | 247 |
| 203 | Residential segregation and cultural dissemination: An Axelrod-Schelling model. Physical Review E, 2009, 80, . | 1.5 | 43 |
| 204 | The Ultimatum Game in complex networks. Journal of Statistical Mechanics: Theory and Experiment, 2009, 2009, P09012. | 1.2 | 70 |
| 205 | Evolutionary game dynamics in a growing structured population. New Journal of Physics, 2009, 11, 083031. | 1.8 | 141 |
| 206 | Cooperative scale-free networks despite the presence of defector hubs. Europhysics Letters, 2009, 88, 38003. | 1.3 | 59 |
| 207 | Traffic-driven epidemic spreading in finite-size scale-free networks. Proceedings of the National Academy of Sciences of the United States of America, 2009, 106, 16897-16902. | 5.2 | 180 |
| 208 | Social network reciprocity as a phase transition in evolutionary cooperation. Physical Review E, 2009, 79, . | 1.5 | 82 |
| 209 | Synchronization in complex networks. Physics Reports, 2008, 469, 93-153. | 17.1 | 3,477 |
| 210 | Natural selection of cooperation and degree hierarchy in heterogeneous populations. Journal of Theoretical Biology, 2008, 253, 296-301. | 1.1 | 55 |
| 211 | Complex Cooperative Networks from Evolutionary Preferential Attachment. PLoS ONE, 2008, 3, e2449. | 1.5 | 182 |
| 212 | Spreading of sexually transmitted diseases in heterosexual populations. Proceedings of the National Academy of Sciences of the United States of America, 2008, 105, 1399-1404. | 5.2 | 99 |
| 213 | Dynamics of gossip-like information dissemination in complex computer networks. International Journal of Computer Mathematics, 2008, 85, 1165-1173. | 1.1 | 3 |
| 214 | Scaling Breakdown in Flow Fluctuations on Complex Networks. Physical Review Letters, 2008, 100, . | 5.8 | 99 |
| 215 | SYNCHRONIZATION OF NETWORKS WITH VARIABLE LOCAL PROPERTIES. International Journal of Bifurcation and Chaos in Applied Sciences and Engineering, 2007, 17, 2501-2507. | 1.2 | 14 |
| 216 | Robustness of cooperation in the evolutionary prisoner's dilemma on complex networks. New Journal of Physics, 2007, 9, 184-184. | 1.8 | 156 |

| # | Article | IF | Citations |
|---|---|---|---|
| 217 | Dynamical Organization of Cooperation in Complex Topologies. Physical Review Letters, 2007, 98, . | 5.8 | 492 |
| 218 | Synchronizability determined by coupling strengths and topology on complex networks. Physical Review E, 2007, 75, . | 1.5 | 91 |
| 219 | Paths to Synchronization on Complex Networks. Physical Review Letters, 2007, 98, . | 5.8 | 360 |
| 220 | Awaking and sleeping of a complex network. Neural Networks, 2007, 20, 102-108. | 5.3 | 7 |
| 221 | Theory of rumour spreading in complex social networks. Physica A: Statistical Mechanics and Its Applications, 2007, 374, 457-470. | 2.1 | 685 |
| 222 | Complex networks: Structure and dynamics. Physics Reports, 2006, 424, 175-308. | 17.1 | 9,904 |
| 223 | Immunization of real complex communication networks. European Physical Journal B, 2006, 49, 259-264. | 1.1 | 74 |
| 224 | From scale-free to Erdos-Rényi networks. Physical Review E, 2006, 73, . | 1.5 | 120 |
| 225 | Scale-free topologies and activatory-inhibitory interactions. Chaos, 2006, 16, 015114. | 2.0 | 7 |
| 226 | Structure of peer-to-peer social networks. Physical Review E, 2006, 73, . | 1.5 | 69 |
| 227 | Michaelis–Menten dynamics in complex heterogeneous networks. Physica A: Statistical Mechanics and Its Applications, 2005, 352, 265-281. | 2.1 | 10 |
| 228 | On the robustness of complex heterogeneous gene expression networks. Biophysical Chemistry, 2005, 115, 225-228. | 1.4 | 15 |
| 229 | Dynamics of jamming transitions in complex networks. Europhysics Letters, 2005, 71, 325-331. | 1.3 | 226 |
| 230 | Distance-dcovering problems in scale-free networks with degree correlations. Physical Review E, 2005, 71, . | 1.5 | 46 |
| 231 | Local versus global knowledge in the Barabási-Albert scale-free network model. Physical Review E, 2004, 69, . | 1.5 | 34 |
| 232 | Improved routing strategies for Internet traffic delivery. Physical Review E, 2004, 70, . | 1.5 | 252 |
| 233 | Efficiency and reliability of epidemic data dissemination in complex networks. Physical Review E, 2004, 69, . | 1.5 | 120 |
| 234 | Synchronization of Kuramoto oscillators in scale-free networks. Europhysics Letters, 2004, 68, 603-609. | 1.3 | 262 |

| # | Article | IF | Citations |
|---|---|---|---|
| 235 | Dynamics of rumor spreading in complex networks. Physical Review E, 2004, 69, . | 1.5 | 795 |
| 236 | Disease spreading in structured scale-free networks. European Physical Journal B, 2003, 31, 265-271. | 1.1 | 61 |
| 237 | Error diagrams and temporal correlations in a fracture model with characteristic and power-law distributed avalanches. European Physical Journal B, 2003, 34, 489-494. | 1.1 | 0 |
| 238 | Size dependency of tension strength in natural fiber composites. Physica A: Statistical Mechanics and Its Applications, 2003, 325, 547-560. | 2.1 | 32 |
| 239 | Resilience to damage of graphs with degree correlations. Physical Review E, 2003, 67, . | 1.5 | 195 |
| 240 | Epidemic incidence in correlated complex networks. Physical Review E, 2003, 68, . | 1.5 | 183 |
| 241 | Time evolution of damage under variable ranges of load transfer. Physical Review E, 2003, 68, . | 1.5 | 23 |
| 242 | Topology and correlations in structured scale-free networks. Physical Review E, 2003, 67, . | 1.5 | 72 |
| 243 | Creep rupture has two universality classes. Europhysics Letters, 2003, 63, 347-353. | 1.3 | 51 |
| 244 | Critical load and congestion instabilities in scale-free networks. Europhysics Letters, 2003, 62, 292-298. | 1.3 | 172 |
| 245 | Fracture model with variable range of interaction. Physical Review E, 2002, 65, . | 1.5 | 127 |
| 246 | Instability of scale-free networks under node-breaking avalanches. Europhysics Letters, 2002, 58, 630-636. | 1.3 | 219 |
| 247 | The Bak-Sneppen model on scale-free networks. Europhysics Letters, 2002, 57, 765-771. | 1.3 | 36 |
| 248 | Epidemic outbreaks in complex heterogeneous networks. European Physical Journal B, 2002, 26, 521-529. | 1.1 | 718 |
| 249 | A model for complex aftershock sequences. Journal of Geophysical Research, 2001, 106, 6609-6619. | 3.5 | 26 |
| 250 | Phase transitions in load transfer models of fracture. Physica A: Statistical Mechanics and Its Applications, 2001, 296, 9-23. | 2.1 | 12 |
| 251 | Exact numerical solution for a time-dependent fibre-bundle model with continuous damage. Journal of Physics A, 2001, 34, 9983-9991. | 1.5 | 9 |
| 252 | Time dependence of breakdown in a global fiber-bundle model with continuous damage. Physical Review E, 2001, 63, . | 1.5 | 21 |

| # | Article | IF | Citations |
|---|---|---|---|
| 253 | Fracture and Second-Order Phase Transitions. Physical Review Letters, 2000, 85, 2865-2868. | 5.8 | 91 |
| 254 | Modified renormalization strategy for sandpile models. Physical Review E, 1999, 60, 7565-7568. | 1.5 | 4 |
| 255 | Bounds for the time to failure of hierarchical systems of fracture. Physical Review E, 1999, 59, R1287-R1290. | 1.5 | 5 |
| 256 | Time to failure of hierarchical load-transfer models of fracture. Physical Review E, 1999, 60, 2581-2594. | 1.5 | 23 |
| 257 | Self-organized criticality in a fibre-bundle-type model. Physica A: Statistical Mechanics and Its Applications, 1999, 274, 400-409. | 2.1 | 25 |
| 258 | Probabilistic approach to time-dependent load-transfer models of fracture. Physical Review E, 1998, 58, 1528-1532. | 1.5 | 19 |
| 259 | On the impact of masking and blocking hypotheses for measuring the efficacy of new tuberculosis vaccines. PeerJ, 0, 4, e1513. | 0.0 | 22 |
| 260 | The interplay between pitch control and top speed in soccer considering the stamina factor. Scientific Reports, 0, 15, . | 2.7 | 2 |
| 261 | A new algorithm for identifying influential nodes in multiplex networks. Chaos, Solitons and Fractals, 0, 202, 117549. | 3.8 | 6 |
| 262 | Edge-based reputation promotes cooperation in simplicial complexes. Chaos, Solitons and Fractals, 0, 204, 117748. | 3.8 | 2 |
| 263 | Mechanistic interplay between information spreading and opinion polarization. PNAS Nexus, 0, 5, . | 2.4 | 0 |
| 264 | Assigning entities to teams as a hypergraph discovery problem. Communications Physics, 0, 9, . | 3.5 | 1 |
| 265 | Rumor propagation on hypergraphs. Nature Communications, 0, 17, . | 10.8 | 5 |
| 266 | Directionality-Induced Jamming in Multiplex Networks. Physical Review Letters, 0, 136, . | 5.8 | 0 |
| 267 | Evolutionary vaccination dynamics under higher-order reinforcement pressure. New Journal of Physics, 0, 28, 064601. | 1.8 | 0 |
| 268 | Efficient Gillespie algorithms for spreading phenomena in large and heterogeneous higher-order networks. Nature Communications, 0, 17, . | 10.8 | 0 |
| 269 | Effective graph resistance as cumulative heat dissipation. Nature Communications, 0, 17, . | 10.8 | 0 |