

# Duccio Fanelli

## List of Publications by Year in descending order

Source: <https://exaly.com/author-pdf/1698993/publications.pdf>

Version: 2024-02-01

73  
papers

2,810  
citations

304743

22  
h-index

197818

49  
g-index

77  
all docs

77  
docs citations

77  
times ranked

2294  
citing authors

#	ARTICLE	IF	CITATIONS
1	Fast whole-brain imaging of seizures in zebrafish larvae by two-photon light-sheet microscopy. Biomedical Optics Express, 2022, 13, 1516.	2.9	16
2	Pattern Formation on Hypergraphs. Understanding Complex Systems, 2022, , 163-180.	0.6	2
3	Spectral pruning of fully connected layers. Scientific Reports, 2022, 12, .	3.3	4
4	Machine learning in spectral domain. Nature Communications, 2021, 12, 1330.	12.8	14
5	Robust, coherent, and synchronized circadian clock-controlled oscillations along Anabaena filaments. ELife, 2021, 10, .	6.0	14
6	Reconstruction scheme for excitatory and inhibitory dynamics with quenched disorder: application to zebrafish imaging. Journal of Computational Neuroscience, 2021, 49, 159-174.	1.0	7
7	Random walks and community detection in hypergraphs. Journal of Physics Complexity, 2021, 2, 015011.	2.2	29
8	Cortical propagation tracks functional recovery after stroke. PLoS Computational Biology, 2021, 17, e1008963.	3.2	5
9	Deep learning and alignment of spatially resolved single-cell transcriptomes with Tangram. Nature Methods, 2021, 18, 1352-1362.	19.0	276
10	How to fairly share a watermelon. Physics Education, 2021, 56, 015010.	0.5	0
11	Generating directed networks with prescribed Laplacian spectra. Journal of Physics Complexity, 2021, 2, 015004.	2.2	0
12	Training of sparse and dense deep neural networks: Fewer parameters, same performance. Physical Review E, 2021, 104, 054312.	2.1	4
13	Inferring network structure and local dynamics from neuronal patterns with quenched disorder. Chaos, Solitons and Fractals, 2020, 140, 110235.	5.1	5
14	Analysis and forecast of COVID-19 spreading in China, Italy and France. Chaos, Solitons and Fractals, 2020, 134, 109761.	5.1	754
15	Generalized patterns from local and non local reactions. Chaos, Solitons and Fractals, 2020, 134, 109707.	5.1	8
16	COVID-19: The unreasonable effectiveness of simple models. Chaos, Solitons and Fractals: X, 2020, 5, 100034.	2.1	35
17	Random walks on hypergraphs. Physical Review E, 2020, 101, 022308.	2.1	99
18	Stabilizing Stuart-Landau oscillators via time-varying networks. Chaos, Solitons and Fractals, 2020, 133, 109587.	5.1	5

#	ARTICLE	IF	CITATIONS
19	Dynamical systems on hypergraphs. <i>Journal of Physics Complexity</i> , 2020, 1, 035006.	2.2	41
20	Nonlinear walkers and efficient exploration of congested networks. <i>Physical Review Research</i> , 2020, 2, .	3.6	10
21	Network equilibrium stabilization via single-node insertion. , 2019, , .		0
22	Patterns of non-normality in networked systems. <i>Journal of Theoretical Biology</i> , 2019, 480, 81-91.	1.7	42
23	Resilience for stochastic systems interacting via a quasi-degenerate network. <i>Chaos</i> , 2019, 29, 083123.	2.5	8
24	Reactive explorers to unravel network topology. <i>European Physical Journal B</i> , 2019, 92, 1.	1.5	5
25	Desynchronization and pattern formation in a noisy feed-forward oscillator network. <i>Physical Review E</i> , 2019, 99, 012303.	2.1	6
26	Nonautonomous driving induces stability in network of identical oscillators. <i>Physical Review E</i> , 2019, 99, 012309.	2.1	15
27	Hopping in the Crowd to Unveil Network Topology. <i>Physical Review Letters</i> , 2018, 120, 158301.	7.8	20
28	Spectral control for ecological stability. <i>European Physical Journal B</i> , 2018, 91, 1.	1.5	1
29	Noiseâ€“Seeded Developmental Pattern Formation in Filamentous Cyanobacteria. <i>Life</i> , 2018, 8, 58.	2.4	5
30	Reactive random walkers on complex networks. <i>Physical Review E</i> , 2018, 98, .	2.1	13
31	Non-normal amplification of stochastic quasicycles. <i>Physical Review E</i> , 2018, 98, .	2.1	7
32	Pattern invariance for reaction-diffusion systems on complex networks. <i>Scientific Reports</i> , 2018, 8, 16226.	3.3	8
33	Desynchronization induced by time-varying network. <i>Europhysics Letters</i> , 2018, 121, 50008.	2.0	16
34	Robust stochastic Turing patterns in the development of a one-dimensional cyanobacterial organism. <i>PLoS Biology</i> , 2018, 16, e2004877.	5.6	30
35	Benjaminâ€“Feir instabilities on directed networks. <i>Chaos, Solitons and Fractals</i> , 2017, 96, 8-16.	5.1	15
36	Theory of Turing Patterns on Time Varying Networks. <i>Physical Review Letters</i> , 2017, 119, 148301.	7.8	50

#	ARTICLE	IF	CITATIONS
37	Diffusion approximation of the stochastic Wilson–Cowan model. <i>Chaos, Solitons and Fractals</i> , 2017, 103, 504-512.	5.1	6
38	Intertangled stochastic motifs in networks of excitatory-inhibitory units. <i>Physical Review E</i> , 2017, 96, 022308.	2.1	4
39	Topological stabilization for synchronized dynamics on networks. <i>European Physical Journal B</i> , 2017, 90, 1.	1.5	14
40	Noise-driven neuromorphic tuned amplifier. <i>Physical Review E</i> , 2017, 96, 062313.	2.1	10
41	Suppressing escape events in maps of the unit interval with demographic noise. <i>Physical Review E</i> , 2016, 94, 052133.	2.1	0
42	Macroscopic Transport Equations in Many-Body Systems from Microscopic Exclusion Processes in Disordered Media: A Review. <i>Frontiers in Physics</i> , 2016, 4, .	2.1	5
43	Tune the topology to create or destroy patterns. <i>European Physical Journal B</i> , 2016, 89, 1.	1.5	24
44	Generalized maximum entropy approach to quasistationary states in long-range systems. <i>Physical Review E</i> , 2016, 93, 022107.	2.1	4
45	Multiple-scale theory of topology-driven patterns on directed networks. <i>Physical Review E</i> , 2016, 93, 032317.	2.1	14
46	Theory of diffusion-influenced reactions in complex geometries. <i>Physical Chemistry Chemical Physics</i> , 2016, 18, 15950-15954.	2.8	31
47	Turing instabilities on Cartesian product networks. <i>Scientific Reports</i> , 2015, 5, 12927.	3.3	20
48	Emergence of a collective crystal in a classical system with long-range interactions. <i>Europhysics Letters</i> , 2015, 111, 30011.	2.0	1
49	Pattern formation for reactive species undergoing anisotropic diffusion. <i>European Physical Journal B</i> , 2015, 88, 1.	1.5	7
50	Turing patterns in multiplex networks. <i>Physical Review E</i> , 2014, 90, 042814.	2.1	82
51	Adhesion-Mediated Signalling in Cancer: Recent Advances and Mathematical Modelling. <i>Biophysical Reviews and Letters</i> , 2014, 09, 285-300.	0.8	1
52	Linear noise approximation for stochastic oscillations of intracellular calcium. <i>Journal of Theoretical Biology</i> , 2014, 349, 92-99.	1.7	8
53	Stochastic amplification of spatial modes in a system with one diffusing species. <i>Journal of Mathematical Biology</i> , 2014, 69, 1585-1608.	1.9	10
54	Intrinsic noise and two-dimensional maps: Quasicycles, quasiperiodicity, and chaos. <i>Physical Review E</i> , 2014, 90, 032135.	2.1	7

#	ARTICLE	IF	CITATIONS
55	The theory of pattern formation on directed networks. Nature Communications, 2014, 5, 4517.	12.8	112
56	Beam-plasma instability and fast particles: the Lynden-Bell approach. Plasma Physics and Controlled Fusion, 2014, 56, 035013.	2.1	17
57	The Theory of Individual Based Discrete-Time Processes. Journal of Statistical Physics, 2014, 156, 131-155.	1.2	7
58	Diffusion of tagged particles in a crowded medium. Europhysics Letters, 2014, 107, 20006.	2.0	14
59	Ensemble inequivalence in systems with wave-particle interaction. Physical Review E, 2014, 89, 050101.	2.1	6
60	The linear noise approximation for reaction-diffusion systems on networks. European Physical Journal B, 2013, 86, 1.	1.5	27
61	Intrinsic noise and discrete-time processes. Physical Review E, 2013, 88, 040102.	2.1	9
62	Turing instabilities in reaction-diffusion systems with cross diffusion. European Physical Journal B, 2013, 86, 1.	1.5	33
63	Stochastic Turing patterns on a network. Physical Review E, 2012, 86, 046105.	2.1	35
64	Statistical theory of quasistationary states beyond the single water-bag case study. Physical Review E, 2012, 85, 021148.	2.1	35
65	Existence of quasi-stationary states at the long range threshold. Communications in Nonlinear Science and Numerical Simulation, 2011, 16, 4718-4724.	3.3	15
66	Stochastic Turing patterns in the Brusselator model. Physical Review E, 2010, 81, 046215.	2.1	122
67	Spatial model of autocatalytic reactions. Physical Review E, 2010, 81, 056110.	2.1	19
68	Diffusion in a crowded environment. Physical Review E, 2010, 82, 021113.	2.1	45
69	Enhanced stochastic oscillations in autocatalytic reactions. Physical Review E, 2009, 79, 036112.	2.1	39
70	Exploring the Thermodynamic Limit of Hamiltonian Models: Convergence to the Vlasov Equation. Physical Review Letters, 2007, 98, 150602.	7.8	92
71	Nonequilibrium Tricritical Point in a System with Long-Range Interactions. Physical Review Letters, 2007, 99, 040601.	7.8	111
72	Maximum entropy principle explains quasistationary states in systems with long-range interactions: The example of the Hamiltonian mean-field model. Physical Review E, 2007, 75, 011112.	2.1	119

#	ARTICLE	IF	CITATIONS
73	Statistical theory of high-gain free-electron laser saturation. Physical Review E, 2004, 69, 045501.	2.1	103