Giovanni Petri

List of Publications by Year in Descending Order

43 papers	1,699 citations	21 h-index	41 g-index
50 ext. papers	2,422 ext. citations	5.5 avg, IF	5.58 L-index

#	Paper	IF	Citations
43	Topological Features of Electroencephalography are Robust to Re-referencing and Preprocessing.. *Brain Topography*, **2022**, 35, 79	4.3	0
42	Influential groups for seeding and sustaining nonlinear contagion in heterogeneous hypergraphs. *Communications Physics*, **2022**, 5,	5.4	3
41	Sex Differences in Aggression Are Paralleled by Differential Activation of the Brain Social Decision-Making Network in Zebrafish.. *Frontiers in Behavioral Neuroscience*, **2022**, 16, 784835	3.5	0
40	Group interactions modulate critical mass dynamics in social convention. *Communications Physics*, **2022**, 5,	5.4	2
39	Higher-Order Description of Brain Function. *Understanding Complex Systems*, **2022**, 401-415	0.4	
38	Towards Understanding the Communication in Sperm Whales. *IScience*, **2022**, 104393	6.1	1
37	The physics of higher-order interactions in complex systems. *Nature Physics*, **2021**, 17, 1093-1098	16.2	36
36	Homological scaffold via minimal homology bases. *Scientific Reports*, **2021**, 11, 5355	4.9	3
35	Simplicial and topological descriptions of human brain dynamics. *Network Neuroscience*, **2021**, 5, 549-568	5.6	2
34	Hypergraph reconstruction from network data. *Communications Physics*, **2021**, 4,	5.4	8
33	Topological limits to the parallel processing capability of network architectures. *Nature Physics*, **2021**, 17, 646-651	16.2	4
32	Linear and Nonlinear Quantitative EEG Analysis during Neutral Hypnosis following an Opened/Closed Eye Paradigm. *Symmetry*, **2021**, 13, 1423	2.7	0
31	Developmental Effects of Oxytocin Neurons on Social Affiliation and Processing of Social Information. *Journal of Neuroscience*, **2021**, 41, 8742-8760	6.6	6
30	Networks beyond pairwise interactions: Structure and dynamics. *Physics Reports*, **2020**, 874, 1-92	27.7	228
29	Impact of the distribution of recovery rates on disease spreading in complex networks. *Physical Review Research*, **2020**, 2,	3.9	17
28	Social contagion models on hypergraphs. *Physical Review Research*, **2020**, 2,	3.9	54
27	Differences in EMG Feature Space between Able-Bodied and Amputee Subjects for Myoelectric Control **2019**,		8

26	Simplicial models of social contagion. *Nature Communications*, **2019**, 10, 2485	17.4	161
25	Topological gene expression networks recapitulate brain anatomy and function. *Network Neuroscience*, **2019**, 3, 744-762	5.6	15
24	Generating dynamical neuroimaging spatiotemporal representations (DyNeuSR) using topological data analysis. *Network Neuroscience*, **2019**, 3, 763-778	5.6	12
23	Spectral and topological analyses of the cortical representation of the head position: Does hypnotizability matter?. *Brain and Behavior*, **2019**, 9, e01277	3.4	14
22	On the predictability of infectious disease outbreaks. *Nature Communications*, **2019**, 10, 898	17.4	92
21	Topology highlights mesoscopic functional equivalence between imagery and perception: The case of hypnotizability. *NeuroImage*, **2019**, 200, 437-449	7.9	29
20	Analysis of Big Data in Gait Biomechanics: Current Trends and Future Directions. *Journal of Medical and Biological Engineering*, **2018**, 38, 244-260	2.2	70
19	Simplicial Activity Driven Model. *Physical Review Letters*, **2018**, 121, 228301	7.4	62
18	Topological analysis of data. *EPJ Data Science*, **2017**, 6,	3.4	39
17	The shape of collaborations. *EPJ Data Science*, **2017**, 6,	3.4	63
16	Construction of and efficient sampling from the simplicial configuration model. *Physical Review E*, **2017**, 96, 032312	2.4	29
15	Resting-State fMRI Functional Connectivity: Big Data Preprocessing Pipelines and Topological Data Analysis. *IEEE Transactions on Big Data*, **2017**, 3, 415-428	3.2	25
14	Navigating features: a topologically informed chart of electromyographic features space. *Journal of the Royal Society Interface*, **2017**, 14,	4.1	44
13	Persistent homology analysis of phase transitions. *Physical Review E*, **2016**, 93, 052138	2.4	36
12	Insights into Brain Architectures from the Homological Scaffolds of Functional Connectivity Networks. *Frontiers in Systems Neuroscience*, **2016**, 10, 85	3.5	27
11	Unveiling patterns of international communities in a global city using mobile phone data. *EPJ Data Science*, **2015**, 4,	3.4	21
10	Homological scaffolds of brain functional networks. *Journal of the Royal Society Interface*, **2014**, 11, 20140873	4.1	269
9	jHoles: A Tool for Understanding Biological Complex Networks via Clique Weight Rank Persistent Homology. *Electronic Notes in Theoretical Computer Science*, **2014**, 306, 5-18	0.7	34

8	Temporal stability of network partitions. *Physical Review E*, **2014**, 90, 022813	2.4	10
7	Evolutionary dynamics of time-resolved social interactions. *Physical Review E*, **2014**, 90, 052825	2.4	27
6	Entangled communities and spatial synchronization lead to criticality in urban traffic. *Scientific Reports*, **2013**, 3, 1798	4.9	22
5	Topological Strata of Weighted Complex Networks. *PLoS ONE*, **2013**, 8, e66506	3.7	109
4	Networks and Cycles: A Persistent Homology Approach to Complex Networks. *Springer Proceedings in Complexity*, **2013**, 93-99	0.3	9
3	Understanding mobility in a social petri dish. *Scientific Reports*, **2012**, 2, 457	4.9	87
2	Global and local information in traffic congestion. *Europhysics Letters*, **2009**, 88, 20010	1.6	7
1	Topology highlights mesoscopic functional equivalence between imagery and perception		4