

Alessandro Vespignani

List of Publications by Citations

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274
papers

43,088
citations

95
h-index

206
g-index

302
ext. papers

51,234
ext. citations

9.1
avg, IF

7.93
L-index

#	Paper	IF	Citations
274	Epidemic spreading in scale-free networks. <i>Physical Review Letters</i> , 2001 , 86, 3200-3	7.4	3811
273	The architecture of complex weighted networks. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2004 , 101, 3747-52	11.5	2401
272	The effect of travel restrictions on the spread of the 2019 novel coronavirus (COVID-19) outbreak. <i>Science</i> , 2020 , 368, 395-400	33.3	1798
271	Epidemic processes in complex networks. <i>Reviews of Modern Physics</i> , 2015 , 87, 925-979	40.5	1761
270	Big data. The parable of Google Flu: traps in big data analysis. <i>Science</i> , 2014 , 343, 1203-5	33.3	1434
269	The effect of human mobility and control measures on the COVID-19 epidemic in China. <i>Science</i> , 2020 , 368, 493-497	33.3	1373
268	Dynamical Processes on Complex Networks 2008 ,		1362
267	Epidemic dynamics and endemic states in complex networks. <i>Physical Review E</i> , 2001 , 63, 066117	2.4	1041
266	Dynamical and correlation properties of the internet. <i>Physical Review Letters</i> , 2001 , 87, 258701	7.4	964
265	Multiscale mobility networks and the spatial spreading of infectious diseases. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2009 , 106, 21484-9	11.5	821
264	The role of the airline transportation network in the prediction and predictability of global epidemics. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2006 , 103, 2015-20	11.5	749
263	Immunization of complex networks. <i>Physical Review E</i> , 2002 , 65, 036104	2.4	701
262	Evolution and Structure of the Internet: A Statistical Physics Approach 2004 ,		663
261	Changes in contact patterns shape the dynamics of the COVID-19 outbreak in China. <i>Science</i> , 2020 , 368, 1481-1486	33.3	610
260	Detecting rich-club ordering in complex networks. <i>Nature Physics</i> , 2006 , 2, 110-115	16.2	603
259	Economic networks: the new challenges. <i>Science</i> , 2009 , 325, 422-5	33.3	537
258	Reaction-diffusion processes and metapopulation models in heterogeneous networks. <i>Nature Physics</i> , 2007 , 3, 276-282	16.2	500

257	Global protein function prediction from protein-protein interaction networks. <i>Nature Biotechnology</i> , 2003 , 21, 697-700	44.5	494
256	Velocity and hierarchical spread of epidemic outbreaks in scale-free networks. <i>Physical Review Letters</i> , 2004 , 92, 178701	7.4	483
255	Dynamics of person-to-person interactions from distributed RFID sensor networks. <i>PLoS ONE</i> , 2010 , 5, e11596	3.7	473
254	Modeling the worldwide spread of pandemic influenza: baseline case and containment interventions. <i>PLoS Medicine</i> , 2007 , 4, e13	11.6	458
253	Large-scale topological and dynamical properties of the Internet. <i>Physical Review E</i> , 2002 , 65, 066130	2.4	454
252	Epidemic dynamics in finite size scale-free networks. <i>Physical Review E</i> , 2002 , 65, 035108	2.4	451
251	Modelling dynamical processes in complex socio-technical systems. <i>Nature Physics</i> , 2012 , 8, 32-39	16.2	429
250	Weighted evolving networks: coupling topology and weight dynamics. <i>Physical Review Letters</i> , 2004 , 92, 228701	7.4	423
249	Intermittent dislocation flow in viscoplastic deformation. <i>Nature</i> , 2001 , 410, 667-71	50.4	423
248	Extracting the multiscale backbone of complex weighted networks. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2009 , 106, 6483-8	11.5	416
247	Evolving epidemiology and transmission dynamics of coronavirus disease 2019 outside Hubei province, China: a descriptive and modelling study. <i>Lancet Infectious Diseases</i> , 2020 , 20, 793-802	25.5	394
246	Absence of epidemic threshold in scale-free networks with degree correlations. <i>Physical Review Letters</i> , 2003 , 90, 028701	7.4	379
245	Science of science. <i>Science</i> , 2018 , 359,	33.3	373
244	Predicting the behavior of techno-social systems. <i>Science</i> , 2009 , 325, 425-8	33.3	335
243	Digital epidemiology. <i>PLoS Computational Biology</i> , 2012 , 8, e1002616	5	334
242	Modelling the impact of testing, contact tracing and household quarantine on second waves of COVID-19. <i>Nature Human Behaviour</i> , 2020 , 4, 964-971	12.8	333
241	Modeling users' activity on twitter networks: validation of Dunbar's number. <i>PLoS ONE</i> , 2011 , 6, e22656	3.7	324
240	Dynamical patterns of epidemic outbreaks in complex heterogeneous networks. <i>Journal of Theoretical Biology</i> , 2005 , 235, 275-88	2.3	320

239	Human mobility networks, travel restrictions, and the global spread of 2009 H1N1 pandemic. <i>PLoS ONE</i> , 2011 , 6, e16591	3.7	313
238	Epidemic modeling in metapopulation systems with heterogeneous coupling pattern: theory and simulations. <i>Journal of Theoretical Biology</i> , 2008 , 251, 450-67	2.3	304
237	Modeling of Protein Interaction Networks. <i>Complexus</i> , 2003 , 1, 38-44		298
236	Modeling the spatial spread of infectious diseases: the Global Epidemic and Mobility computational model. <i>Journal of Computational Science</i> , 2010 , 1, 132-145	3.4	275
235	Seasonal transmission potential and activity peaks of the new influenza A(H1N1): a Monte Carlo likelihood analysis based on human mobility. <i>BMC Medicine</i> , 2009 , 7, 45	11.4	248
234	Cut-offs and finite size effects in scale-free networks. <i>European Physical Journal B</i> , 2004 , 38, 205-209	1.2	244
233	Modeling human mobility responses to the large-scale spreading of infectious diseases. <i>Scientific Reports</i> , 2011 , 1, 62	4.9	233
232	Characterization and modeling of weighted networks. <i>Physica A: Statistical Mechanics and Its Applications</i> , 2005 , 346, 34-43	3.3	225
231	Nonequilibrium phase transition in a model for social influence. <i>Physical Review Letters</i> , 2000 , 85, 3536-97.4		225
230	Paths to self-organized criticality. <i>Brazilian Journal of Physics</i> , 2000 , 30, 27-41	1.2	213
229	Diffusion of scientific credits and the ranking of scientists. <i>Physical Review E</i> , 2009 , 80, 056103	2.4	209
228	Invasion threshold in heterogeneous metapopulation networks. <i>Physical Review Letters</i> , 2007 , 99, 148701.4	1.4	209
227	Assessing the international spreading risk associated with the 2014 west african ebola outbreak. <i>PLOS Currents</i> , 2014 , 6,		208
226	Spread of Zika virus in the Americas. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2017 , 114, E4334-E4343	11.5	194
225	Experimental evidence for critical dynamics in microfracturing processes. <i>Physical Review Letters</i> , 1994 , 73, 3423-3426	7.4	194
224	First-Order Transition in the Breakdown of Disordered Media. <i>Physical Review Letters</i> , 1997 , 78, 1408-1411.4	1.4	187
223	Modeling the evolution of weighted networks. <i>Physical Review E</i> , 2004 , 70, 066149	2.4	182
222	Spatiotemporal spread of the 2014 outbreak of Ebola virus disease in Liberia and the effectiveness of non-pharmaceutical interventions: a computational modelling analysis. <i>Lancet Infectious Diseases</i> , 2015 , 15, 204-11	25.5	180

221	Real-time numerical forecast of global epidemic spreading: case study of 2009 A/H1N1pdm. <i>BMC Medicine</i> , 2012 , 10, 165	11.4	178
220	Plasticity and avalanche behaviour in microfracturing phenomena. <i>Nature</i> , 1997 , 388, 658-660	50.4	177
219	Network science. <i>Annual Review of Information Science & Technology</i> , 2007 , 41, 537-607		173
218	Transmission heterogeneities, kinetics, and controllability of SARS-CoV-2. <i>Science</i> , 2021 , 371,	33.3	173
217	How self-organized criticality works: A unified mean-field picture. <i>Physical Review E</i> , 1998 , 57, 6345-6362	2.4	169
216	Universality class of absorbing phase transitions with a conserved field. <i>Physical Review Letters</i> , 2000 , 85, 1803-6	7.4	166
215	Comparing large-scale computational approaches to epidemic modeling: agent-based versus structured metapopulation models. <i>BMC Infectious Diseases</i> , 2010 , 10, 190	4	163
214	Characterizing and modeling the dynamics of online popularity. <i>Physical Review Letters</i> , 2010 , 105, 158701	14	160
213	Explaining the uneven distribution of numbers in nature: the laws of Benford and Zipf. <i>Physica A: Statistical Mechanics and Its Applications</i> , 2001 , 293, 297-304	3.3	158
212	The Structure of Interurban Traffic: A Weighted Network Analysis. <i>Environment and Planning B: Planning and Design</i> , 2007 , 34, 905-924		155
211	Incomplete ordering of the voter model on small-world networks. <i>Europhysics Letters</i> , 2003 , 63, 153-158	1.6	150
210	Towards a characterization of behavior-disease models. <i>PLoS ONE</i> , 2011 , 6, e23084	3.7	149
209	The Twitter of Babel: mapping world languages through microblogging platforms. <i>PLoS ONE</i> , 2013 , 8, e61981	3.7	148
208	Phase transitions in contagion processes mediated by recurrent mobility patterns. <i>Nature Physics</i> , 2011 , 7, 581-586	16.2	147
207	Time varying networks and the weakness of strong ties. <i>Scientific Reports</i> , 2014 , 4, 4001	4.9	143
206	Self-organized criticality as an absorbing-state phase transition. <i>Physical Review E</i> , 1998 , 57, 5095-5105	2.4	143
205	Avalanche and spreading exponents in systems with absorbing states. <i>Physical Review E</i> , 1999 , 59, 6175-9	2.4	141
204	Big Data for Infectious Disease Surveillance and Modeling. <i>Journal of Infectious Diseases</i> , 2016 , 214, S375-S379	7	138

203	Absorbing-state phase transitions in fixed-energy sandpiles. <i>Physical Review E</i> , 2000 , 62, 4564-82	2.4	138
202	Critical load and congestion instabilities in scale-free networks. <i>Europhysics Letters</i> , 2003 , 62, 292-298	1.6	137
201	Driving, Conservation, and Absorbing States in Sandpiles. <i>Physical Review Letters</i> , 1998 , 81, 5676-5679	7.4	135
200	Random walks and search in time-varying networks. <i>Physical Review Letters</i> , 2012 , 109, 238701	7.4	133
199	The GLEaMviz computational tool, a publicly available software to explore realistic epidemic spreading scenarios at the global scale. <i>BMC Infectious Diseases</i> , 2011 , 11, 37	4	131
198	Patterns of dominant flows in the world trade web. <i>Journal of Economic Interaction and Coordination</i> , 2007 , 2, 111-124	1.1	126
197	Predictability and epidemic pathways in global outbreaks of infectious diseases: the SARS case study. <i>BMC Medicine</i> , 2007 , 5, 34	11.4	124
196	Measurability of the epidemic reproduction number in data-driven contact networks. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2018 , 115, 12680-12685	11.5	124
195	Controlling contagion processes in activity driven networks. <i>Physical Review Letters</i> , 2014 , 112, 118702	7.4	122
194	K-core decomposition of Internet graphs: hierarchies, self-similarity and measurement biases. <i>Networks and Heterogeneous Media</i> , 2008 , 3, 371-393	1.6	122
193	Inferring the structure of social contacts from demographic data in the analysis of infectious diseases spread. <i>PLoS Computational Biology</i> , 2012 , 8, e1002673	5	121
192	Renormalization scheme for self-organized criticality in sandpile models. <i>Physical Review Letters</i> , 1994 , 72, 1690-1693	7.4	118
191	Dislocation jamming and andrade creep. <i>Physical Review Letters</i> , 2002 , 89, 165501	7.4	113
190	Results from the centers for disease control and prevention's predict the 2013-2014 Influenza Season Challenge. <i>BMC Infectious Diseases</i> , 2016 , 16, 357	4	109
189	The RAPIDD ebola forecasting challenge: Synthesis and lessons learnt. <i>Epidemics</i> , 2018 , 22, 13-21	5.1	106
188	The fixed-scale transformation approach to fractal growth. <i>Reviews of Modern Physics</i> , 1995 , 67, 545-604	40.5	105
187	Web-based participatory surveillance of infectious diseases: the Influenzanet participatory surveillance experience. <i>Clinical Microbiology and Infection</i> , 2014 , 20, 17-21	9.5	104
186	Algorithmic detection of semantic similarity 2005 ,		104

185	Studying the emerging global brain: Analyzing and visualizing the impact of co-authorship teams. <i>Complexity</i> , 2005 , 10, 57-67	1.6	100
184	A multi-source dataset of urban life in the city of Milan and the Province of Trentino. <i>Scientific Data</i> , 2015 , 2, 150055	8.2	97
183	Epidemic Spreading in Complex Networks with Degree Correlations. <i>Lecture Notes in Physics</i> , 2003 , 127-147	1.4	97
182	Enhancing disease surveillance with novel data streams: challenges and opportunities. <i>EPJ Data Science</i> , 2015 , 4,	3.4	96
181	The effects of spatial constraints on the evolution of weighted complex networks. <i>Journal of Statistical Mechanics: Theory and Experiment</i> , 2005 , 2005, P05003	1.9	96
180	Modelling COVID-19. <i>Nature Reviews Physics</i> , 2020 , 1-3	23.6	91
179	Order Parameter and Scaling Fields in Self-Organized Criticality. <i>Physical Review Letters</i> , 1997 , 78, 4793-4796	4.7	91
178	The modeling of global epidemics: stochastic dynamics and predictability. <i>Bulletin of Mathematical Biology</i> , 2006 , 68, 1893-921	2.1	89
177	Efficiency and reliability of epidemic data dissemination in complex networks. <i>Physical Review E</i> , 2004 , 69, 055101	2.4	89
176	Avalanches in breakdown and fracture processes. <i>Physical Review E</i> , 1999 , 59, 5049-57	2.4	89
175	The effect of travel restrictions on the spread of the 2019 novel coronavirus (2019-nCoV) outbreak 2020 ,		87
174	Computational social science: Obstacles and opportunities. <i>Science</i> , 2020 , 369, 1060-1062	33.3	81
173	Universality in sandpiles. <i>Physical Review E</i> , 1999 , 59, R12-R15	2.4	77
172	Renormalization approach to the self-organized critical behavior of sandpile models. <i>Physical Review E</i> , 1995 , 51, 1711-1724	2.4	76
171	Links that speak: the global language network and its association with global fame. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2014 , 111, E5616-22	11.5	72
170	Online social networks and offline protest. <i>EPJ Data Science</i> , 2015 , 4,	3.4	71
169	Vulnerability of weighted networks. <i>Journal of Statistical Mechanics: Theory and Experiment</i> , 2006 , 2006, P04006-P04006	1.9	69
168	Topical interests and the mitigation of search engine bias. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2006 , 103, 12684-9	11.5	69

167	Inferring high-resolution human mixing patterns for disease modeling. <i>Nature Communications</i> , 2021 , 12, 323	17.4	69
166	Critical behavior of a one-dimensional fixed-energy stochastic sandpile. <i>Physical Review E</i> , 2001 , 64, 056104	10.4	65
165	Results from the second year of a collaborative effort to forecast influenza seasons in the United States. <i>Epidemics</i> , 2018 , 24, 26-33	5.1	63
164	WiFi networks and malware epidemiology. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2009 , 106, 1318-23	11.5	63
163	Modeling the impact of social distancing, testing, contact tracing and household quarantine on second-wave scenarios of the COVID-19 epidemic 2020 ,		63
162	Topology and correlations in structured scale-free networks. <i>Physical Review E</i> , 2003 , 67, 046111	2.4	61
161	Exploring networks with traceroute-like probes: Theory and simulations. <i>Theoretical Computer Science</i> , 2006 , 355, 6-24	1.1	60
160	Field theory of absorbing phase transitions with a nondiffusive conserved field. <i>Physical Review E</i> , 2000 , 62, R5875-8	2.4	58
159	Opinion: Mathematical models: a key tool for outbreak response. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2014 , 111, 18095-6	11.5	56
158	Structure of cycles and local ordering in complex networks. <i>European Physical Journal B</i> , 2004 , 38, 183-186	6	56
157	Characterization and modeling of protein-protein interaction networks. <i>Physica A: Statistical Mechanics and Its Applications</i> , 2005 , 352, 1-27	3.3	56
156	The dynamics of information-driven coordination phenomena: A transfer entropy analysis. <i>Science Advances</i> , 2016 , 2, e1501158	14.3	54
155	Infectivity, susceptibility, and risk factors associated with SARS-CoV-2 transmission under intensive contact tracing in Hunan, China. <i>Nature Communications</i> , 2021 , 12, 1533	17.4	53
154	Collaborative efforts to forecast seasonal influenza in the United States, 2015-2016. <i>Scientific Reports</i> , 2019 , 9, 683	4.9	51
153	Invasion threshold in structured populations with recurrent mobility patterns. <i>Journal of Theoretical Biology</i> , 2012 , 293, 87-100	2.3	50
152	Modeling of Future COVID-19 Cases, Hospitalizations, and Deaths, by Vaccination Rates and Nonpharmaceutical Intervention Scenarios - United States, April-September 2021. <i>Morbidity and Mortality Weekly Report</i> , 2021 , 70, 719-724	31.7	50
151	Renormalization group approach to the critical behavior of the forest-fire model. <i>Physical Review Letters</i> , 1995 , 75, 465-468	7.4	49
150	Complexity in dislocation dynamics: experiments. <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2001 , 309-310, 360-364	5.3	48

149	Resilience management during large-scale epidemic outbreaks. <i>Scientific Reports</i> , 2018 , 8, 1859	4.9	46
148	Algorithmic Computation and Approximation of Semantic Similarity. <i>World Wide Web</i> , 2006 , 9, 431-456	2.9	45
147	An early warning approach to monitor COVID-19 activity with multiple digital traces in near real time. <i>Science Advances</i> , 2021 , 7,	14.3	44
146	Epidemic modeling in complex realities. <i>Comptes Rendus - Biologies</i> , 2007 , 330, 364-74	1.4	42
145	Containing Ebola at the Source with Ring Vaccination. <i>PLoS Neglected Tropical Diseases</i> , 2016 , 10, e0005093	4.8	42
144	Simulations for designing and interpreting intervention trials in infectious diseases. <i>BMC Medicine</i> , 2017 , 15, 223	11.4	41
143	Beating the news using social media: the case study of American Idol. <i>EPJ Data Science</i> , 2012 , 1,	3.4	41
142	Epidemics and immunization in scale-free networks 2004 , 111-130		41
141	Spatiotemporal invasion dynamics of SARS-CoV-2 lineage B.1.1.7 emergence. <i>Science</i> , 2021 , 373, 889-895	33.3	41
140	Ranking web sites with real user traffic 2008 ,		40
139	Complexity in dislocation dynamics: model. <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2001 , 309-310, 324-327	5.3	38
138	Decoding the structure of the WWW. <i>ACM Transactions on the Web</i> , 2007 , 1, 10	3.2	36
137	Comparative cost-effectiveness of SARS-CoV-2 testing strategies in the USA: a modelling study. <i>Lancet Public Health</i> , 2021 , 6, e184-e191	22.4	35
136	Host mobility drives pathogen competition in spatially structured populations. <i>PLoS Computational Biology</i> , 2013 , 9, e1003169	5	34
135	Forecasting Seasonal Influenza Fusing Digital Indicators and a Mechanistic Disease Model 2017 ,		33
134	The workshop on internet topology (wit) report. <i>Computer Communication Review</i> , 2007 , 37, 69-73	1.4	33
133	Ebola: mobility data. <i>Science</i> , 2014 , 346, 433	33.3	31
132	The representativeness of a European multi-center network for influenza-like-illness participatory surveillance. <i>BMC Public Health</i> , 2014 , 14, 984	4.1	31

131	Citation Networks. <i>Understanding Complex Systems</i> , 2012 , 233-257	0.4	31
130	Estimating the effect of social inequalities on the mitigation of COVID-19 across communities in Santiago de Chile. <i>Nature Communications</i> , 2021 , 12, 2429	17.4	31
129	The future of influenza forecasts. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2019 , 116, 2802-2804	11.5	30
128	Universality classes in directed sandpile models. <i>Journal of Physics A</i> , 2000 , 33, L33-L39		30
127	Characterizing scientific production and consumption in physics. <i>Scientific Reports</i> , 2013 , 3, 1640	4.9	29
126	Persistence of screening and self-criticality in the scale invariant dynamics of diffusion limited aggregation. <i>Physical Review Letters</i> , 1993 , 70, 3939-3942	7.4	29
125	Combining Participatory Influenza Surveillance with Modeling and Forecasting: Three Alternative Approaches. <i>JMIR Public Health and Surveillance</i> , 2017 , 3, e83	11.4	29
124	Early Insights from Statistical and Mathematical Modeling of Key Epidemiologic Parameters of COVID-19. <i>Emerging Infectious Diseases</i> , 2020 , 26, e1-e14	10.2	29
123	Age profile of susceptibility, mixing, and social distancing shape the dynamics of the novel coronavirus disease 2019 outbreak in China 2020 ,		29
122	Integrating explanation and prediction in computational social science. <i>Nature</i> , 2021 , 595, 181-188	50.4	29
121	Mean-field behavior of the sandpile model below the upper critical dimension. <i>Physical Review E</i> , 1998 , 57, R6241-R6244	2.4	28
120	Assessing the spread of COVID-19 in Brazil: Mobility, morbidity and social vulnerability. <i>PLoS ONE</i> , 2020 , 15, e0238214	3.7	28
119	Assessing the ecotoxicologic hazards of a pandemic influenza medical response. <i>Environmental Health Perspectives</i> , 2011 , 119, 1084-90	8.4	27
118	Critical exponents in stochastic sandpile models. <i>Computer Physics Communications</i> , 1999 , 121-122, 299-302		27
117	Crosscut Analysis of Large Radial DLA: Departures from Self-Similarity and Lacunarity Effects. <i>Europhysics Letters</i> , 1995 , 32, 199-204	1.6	27
116	Local Rigidity and Self-Organized Criticality for Avalanches. <i>Europhysics Letters</i> , 1995 , 29, 111-116	1.6	27
115	Renormalization of Nonequilibrium Systems with Critical Stationary States. <i>Physical Review Letters</i> , 1996 , 77, 4560-4563	7.4	26
114	The effect of human mobility and control measures on the COVID-19 epidemic in China 2020 ,		26

113	Estimating the Cumulative Incidence of COVID-19 in the United States Using Four Complementary Approaches 2020 ,		26
112	Asymptotic theory of time-varying social networks with heterogeneous activity and tie allocation. <i>Scientific Reports</i> , 2016 , 6, 35724	4.9	25
111	Containing the accidental laboratory escape of potential pandemic influenza viruses. <i>BMC Medicine</i> , 2013 , 11, 252	11.4	25
110	Energy Constrained Sandpile Models. <i>Physical Review Letters</i> , 1998 , 80, 4217-4220	7.4	25
109	Determinants of follow-up participation in the Internet-based European influenza surveillance platform Influenzanet. <i>Journal of Medical Internet Research</i> , 2014 , 16, e78	7.6	25
108	Detecting global bridges in networks. <i>Journal of Complex Networks</i> , 2016 , 4, 319-329	1.7	24
107	Deviations from Self-Similarity in Plane DLA and the Infinite Drift Scenario. <i>Europhysics Letters</i> , 1995 , 29, 599-604	1.6	24
106	Evolving epidemiology of novel coronavirus diseases 2019 and possible interruption of local transmission outside Hubei Province in China: a descriptive and modeling study 2020 ,		24
105	Infectivity, susceptibility, and risk factors associated with SARS-CoV-2 transmission under intensive contact tracing in Hunan, China 2020 ,		23
104	Spatiotemporal dynamics of the Ebola epidemic in Guinea and implications for vaccination and disease elimination: a computational modeling analysis. <i>BMC Medicine</i> , 2016 , 14, 130	11.4	22
103	Google Flu Trends Still Appears Sick: An Evaluation of the 2013-2014 Flu Season. <i>SSRN Electronic Journal</i> , 2014 ,	1	22
102	Critical behavior and conservation in directed sandpiles. <i>Physical Review E</i> , 2000 , 62, 6195-205	2.4	22
101	Association between recruitment methods and attrition in Internet-based studies. <i>PLoS ONE</i> , 2014 , 9, e114925	3.7	22
100	Characterising two-pathogen competition in spatially structured environments. <i>Scientific Reports</i> , 2015 , 5, 7895	4.9	20
99	Statistical theory of Internet exploration. <i>Physical Review E</i> , 2005 , 71, 036135	2.4	20
98	Parallel diffusion-limited aggregation. <i>Physical Review E</i> , 1995 , 52, 5602-5609	2.4	20
97	Fractal and topological properties of directed fractures. <i>Physical Review E</i> , 1994 , 49, 2673-2679	2.4	20
96	Evaluation of individual and ensemble probabilistic forecasts of COVID-19 mortality in the US		20

95	The impact of relaxing interventions on human contact patterns and SARS-CoV-2 transmission in China. <i>Science Advances</i> , 2021 , 7,	14.3	20
94	Detecting critical slowing down in high-dimensional epidemiological systems. <i>PLoS Computational Biology</i> , 2020 , 16, e1007679	5	19
93	Short-period attractors and non-ergodic behavior in the deterministic fixed-energy sandpile model. <i>Europhysics Letters</i> , 2003 , 63, 512-518	1.6	19
92	Corrections to scaling in the forest-fire model. <i>Physical Review E</i> , 2000 , 61, 4854-9	2.4	19
91	The effect of eviction moratoria on the transmission of SARS-CoV-2. <i>Nature Communications</i> , 2021 , 12, 2274	17.4	19
90	Analysis of damage clusters in fracture processes. <i>Physica A: Statistical Mechanics and Its Applications</i> , 1999 , 270, 57-62	3.3	18
89	Dynamically driven renormalization group. <i>Journal of Statistical Physics</i> , 1997 , 88, 47-79	1.5	17
88	Real-Time Forecasting of the COVID-19 Outbreak in Chinese Provinces: Machine Learning Approach Using Novel Digital Data and Estimates From Mechanistic Models. <i>Journal of Medical Internet Research</i> , 2020 , 22, e20285	7.6	17
87	Ensemble forecast modeling for the design of COVID-19 vaccine efficacy trials. <i>Vaccine</i> , 2020 , 38, 7213-7216	4.1	17
86	Phase transitions in information spreading on structured populations. <i>Nature Physics</i> , 2020 , 16, 590-596	16.2	16
85	Twitter: big data opportunities--response. <i>Science</i> , 2014 , 345, 148-9	33.3	16
84	On the lack of typical behavior in the global Web traffic network 2005 ,		16
83	Modeling the critical care demand and antibiotics resources needed during the Fall 2009 wave of influenza A(H1N1) pandemic. <i>PLOS Currents</i> , 2009 , 1, RRN1133		16
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