Antonio Scala

List of Publications by Year
in descending order

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122	11,754	66234	30010
papers	citations	42 h-index	103 g-index

124	124	124	9790
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Classes of small-world networks. Proceedings of the National Academy of Sciences of the United States of America, 2000, 97, 11149-11152.	3.3	2,455
2	The spreading of misinformation online. Proceedings of the National Academy of Sciences of the United States of America, 2016, 113, 554-559.	3.3	1,318
3	The COVID-19 social media infodemic. Scientific Reports, 2020, 10, 16598.	1.6	1,167
4	Economic and social consequences of human mobility restrictions under COVID-19. Proceedings of the National Academy of Sciences of the United States of America, 2020, 117, 15530-15535.	3.3	707
5	Science vs Conspiracy: Collective Narratives in the Age of Misinformation. PLoS ONE, 2015, 10, e0118093.	1.1	356
6	Configurational entropy and diffusivity of supercooled water. Nature, 2000, 406, 166-169.	13.7	323
7	Echo Chambers: Emotional Contagion and Group Polarization on Facebook. Scientific Reports, 2016, 6, 37825.	1.6	291
8	Polarization of the vaccination debate on Facebook. Vaccine, 2018, 36, 3606-3612.	1.7	256
9	Saddles in the Energy Landscape Probed by Supercooled Liquids. Physical Review Letters, 2000, 85, 5356-5359.	2.9	211
10	Liquid-State Anomalies and the Stell-Hemmer Core-Softened Potential. Physical Review Letters, 1998, 81, 4895-4898.	2.9	188
11	Debunking in a world of tribes. PLoS ONE, 2017, 12, e0181821.	1.1	185
12	Echo Chambers on Facebook. SSRN Electronic Journal, 0, , .	0.4	179
13	Anatomy of news consumption on Facebook. Proceedings of the National Academy of Sciences of the United States of America, 2017, 114, 3035-3039.	3.3	175
14	Polarization and Fake News. ACM Transactions on the Web, 2019, 13, 1-22.	2.0	166
15	Assortativity decreases the robustness of interdependent networks. Physical Review E, 2012, 86, 066103.	0.8	163
16	Emotional Dynamics in the Age of Misinformation. PLoS ONE, 2015, 10, e0138740.	1.1	148
17	Mapping social dynamics on Facebook: The Brexit debate. Social Networks, 2017, 50, 6-16.	1.3	144
18	Users Polarization on Facebook and Youtube. PLoS ONE, 2016, 11, e0159641.	1.1	139

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19	Opinion dynamics on interacting networks: media competition and social influence. Scientific Reports, 2014, 4, 4938.	1.6	137
20	A Network Analysis of Countriesâ€™ Export Flows: Firm Grounds for the Building Blocks of the Economy. PLoS ONE, 2012, 7, e47278.	1.1	132
21	Abruptness of Cascade Failures in Power Grids. Scientific Reports, 2014, 4, 3694.	1.6	126
22	Modeling confirmation bias and polarization. Scientific Reports, 2017, 7, 40391.	1.6	126
23	Models for a liquidâ€“liquid phase transition. Physica A: Statistical Mechanics and Its Applications, 2002, 304, 23-42.	1.2	102
24	Event-driven Brownian dynamics for hard spheres. Journal of Chemical Physics, 2007, 126, 134109.	1.2	98
25	Human mobility in response to COVID-19 in France, Italy and UK. Scientific Reports, 2021, 11, 13141.	1.6	94
26	Local structural heterogeneities in liquid water under pressure. Chemical Physics Letters, 1998, 294, 9-12.	1.2	87
27	Waterlike anomalies for core-softened models of fluids: Two-dimensional systems. Physical Review E, 2001, 63, 041202.	0.8	87
28	The puzzling behavior of water at very low temperature. Physical Chemistry Chemical Physics, 2000, 2, 1551-1558.	1.3	81
29	Instantaneous Normal Mode Analysis of Supercooled Water. Physical Review Letters, 2000, 84, 4605-4608.	2.9	80
30	Small-world networks and the conformation space of a short lattice polymer chain. Europhysics Letters, 2001, 55, 594-600.	0.7	80
31	Thermodynamic and structural aspects of the potential energy surface of simulated water. Physical Review E, 2001, 63, 041201.	0.8	78
32	Trend of Narratives in the Age of Misinformation. PLoS ONE, 2015, 10, e0134641.	1.1	75
33	Waterlike anomalies for core-softened models of fluids: One dimension. Physical Review E, 1999, 60, 6714-6721.	0.8	74
34	Robustness and assortativity for diffusion-like processes in scale-free networks. Europhysics Letters, 2012, 97, 68006.	0.7	71
35	Self-Healing Networks: Redundancy and Structure. PLoS ONE, 2014, 9, e87986.	1.1	69
36	Homophily and polarization in the age of misinformation. European Physical Journal: Special Topics, 2016, 225, 2047-2059.	1.2	68

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37	Topological Taxonomy of Water Distribution Networks. Water (Switzerland), 2018, 10, 444.	1.2	62
38	Free energy surface of supercooled water. Physical Review E, 2000, 62, 8016-8020.	0.8	58
39	Title is missing!. Journal of Statistical Physics, 2000, 100, 97-106.	0.5	57
40	Time, space and social interactions: exit mechanisms for the Covid-19 epidemics. Scientific Reports, 2020, 10, 13764.	1.6	57
41	Infodemics: A new challenge for public health. Cell, 2021, 184, 6010-6014.	13.5	56
42	Quasisaddles as relevant points of the potential energy surface in the dynamics of supercooled liquids. Journal of Chemical Physics, 2002, 116, 10297-10306.	1.2	50
43	Viral Misinformation. , 2015, , .		49
44	Topological Placement of Quality Sensors in Water-Distribution Networks without the Recourse to Hydraulic Modeling. Journal of Water Resources Planning and Management - ASCE, 2020, 146, .	1.3	49
45	Data-driven modeling of solar-powered urban microgrids. Science Advances, 2016, 2, e1500700.	4.7	48
46	Selective exposure shapes the Facebook news diet. PLoS ONE, 2020, 15, e0229129.	1.1	43
47	Quasicrystals in a monodisperse system. Physical Review E, 1999, 60, 2664-2669.	0.8	42
48	Recursive patterns in online echo chambers. Scientific Reports, 2019, 9, 20118.	1.6	41
49	The puzzling statistical physics of liquid water. Physica A: Statistical Mechanics and Its Applications, 1998, 257, 213-232.	1.2	40
50	The puzzle of liquid water: a very complex fluid. Physica D: Nonlinear Phenomena, 1999, 133, 453-462.	1.3	40
51	Islanding the power grid on the transmission level: less connections for more security. Scientific Reports, 2016, 6, 34797.	1.6	40
52	The economy of attention in the age of (mis)information. Journal of Trust Management, 2014, 1, .	0.4	37
53	Sparse and distributed Analytic Hierarchy Process. Automatica, 2017, 85, 211-220.	3.0	36
54	Critical clusters and efficient dynamics for frustrated spin models. Physical Review Letters, 1994, 72, 1541-1544.	2.9	34

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55	Dynamics of supercooled water in configuration space. Physical Review E, 2001, 64, 036102.	0.8	34
56	Social Determinants of Content Selection in the Age of (Mis)Information. Lecture Notes in Computer Science, 2014, , 259-268.	1.0	30
57	Green Power Grids: How Energy from Renewable Sources Affects Networks and Markets. PLoS ONE, 2015, 10, e0135312.	1.1	29
58	Cascades in interdependent flow networks. Physica D: Nonlinear Phenomena, 2016, 323-324, 35-39.	1.3	27
59	Percolation and cluster Monte Carlo dynamics for spin models. Physical Review E, 1996, 54, 175-189.	0.8	25
60	A network approach to orthodontic diagnosis. Orthodontics and Craniofacial Research, 2011, 14, 189-197.	1.2	25
61	A Complex Network Approach for the Estimation of the Energy Demand of Electric Mobility. Scientific Reports, 2018, 8, 268.	1.6	24
62	Unsolved mysteries of water in its liquid and glassy phases. Journal of Physics Condensed Matter, 2000, 12, A403-A412.	0.7	23
63	Statistical physics and liquid water: â€œWhat mattersâ€• Physica A: Statistical Mechanics and Its Applications, 2002, 306, 230-242.	1.2	23
64	Application of Statistical Physics to Understand Static and Dynamic Anomalies in Liquid Water. Journal of Statistical Physics, 2003, 110, 1039-1054.	0.5	23
65	Event-driven Langevin simulations of hard spheres. Physical Review E, 2012, 86, 026709.	0.8	23
66	Recent results on the connection between thermodynamics and dynamics in supercooled water. Biophysical Chemistry, 2003, 105, 573-583.	1.5	22
67	Comment on â€œQuasisaddles as relevant points of the potential energy surface in the dynamics of supercooled liquidsâ€•[J. Chem. Phys. 116, 10297 (2002)]. Journal of Chemical Physics, 2003, 118, 5263-5264.	1.2	20
68	Knowing power grids and understanding complexity science. International Journal of Critical Infrastructures, 2015, 11, 4.	0.1	20
69	Saddle index properties, singular topology, and its relation to thermodynamic singularities for aï•4mean-field model. Physical Review E, 2004, 70, 036125.	0.8	19
70	Cascade failures and distributed generation in power grids. International Journal of Critical Infrastructures, 2015, 11, 27.	0.1	18
71	Crossover between Spatially Confined Precipitation and Periodic Pattern Formation in Reaction Diffusion Systems. Physical Review Letters, 1996, 77, 2834-2837.	2.9	17
72	Distributed Generation and Resilience in Power Grids. Lecture Notes in Computer Science, 2013, , 71-79.	1.0	15

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73	Portfolio analysis and geographical allocation of renewable sources: A stochastic approach. Energy Policy, 2019, 125, 154-159.	4.2	14
74	Using Networks To Understand Medical Data: The Case of Class III Malocclusions. PLoS ONE, 2012, 7, e44521.	1.1	12
75	A Suite of Distributed Methodologies to Solve the Sparse Analytic Hierarchy Process Problem. , 2018, , .		12
76	The present state of Lake Bracciano: hope and despair. Rendiconti Lincei, 2019, 30, 83-91.	1.0	12
77	The equal load-sharing model of cascade failures in power grids. Physica A: Statistical Mechanics and Its Applications, 2016, 462, 737-742.	1.2	11
78	Opinion-based optimal group formation. Omega, 2019, 89, 164-176.	3.6	11
79	Health-care inequalities in Italy: challenges for the Government. Lancet Public Health, The, 2019, 4, e605.	4.7	10
80	Thermodynamically important contacts in folding of model proteins. Physical Review E, 2001, 63, 032901.	0.8	9
81	Molecular correlation functions for uniaxial ellipsoids in the isotropic state. Journal of Chemical Physics, 2006, 124, 104509.	1.2	9
82	Brownian dynamics simulation of polydisperse hard spheres. European Physical Journal: Special Topics, 2013, 216, 21-29.	1.2	9
83	Kinetics of spatially confined precipitation and periodic pattern formation. Physica A: Statistical Mechanics and Its Applications, 1997, 239, 390-403.	1.2	8
84	A stroll in the energy landscape. The Philosophical Magazine: Physics of Condensed Matter B, Statistical Mechanics, Electronic, Optical and Magnetic Properties, 2002, 82, 151-161.	0.6	8
85	Water and its energy landscape. European Physical Journal E, 2002, 9, 233-237.	0.7	8
86	Fluctuation-Dissipation Relations and Energy Landscape in an Out-of-Equilibrium Strong-Glass-Forming Liquid. Physical Review Letters, 2003, 90, 115503.	2.9	8
87	Complex networks for data-driven medicine: the case of Class III dentoskeletal disharmony. New Journal of Physics, 2014, 16, 115017.	1.2	8
88	How News May Affect Marketsâ€™ Complex Structure: The Case of Cambridge Analytica. Entropy, 2018, 20, 765.	1.1	8
89	Sparse analytic hierarchy process: an experimental analysis. Soft Computing, 2019, 23, 2887-2898.	2.1	8
90	The faster the better: On the shortest paths role for near real-time decision making of water utilities. Reliability Engineering and System Safety, 2021, 212, 107589.	5.1	8

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91	Reply to â€œComment on â€˜Quasisaddles as relevant points of the potential energy surface in the dynamics of supercooled liquidsâ€™â€Šâ€•[J. Chem. Phys. 118, 5263 (2002)]. Journal of Chemical Physics, 2003, 118, 5265-5266.	1.2	7
92	A Holistic Approach for Collaborative Workload Execution in Volunteer Clouds. ACM Transactions on Modeling and Computer Simulation, 2018, 28, 1-27.	0.6	7
93	PopRank: Ranking pagesâ€™ impact and usersâ€™ engagement on Facebook. PLoS ONE, 2019, 14, e0211038.	1.1	7
94	The mathematics of multiple lockdowns. Scientific Reports, 2021, 11, 8078.	1.6	7
95	Generalized percolation models for frustrated spin systems. Nuovo Cimento Della Societa Italiana Di Fisica D - Condensed Matter, Atomic, Molecular and Chemical Physics, Biophysics, 1994, 16, 1259-1264.	0.4	6
96	Mitigating cascades in sandpile models: an immunization strategy for systemic risk?. European Physical Journal: Special Topics, 2016, 225, 2017-2023.	1.2	6
97	A Workload-Based Approach to Partition the Volunteer Cloud. , 2015, , .		5
98	Enhancing network resilience via self-healing. , 2016, , .		5
99	Competitorsâ€™ communities and taxonomy of products according to export fluxes. European Physical Journal: Special Topics, 2012, 212, 115-120.	1.2	4
100	An agent based approach for the development of EV fleet Charging Strategies in Smart Cities. , 2014, , .		4
101	A Data-driven approach to renewable energy source planning at regional level. Energy Sources, Part B: Economics, Planning and Policy, 2021, 16, 1064-1075.	1.8	3
102	Power Grids, Smart Grids and Complex Networks. NATO Science for Peace and Security Series C: Environmental Security, 2014, , 97-110.	0.1	3
103	A stroll in the energy landscape. , 0, .		3
104	Dynamical intervention planning against COVID-19-like epidemics. PLoS ONE, 2022, 17, e0269830.	1.1	3
105	Off-equilibrium dynamics in the energy landscape of a simple model glass. The Philosophical Magazine: Physics of Condensed Matter B, Statistical Mechanics, Electronic, Optical and Magnetic Properties, 2002, 82, 163-169.	0.6	2
106	Off-equilibrium dynamics in the energy landscape of a simple model glass. The Philosophical Magazine: Physics of Condensed Matter B, Statistical Mechanics, Electronic, Optical and Magnetic Properties, 2002, 82, 163-169.	0.6	2
107	POPULATION DYNAMICS ON COMPLEX FOOD WEBS. International Journal of Modeling, Simulation, and Scientific Computing, 2011, 14, 635-647.	0.9	2
108	A Mean Field Model of Coupled Cascades in Flow Networks. Lecture Notes in Computer Science, 2016, , 259-263.	1.0	2

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109	Complexity Science for Sustainable Smart Water Grids. Communications in Computer and Information Science, 2017, , 26-41.	0.4	2
110	Measuring social response to different journalistic techniques on Facebook. Humanities and Social Sciences Communications, 2020, 7, .	1.3	2
111	Directional depletion interactions in shaped particles. Condensed Matter Physics, 2014, 17, 33007.	0.3	1
112	Adopting the cloud to manage the electricity grid. , 2016, , .		1
113	Complex systems applications to electric mobility and regional intermittent sources planning. , 2021, , 641-664.		1
114	Opinion dynamics on interacting networks: media competition and social influence. , 0, .		1
115	Self-Healing Protocols for Infrastructural Networks. Lecture Notes in Computer Science, 2016, , 308-313.	1.0	0
116	Complex, inter-networked economic and social systems. European Physical Journal: Special Topics, 2016, 225, 1875-1877.	1.2	0
117	Availability Study of the Italian Electricity SCADA System in the Cloud. Lecture Notes in Computer Science, 2017, , 201-212.	1.0	0
118	Complex Networks and Infrastructural Grids. , 2018, , 341-396.		0
119	The Robustness of Assortativity. Lecture Notes in Computer Science, 2013, , 223-226.	1.0	0
120	The Complexity Science Approach vs. the Simulative Approach. , 2013, , 139-152.		0
121	Everyday the Same Picture: Popularity and Content Diversity. Springer Proceedings in Complexity, 2017, , 225-236.	0.2	0
122	Access Time Eccentricity and Diameter. Lecture Notes in Control and Information Sciences, 2017, , 215-226.	0.6	0