Stefano Battiston

List of Publications by Year
in descending order

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115 papers	7,416 citations	87888 38 h-index	69250 77 g-index
123 all docs	123 docs citations	123 times ranked	3365 citing authors

#	Article	IF	Citations
1	DebtRank: Too Central to Fail? Financial Networks, the FED and Systemic Risk. Scientific Reports, 2012, 2, 541.	3.3	582
2	The Network of Global Corporate Control. PLoS ONE, 2011, 6, e25995.	2.5	544
3	Liaisons dangereuses: Increasing connectivity, risk sharing, and systemic risk. Journal of Economic Dynamics and Control, 2012, 36, 1121-1141.	1.6	488
4	A climate stress-test of the financial system. Nature Climate Change, 2017, 7, 283-288.	18.8	488
5	Complexity theory and financial regulation. Science, 2016, 351, 818-819.	12.6	361
6	A model of a trust-based recommendation system on a social network. Autonomous Agents and Multi-Agent Systems, 2008, 16, 57-74.	2.1	303
7	Credit chains and bankruptcy propagation in production networks. Journal of Economic Dynamics and Control, 2007, 31, 2061-2084.	1.6	265
8	The financial accelerator in an evolving credit network. Journal of Economic Dynamics and Control, 2010, 34, 1627-1650.	1.6	234
9	Default cascades: When does risk diversification increase stability?. Journal of Financial Stability, 2012, 8, 138-149.	5.2	214
10	Pathways towards instability in financial networks. Nature Communications, 2017, 8, 14416.	12.8	172
11	Web Search Queries Can Predict Stock Market Volumes. PLoS ONE, 2012, 7, e40014.	2.5	170
12	The scale-free topology of market investments. Physica A: Statistical Mechanics and Its Applications, 2005, 350, 491-499.	2.6	169
13	Systemic risk in a unifying framework for cascading processes on networks. European Physical Journal B, 2009, 71, 441-460.	1.5	148
14	Statistical properties of corporate board and director networks. European Physical Journal B, 2004, 38, 345-352.	1.5	143
15	The price of complexity in financial networks. Proceedings of the National Academy of Sciences of the United States of America, 2016, 113, 10031-10036.	7.1	141
16	Default Cascades in Complex Networks: Topology and Systemic Risk. Scientific Reports, 2013, 3, 2759.	3.3	126
17	Climate risks and financial stability. Journal of Financial Stability, 2021, 54, 100867.	5.2	124
18	Backbone of complex networks of corporations: The flow of control. Physical Review E, 2009, 80, 036104.	2.1	105

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19	DebtRank: A Microscopic Foundation for Shock Propagation. PLoS ONE, 2015, 10, e0130406.	2.5	97
20	Climate risk and financial stability in the network of banks and investment funds. Journal of Financial Stability, 2021, 54, 100870.	5.2	92
21	The physics of financial networks. Nature Reviews Physics, 2021, 3, 490-507.	26.6	89
22	A Financial Macro-Network Approach to Climate Policy Evaluation. Ecological Economics, 2018, 149, 239-253.	5.7	88
23	The efficiency and stability of R&D networks. Games and Economic Behavior, 2012, 75, 694-713.	0.8	86
24	Interconnectedness as a source of uncertainty in systemic risk. Journal of Financial Stability, 2018, 35, 93-106.	5.2	86
25	Vulnerable yet relevant: the two dimensions of climate-related financial disclosure. Climatic Change, 2017, 145, 495-507.	3.6	81
26	Financial networks and stress testing: Challenges and new research avenues for systemic risk analysis and financial stability implications. Journal of Financial Stability, 2018, 35, 6-16.	5.2	76
27	Bootstrapping Topological Properties and Systemic Risk of Complex Networks Using the Fitness Model. Journal of Statistical Physics, 2013, 151, 720-734.	1.2	73
28	Evolution of Controllability in Interbank Networks. Scientific Reports, 2013, 3, 1626.	3.3	68
29	Accounting for finance is key for climate mitigation pathways. Science, 2021, 372, 918-920.	12.6	68
30	Decision making dynamics in corporate boards. Physica A: Statistical Mechanics and Its Applications, 2003, 322, 567-582.	2.6	67
31	Integration of Multiple-whisker Inputs in Rat Somatosensory Cortex. Cerebral Cortex, 2001, 11, 164-170.	2.9	64
32	Leveraging the network: A stress-test framework based on DebtRank. Statistics and Risk Modeling, 2016, 33, 117-138.	1.0	61
33	Personalised and dynamic trust in social networks. , 2009, , .		59
34	Recombinant knowledge and the evolution of innovation networks. Journal of Economic Behavior and Organization, 2011, 79, 145-164.	2.0	56
35	Network valuation in financial systems. Mathematical Finance, 2020, 30, 1181-1204.	1.8	55
36	From production networks to geographical economics. Journal of Economic Behavior and Organization, 2007, 64, 448-469.	2.0	52

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37	The Community Structure of the Global Corporate Network. PLoS ONE, 2014, 9, e104655.	2.5	52
38	The power to control. Nature Physics, 2013, 9, 126-128.	16.7	47
39	Climate Transition Risk and Development Finance: A Carbon Risk Assessment of China's Overseas Energy Portfolios. China and World Economy, 2018, 26, 116-142.	2.1	44
40	Examination of the spatial and temporal distribution of sensory cortical activity using a 100-electrode array. Journal of Neuroscience Methods, 1999, 90, 57-66.	2.5	41
41	Emergence of Complexity in Financial Networks. Lecture Notes in Physics, 0, , 399-423.	0.7	40
42	Complex derivatives. Nature Physics, 2013, 9, 123-125.	16.7	39
43	Credit Default Swaps networks and systemic risk. Scientific Reports, 2014, 4, 6822.	3.3	37
44	THE NETWORK OF INTER-REGIONAL DIRECT INVESTMENT STOCKS ACROSS EUROPE. International Journal of Modeling, Simulation, and Scientific Computing, 2007, 10, 29-51.	1.4	36
45	The Structure of Financial Networks. , 2010, , 131-163.		34
46	Network Valuation in Financial Systems. SSRN Electronic Journal, 0, , .	0.4	33
47	How does risk flow in the credit default swap market?. Journal of Financial Stability, 2018, 35, 53-74.	5.2	33
48	Moving recommender systems from on-line commerce to retail stores. Information Systems and E-Business Management, 2012, 10, 367-393.	3.7	32
49	Systemic risk from investment similarities. PLoS ONE, 2019, 14, e0217141.	2.5	32
50	On algebraic graph theory and the dynamics of innovation networks. Networks and Heterogeneous Media, 2008, 3, 201-219.	1.1	29
51	Sentiment leaning of influential communities in social networks. Computational Social Networks, 2015, 2, .	2.1	27
52	Inner structure of capital control networks. Physica A: Statistical Mechanics and Its Applications, 2004, 338, 107-112.	2.6	26
53	Portfolio diversification and systemic risk in interbank networks. Journal of Economic Dynamics and Control, 2017, 82, 96-124.	1.6	26
54	Price and network dynamics in the European carbon market. Journal of Economic Behavior and Organization, 2018, 153, 103-122.	2.0	25

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55	Default Ambiguity: Credit Default Swaps Create New Systemic Risks in Financial Networks. Management Science, 2020, 66, 1981-1998.	4.1	25
56	DECISION SPREAD IN THE CORPORATE BOARD NETWORK. International Journal of Modeling, Simulation, and Scientific Computing, 2003, 06, 631-644.	1.4	22
57	Geography versus topology in the European Ownership Network. New Journal of Physics, 2011, 13, 063021.	2.9	22
58	Credit Default Swaps Drawup Networks: Too Interconnected to Be Stable?. PLoS ONE, 2013, 8, e61815.	2.5	22
59	Market procyclicality and systemic risk. Quantitative Finance, 2016, 16, 1219-1235.	1.7	22
60	Systemic risk in a network fragility model analyzed with probability density evolution of persistent random walks. Networks and Heterogeneous Media, 2008, 3, 185-200.	1.1	20
61	An economic and financial exploratory. European Physical Journal: Special Topics, 2012, 214, 361-400.	2.6	18
62	Leveraging the Network: A Stress-Test Framework Based on DebtRank. SSRN Electronic Journal, 0, , .	0.4	16
63	Market Procyclicality and Systemic Risk. SSRN Electronic Journal, 2012, , .	0.4	13
64	The Architecture of Power: Patterns of Disruption and Stability in the Global Ownership Network. SSRN Electronic Journal, 2019, , .	0.4	13
65	Modeling Evolving Innovation Networks. Understanding Complex Systems, 2009, , 187-267.	0.6	13
66	Interconnected banks and systemically important exposures. Journal of Economic Dynamics and Control, 2021, 133, 104266.	1.6	13
67	DebtRank and the Network of Leverage. Journal of Alternative Investments, 2016, 18, 68-81.	0.5	12
68	Statistical independence and neural computation in the leech ganglion. Biological Cybernetics, 2000, 83, 119-130.	1.3	11
69	Clearing Payments in Financial Networks with Credit Default Swaps [Extended Abstract]. , 2016, , .		11
70	Financial fragility and distress propagation in a network of regions. Journal of Economic Dynamics and Control, 2016, 62, 56-75.	1.6	11
71	A Climate Risk Assessment of Sovereign Bonds' Portfolio. SSRN Electronic Journal, 0, , .	0.4	11
72	Climate Risk and Financial Stability in the Network of Banks and Investment Funds. SSRN Electronic Journal, 0, , .	0.4	11

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73	CLIMAFIN Handbook: Pricing Forward-Looking Climate Risks Under Uncertainty. SSRN Electronic Journal, 0, , .	0.4	11
74	A Climate Risk Assessment of Sovereign Bondsâ€™ Portfolio. SSRN Electronic Journal, 0, , .	0.4	10
75	Rethinking Financial Contagion. SSRN Electronic Journal, 0, , .	0.4	9
76	A Climate Stress-Test of the Financial System. SSRN Electronic Journal, 2016, , .	0.4	9
77	Collateral Unchained: Rehypothecation networks, concentration and systemic effects. Journal of Financial Stability, 2021, 52, 100811.	5.2	9
78	From Graph Theory to Models of Economic Networks. A Tutorial. Lecture Notes in Economics and Mathematical Systems, 2009, , 23-63.	0.3	9
79	A multiplex financial network approach to policy evaluation: the case of euro area Quantitative Easing. Applied Network Science, 2018, 3, 49.	1.5	8
80	The Financial System as a Nexus of Interconnected Networks. Understanding Complex Systems, 2016, , 195-229.	0.6	8
81	The Multiplex Network of EU Lobby Organizations. PLoS ONE, 2016, 11, e0158062.	2.5	8
82	The Price of Complexity in Financial Networks. SSRN Electronic Journal, 0, , .	0.4	7
83	Case study of Lykke exchange: architecture and outlook. Journal of Risk Finance, 2018, 19, 26-38.	5.6	7
84	Coping with Information Overload through Trust-Based Networks. Understanding Complex Systems, 2008, , 273-300.	0.6	7
85	Credit Default Swaps Drawup Networks: Too Tied to Be Stable?. SSRN Electronic Journal, 2012, , .	0.4	6
86	How Does Risk Flow in the Credit Default Swap Market?. SSRN Electronic Journal, 0, , .	0.4	6
87	On the Dependence of Investorâ€™s Probability of Default on Climate Transition Scenarios. SSRN Electronic Journal, 0, , .	0.4	6
88	Interconnectedness as a Source of Uncertainty in Systemic Risk. SSRN Electronic Journal, 2016, , .	0.4	5
89	DebtRank and the Network of Leverage. Journal of Private Equity, 2016, 20, 58-71.	0.3	5
90	Financialization and unconventional monetary policy: a financial-network analysis. Journal of Evolutionary Economics, 2020, 30, 1385-1428.	1.7	5

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91	The Community Structure of the Global Corporate Network. SSRN Electronic Journal, 0, , .	0.4	5
92	Collateral Unchained: Rehypothecation Networks, Concentration and Systemic Effects. SSRN Electronic Journal, 0, , .	0.4	4
93	Community Sentiment on Environmental Topics in Social Networks. , 2014, , .		3
94	Financial complexity: Accounting for fraudâ€"Response. Science, 2016, 352, 302-302.	12.6	3
95	Default Ambiguity: Credit Default Swaps Create New Systemic Risks in Financial Networks. SSRN Electronic Journal, 2017, , .	0.4	3
96	Portfolio diversification, differentiation and the robustness of holdings networks. Applied Network Science, 2020, 5, .	1.5	3
97	Trade Credit Networks and Systemic Risk. , 2008, , 219-239.		3
98	Profiling the EU lobby organizations in Banking and Finance. Applied Network Science, 2018, 3, 44.	1.5	2
99	Climate-Finance and Climate Transition Risk: An Assessment of China's Overseas Energy Investments Portfolio. SSRN Electronic Journal, 2018, , .	0.4	2
100	The Climate Target Gap Is Widening. Can We Close It by Including Climate Finance in SSPs?. SSRN Electronic Journal, 0, , .	0.4	2
101	The skeleton of the Shareholders Networks. , 2006, , 297-301.		2
102	Financial Fragility and Distress Propagation in a Network of Regions. SSRN Electronic Journal, 0, , .	0.4	1
103	Some reflections on inflation targeting, monetaryâ€"fiscal policy interactions, and unconventional monetary policies. European Journal of Economics and Economic Policies: Intervention, 2018, 15, 132-138.	0.2	1
104	Financial Networks. Understanding Complex Systems, 2014, , 311-321.	0.6	1
105	14. The Economics of Information and Financial Networks. , 2018, , 277-306.		1
106	Emergence and Evolution of Coalitions in Buyer-Seller Networks. Studies in Computational Intelligence, 2007, , 245-258.	0.9	1
107	Social Intelligence Networks. A Novel Framework for On-Line Social Platforms.. SSRN Electronic Journal, 0, , .	0.4	1
108	Reshaping the Financial Network: Externalities and Redistribution Effects in Central Clearing. SSRN Electronic Journal, 0, , .	0.4	1

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109	Risk, Markets, Games, and Networks. European Physical Journal B, 2009, 71, 439-440.	1.5	0
110	The Multiplex Network of EU Lobby Organizations. SSRN Electronic Journal, 2015, , .	0.4	0
111	A Financial Macro-Network Approach to Climate Policy Evaluation. SSRN Electronic Journal, 0, , .	0.4	0
112	Reducing Climate Transition Risk in Central Banksâ€™ Asset Purchasing Programs. SSRN Electronic Journal, 0, , .	0.4	0
113	A Network-Based Analysis of the European Emission Market. Springer Proceedings in Complexity, 2016, , 283-295.	0.3	0
114	Financial Networks in the Brave New World. , 2019, , .		0
115	Climate Mitigation Pathways Need To Account for the Ambivalent Role of Finance. SSRN Electronic Journal, 0, , .	0.4	0