

Stefano Allesina

List of Publications by Year in descending order

Source: <https://exaly.com/author-pdf/7330823/publications.pdf>

Version: 2024-02-01

88
papers

7,921
citations

71097

41
h-index

56717

83
g-index

103
all docs

103
docs citations

103
times ranked

7537
citing authors

#	ARTICLE	IF	CITATIONS
1	Stability criteria for complex ecosystems. <i>Nature</i> , 2012, 483, 205-208.	27.8	900
2	Parasites in food webs: the ultimate missing links. <i>Ecology Letters</i> , 2008, 11, 533-546.	6.4	716
3	Beyond pairwise mechanisms of species coexistence in complex communities. <i>Nature</i> , 2017, 546, 56-64.	27.8	544
4	Higher-order interactions stabilize dynamics in competitive network models. <i>Nature</i> , 2017, 548, 210-213.	27.8	389
5	A competitive network theory of species diversity. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2011, 108, 5638-5642.	7.1	289
6	The dimensionality of ecological networks. <i>Ecology Letters</i> , 2013, 16, 577-583.	6.4	246
7	The ghost of nestedness in ecological networks. <i>Nature Communications</i> , 2013, 4, 1391.	12.8	225
8	A General Model for Food Web Structure. <i>Science</i> , 2008, 320, 658-661.	12.6	217
9	Predicting scientific success. <i>Nature</i> , 2012, 489, 201-202.	27.8	209
10	Modularity and stability in ecological communities. <i>Nature Communications</i> , 2016, 7, 12031.	12.8	208
11	The stability-complexity relationship at age 40: a random matrix perspective. <i>Population Ecology</i> , 2015, 57, 63-75.	1.2	186
12	Network structure, predator-prey modules, and stability in large food webs. <i>Theoretical Ecology</i> , 2008, 1, 55-64.	1.0	184
13	Googling Food Webs: Can an Eigenvector Measure Species' Importance for Coextinctions?. <i>PLoS Computational Biology</i> , 2009, 5, e1000494.	3.2	167
14	The Effect of Intra- and Interspecific Competition on Coexistence in Multispecies Communities. <i>American Naturalist</i> , 2016, 188, E1-E12.	2.1	131
15	Who dominates whom in the ecosystem? Energy flow bottlenecks and cascading extinctions. <i>Journal of Theoretical Biology</i> , 2004, 230, 351-358.	1.7	123
16	Food web models: a plea for groups. <i>Ecology Letters</i> , 2009, 12, 652-662.	6.4	118
17	Feasibility and coexistence of large ecological communities. <i>Nature Communications</i> , 2017, 8, .	12.8	115
18	Correlation between interaction strengths drives stability in large ecological networks. <i>Ecology Letters</i> , 2014, 17, 1094-1100.	6.4	113

#	ARTICLE	IF	CITATIONS
19	Predicting the stability of large structured food webs. <i>Nature Communications</i> , 2015, 6, 7842.	12.8	108
20	The Scientific Impact of Nations: Journal Placement and Citation Performance. <i>PLoS ONE</i> , 2014, 9, e109195.	2.5	103
21	Operationalizing Network Theory for Ecosystem Service Assessments. <i>Trends in Ecology and Evolution</i> , 2017, 32, 118-130.	8.7	103
22	Coexistence of many species in random ecosystems. <i>Nature Ecology and Evolution</i> , 2018, 2, 1237-1242.	7.8	90
23	Selection on stability across ecological scales. <i>Trends in Ecology and Evolution</i> , 2015, 30, 417-425.	8.7	86
24	Self-regulation and the stability of large ecological networks. <i>Nature Ecology and Evolution</i> , 2017, 1, 1870-1875.	7.8	86
25	Functional links and robustness in food webs. <i>Philosophical Transactions of the Royal Society B: Biological Sciences</i> , 2009, 364, 1701-1709.	4.0	85
26	WAND: an ecological network analysis user-friendly tool. <i>Environmental Modelling and Software</i> , 2004, 19, 337-340.	4.5	81
27	Linking the green and brown worlds: the prevalence and effect of multichannel feeding in food webs. <i>Ecology</i> , 2014, 95, 3376-3386.	3.2	79
28	Steady state of ecosystem flow networks: a comparison between balancing procedures. <i>Ecological Modelling</i> , 2003, 165, 221-229.	2.5	73
29	Effect of localization on the stability of mutualistic ecological networks. <i>Nature Communications</i> , 2015, 6, 10179.	12.8	70
30	Relevance of evolutionary history for food web structure. <i>Proceedings of the Royal Society B: Biological Sciences</i> , 2012, 279, 1588-1596.	2.6	69
31	Cities as ecosystems: Growth, development and implications for sustainability. <i>Ecological Modelling</i> , 2012, 245, 185-198.	2.5	67
32	Characterizing a scientific elite: the social characteristics of the most highly cited scientists in environmental science and ecology. <i>Scientometrics</i> , 2010, 85, 129-143.	3.0	66
33	Cycling in ecological networks: Finn's index revisited. <i>Computational Biology and Chemistry</i> , 2004, 28, 227-233.	2.3	64
34	Temporal dynamics of gene expression in heat-stressed <i>Caenorhabditis elegans</i> . <i>PLoS ONE</i> , 2017, 12, e0189445.	2.5	62
35	Effect of population abundances on the stability of large random ecosystems. <i>Physical Review E</i> , 2018, 98, 022410.	2.1	58
36	Spatial Guilds in the Serengeti Food Web Revealed by a Bayesian Group Model. <i>PLoS Computational Biology</i> , 2011, 7, e1002321.	3.2	57

#	ARTICLE	IF	CITATIONS
37	Ecological subsystems via graph theory: the role of strongly connected components. <i>Oikos</i> , 2005, 110, 164-176.	2.7	55
38	Secondary extinctions in ecological networks: Bottlenecks unveiled. <i>Ecological Modelling</i> , 2006, 194, 150-161.	2.5	55
39	Reactivity and stability of large ecosystems. <i>Frontiers in Ecology and Evolution</i> , 2014, 2, .	2.2	53
40	Measuring Nepotism through Shared Last Names: The Case of Italian Academia. <i>PLoS ONE</i> , 2011, 6, e21160.	2.5	52
41	Ecological Network Inference From Long-Term Presence-Absence Data. <i>Scientific Reports</i> , 2017, 7, 7154.	3.3	50
42	Transcriptome resilience predicts thermotolerance in <i>Caenorhabditis elegans</i> . <i>BMC Biology</i> , 2019, 17, 102.	3.8	50
43	Metapopulation Persistence in Random Fragmented Landscapes. <i>PLoS Computational Biology</i> , 2015, 11, e1004251.	3.2	49
44	The consequences of the aggregation of detritus pools in ecological networks. <i>Ecological Modelling</i> , 2005, 189, 221-232.	2.5	45
45	Secondary extinctions in food webs: a Bayesian network approach. <i>Methods in Ecology and Evolution</i> , 2013, 4, 760-770.	5.2	45
46	Network spandrels reflect ecological assembly. <i>Ecology Letters</i> , 2018, 21, 324-334.	6.4	45
47	Predicting coexistence in experimental ecological communities. <i>Nature Ecology and Evolution</i> , 2020, 4, 91-100.	7.8	45
48	Drivers of compartmentalization in a Mediterranean pollination network. <i>Oikos</i> , 2012, 121, 2001-2013.	2.7	44
49	Detecting Stress at the Whole-Ecosystem Level: The Case of a Mountain Lake (Lake Santo, Italy). <i>Ecosystems</i> , 2006, 9, 768-787.	3.4	43
50	Characterizing a scientific elite (B): publication and citation patterns of the most highly cited scientists in environmental science and ecology. <i>Scientometrics</i> , 2013, 94, 469-480.	3.0	42
51	Phenotypic Plasticity Opposes Species Invasions by Altering Fitness Surface. <i>PLoS Biology</i> , 2006, 4, e372.	5.6	35
52	Food webs: Ordering species according to body size yields high degree of intervality. <i>Journal of Theoretical Biology</i> , 2011, 271, 106-113.	1.7	35
53	Ten Simple (Empirical) Rules for Writing Science. <i>PLoS Computational Biology</i> , 2015, 11, e1004205.	3.2	35
54	What Can Interaction Webs Tell Us About Species Roles?. <i>PLoS Computational Biology</i> , 2015, 11, e1004330.	3.2	34

#	ARTICLE	IF	CITATIONS
55	Using food web dominator trees to catch secondary extinctions in action. <i>Philosophical Transactions of the Royal Society B: Biological Sciences</i> , 2009, 364, 1725-1731.	4.0	32
56	Tractable models of ecological assembly. <i>Ecology Letters</i> , 2021, 24, 1029-1037.	6.4	32
57	And, not or: Quality, quantity in scientific publishing. <i>PLoS ONE</i> , 2017, 12, e0178074.	2.5	31
58	Towards a use of network analysis: quantifying the complexity of Supply Chain Networks. <i>International Journal of Electronic Customer Relationship Management</i> , 2007, 1, 75.	0.2	30
59	Phenotypic variability promotes diversity and stability in competitive communities. <i>Ecology Letters</i> , 2019, 22, 1776-1786.	6.4	30
60	Gene regulatory network stabilized by pervasive weak repressions: microRNA functions revealed by the Mayâ€Wigner theory. <i>National Science Review</i> , 2019, 6, 1176-1188.	9.5	30
61	The Song Overlap Null model Generator (SONG): a new tool for distinguishing between random and non-random song overlap. <i>Bioacoustics</i> , 2016, 25, 29-40.	1.7	29
62	Interaction rules affect species coexistence in intransitive networks. <i>Ecology</i> , 2011, 92, 1174-1180.	3.2	27
63	Using trophic hierarchy to understand food web structure. <i>Oikos</i> , 2009, 118, 1695-1702.	2.7	23
64	Predicting trophic relations in ecological networks: A test of the Allometric Diet Breadth Model. <i>Journal of Theoretical Biology</i> , 2011, 279, 161-168.	1.7	22
65	The assembly, collapse and restoration of food webs. <i>Philosophical Transactions of the Royal Society B: Biological Sciences</i> , 2009, 364, 1803-1806.	4.0	21
66	Last name analysis of mobility, gender imbalance, and nepotism across academic systems. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2017, 114, 7600-7605.	7.1	21
67	Metapopulations with habitat modification. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2021, 118, .	7.1	21
68	Food web networks: Scaling relation revisited. <i>Ecological Complexity</i> , 2005, 2, 323-338.	2.9	20
69	Frequency-Dependent Selection Predicts Patterns of Radiations and Biodiversity. <i>PLoS Computational Biology</i> , 2010, 6, e1000892.	3.2	20
70	Telling ecological networks apart by their structure: A computational challenge. <i>PLoS Computational Biology</i> , 2019, 15, e1007076.	3.2	20
71	Does Sex Speed Up Evolutionary Rate and Increase Biodiversity?. <i>PLoS Computational Biology</i> , 2012, 8, e1002414.	3.2	17
72	Effective trophic positions in ecological acyclic networks. <i>Ecological Modelling</i> , 2006, 198, 495-505.	2.5	16

#	ARTICLE	IF	CITATIONS
73	The more the merrier. <i>Nature</i> , 2012, 487, 175-176.	27.8	16
74	Understanding the role of parasites in food webs using the group model. <i>Journal of Animal Ecology</i> , 2018, 87, 790-800.	2.8	16
75	Predicting global community properties from uncertain estimates of interaction strengths. <i>Journal of the Royal Society Interface</i> , 2015, 12, 20150218.	3.4	15
76	A new computational system, DOVE (Digital Organisms in a Virtual Ecosystem), to study phenotypic plasticity and its effects in food webs. <i>Ecological Modelling</i> , 2007, 205, 13-28.	2.5	13
77	Interaction rules affect species coexistence in intransitive networks. <i>Ecology</i> , 2011, 92, 1174-1180.	3.2	13
78	Reconciling empirical interactions and species coexistence. <i>Ecology Letters</i> , 2019, 22, 1028-1037.	6.4	11
79	Local stability properties of complex, species-rich soil food webs with functional block structure. <i>Ecology and Evolution</i> , 2021, 11, 16070-16081.	1.9	11
80	Selecting food web models using normalized maximum likelihood. <i>Methods in Ecology and Evolution</i> , 2014, 5, 551-562.	5.2	10
81	Ecological networks: Pursuing the shortest path, however narrow and crooked. <i>Scientific Reports</i> , 2019, 9, 17826.	3.3	10
82	Good news for the people who love bad news: an analysis of the funding of the top 1% most highly cited ecologists. <i>Oikos</i> , 2012, 121, 1005-1008.	2.7	9
83	Ocean acidification affects competition for space: projections of community structure using cellular automata. <i>Proceedings of the Royal Society B: Biological Sciences</i> , 2016, 283, 20152561.	2.6	8
84	No robust multispecies coexistence in a canonical model of plant-soil feedbacks. <i>Ecology Letters</i> , 2022, 25, 1690-1698.	6.4	8
85	With Great Power Comes Great Responsibility: the Importance of Rejection, Power, and Editors in the Practice of Scientific Publishing. <i>PLoS ONE</i> , 2013, 8, e85382.	2.5	4
86	Stability and feedback levels in food web models. <i>Ecology Letters</i> , 2015, 18, 593-595.	6.4	3
87	Cities as Ecosystems. <i>Developments in Environmental Modelling</i> , 2012, , 297-318.	0.3	2
88	Frequency-dependent selection predicts patterns of radiations and biodiversity. <i>Nature Precedings</i> , 2009, , .	0.1	0