Stability criteria for complex ecosystems

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Citation Report

#	Article	IF	CITATIONS
1	The efficiency of a random and fast switch in complex dynamical systems. New Journal of Physics, 2012, 14, 083022.	1.2	10
2	Climate change in metacommunities: dispersal gives double-sided effects on persistence. Philosophical Transactions of the Royal Society B: Biological Sciences, 2012, 367, 2945-2954.	1.8	26
3	Experimental â€~omics' data in tree research: facing complexity. Trees - Structure and Function, 2012, 26, 1723-1735.	0.9	15
4	On the application of network theory to arbuscular mycorrhizal fungi–plant interactions: the importance of basic assumptions. New Phytologist, 2012, 194, 891-894.	3.5	45
5	Probabilistic patterns of interaction: the effects of link-strength variability on food web structure. Journal of the Royal Society Interface, 2012, 9, 3219-3228.	1.5	14
6	The Dynamics of Coordinated Group Hunting and Collective Information Transfer among Schooling Prey. Current Biology, 2012, 22, 1213-1217.	1.8	215
7	The emerging energy web. European Physical Journal: Special Topics, 2012, 214, 547-569.	1.2	14
8	Where are the parasites in food webs?. Parasites and Vectors, 2012, 5, 239.	1.0	41
9	Disentangling nestedness from models of ecological complexity. Nature, 2012, 487, 227-230.	13.7	195
10	Impacts of Warming on the Structure and Functioning of Aquatic Communities. Advances in Ecological Research, 2012, 47, 81-176.	1.4	106
11	Perturbing a Marine Food Web: Consequences for Food Web Structure and Trivariate Patterns. Advances in Ecological Research, 2012, 47, 349-409.	1.4	7
12	The Art of Ecological Modeling. Science, 2012, 337, 306-307.	6.0	29
13	Diversity of Interaction Types and Ecological Community Stability. Science, 2012, 337, 349-351.	6.0	655
14	Insights into the resistance and resilience of the soil microbial community. FEMS Microbiology Reviews, 2013, 37, 112-129.	3.9	754
15	Global versus local extinction in a network model of plant–pollinator communities. Theoretical Ecology, 2013, 6, 495-503.	0.4	18
16	Consumer–resource dynamics of indirect interactions in a mutualism–parasitism food web module. Theoretical Ecology, 2013, 6, 475-493.	0.4	21
17	Emergence of structural and dynamical properties of ecological mutualistic networks. Nature, 2013, 500, 449-452.	13.7	221
18	Abundant equals nested. Nature, 2013, 500, 411-412.	13.7	15

#	Article	IF	Citations
19	Networking Agroecology. Advances in Ecological Research, 2013, , 1-67.	1.4	50
20	Interaction Networks in Agricultural Landscape Mosaics. Advances in Ecological Research, 2013, , 291-338.	1.4	21
21	Modelling Interaction Networks for Enhanced Ecosystem Services in Agroecosystems. Advances in Ecological Research, 2013, , 437-480.	1.4	39
22	The impact of climate change on the structure of Pleistocene food webs across the mammoth steppe. Proceedings of the Royal Society B: Biological Sciences, 2013, 280, 20130239.	1.2	43
23	Predator–Prey Molecular Ecosystems. ACS Nano, 2013, 7, 27-34.	7.3	159
24	Biodiversity and ecosystem stability: a synthesis of underlying mechanisms. Ecology Letters, 2013, 16, 106-115.	3.0	780
25	On the dimensionality of ecological stability. Ecology Letters, 2013, 16, 421-429.	3.0	315
26	The ghost of nestedness in ecological networks. Nature Communications, 2013, 4, 1391.	5.8	225
27	Interaction intimacy organizes networks of antagonistic interactions in different ways. Journal of the Royal Society Interface, 2013, 10, 20120649.	1.5	66
28	A topo-dynamical perspective to evaluate indirect interactions in trophic webs: New indexes. Ecological Modelling, 2013, 250, 363-369.	1.2	6
29	Color and degree of interspecific synchrony of environmental noise affect the variability of complex ecological networks. Ecological Modelling, 2013, 263, 162-173.	1.2	15
30	Predation effects on mean time to extinction under demographic stochasticity. Journal of Theoretical Biology, 2013, 334, 61-70.	0.8	8
31	Eco-Evolutionary Dynamics of Agricultural Networks. Advances in Ecological Research, 2013, 49, 339-435.	1.4	54
33	Stability and Bifurcation Analysis of a Delayed Leslie-Gower Predator-Prey System with Nonmonotonic Functional Response. Abstract and Applied Analysis, 2013, 2013, 1-19.	0.3	9
34	A cure for the plague of parameters: constraining models of complex population dynamics with allometries. Proceedings of the Royal Society B: Biological Sciences, 2013, 280, 20131901.	1.2	32
35	Oscillation suppression and synchronization: Frequencies determine the role of control with time delays. Europhysics Letters, 2013, 102, 20003.	0.7	22
36	Increasing functional modularity with residence time in the co-distribution of native and introduced vascular plants. Nature Communications, 2013, 4, 2454.	5.8	32
37	Modeling foundation species in food webs. Ecosphere, 2013, 4, 1-14.	1.0	31

#	Article	IF	Citations
38	Trophic cascade alters ecosystem carbon exchange. Proceedings of the National Academy of Sciences of the United States of America, 2013, 110, 11035-11038.	3.3	78
39	Stability constraints on large-scale structural brain networks. Frontiers in Computational Neuroscience, 2013, 7, 31.	1.2	16
40	Early Warning Signs in Social-Ecological Networks. PLoS ONE, 2014, 9, e101851.	1.1	42
41	Limits and Trade-Offs of Topological Network Robustness. PLoS ONE, 2014, 9, e108215.	1.1	6
42	Reactivity and stability of large ecosystems. Frontiers in Ecology and Evolution, 2014, 2, .	1.1	53
43	Hunting in groups. Resonance, 2014, 19, 936-957.	0.2	5
44	Multiple diversity–stability mechanisms enhance population and community stability in aquatic food webs. Ecology, 2014, 95, 173-184.	1.5	71
45	Stability of dynamical systems on a graph. , 2014, , .		7
46	How exotic plants integrate into pollination networks. Journal of Ecology, 2014, 102, 1442-1450.	1.9	65
47	The interactional foundations of MaxEnt: Open questions. , 2014, , .		0
48	Extreme-value statistics of brain networks: Importance of balanced condition. Physical Review E, 2014, 89, 062718.	0.8	7
49	Interaction strengths in balanced carbon cycles and the absence of a relation between ecosystem complexity and stability. Ecology Letters, 2014, 17, 651-661.	3.0	59
50	Emergence of clustering: Role of inhibition. Physical Review E, 2014, 90, 032803.	0.8	21
51	Trophic coherence determines food-web stability. Proceedings of the National Academy of Sciences of the United States of America, 2014, 111, 17923-17928.	3.3	129
52	Individual phenotypic variation reduces interaction strengths in a consumer–resource system. Ecology and Evolution, 2014, 4, 3703-3713.	0.8	45
53	Structure–stability relationships in networks combining mutualistic and antagonistic interactions. Oikos, 2014, 123, 378-384.	1.2	101
54	Complex dynamical behaviors in a discrete eco-epidemiological model with disease in prey. Advances in Difference Equations, 2014, 2014, .	3.5	13
55	Adaptation in a hybrid world with multiple interaction types: a new mechanism for species coexistence. Ecological Research, 2014, 29, 113-119.	0.7	18

#	ARTICLE	IF	Citations
56	Instability of a hybrid module of antagonistic and mutualistic interactions. Population Ecology, 2014, 56, 257-263.	0.7	25
57	Limits on ecosystem trophic complexity: insights from ecological network analysis. Ecology Letters, 2014, 17, 127-136.	3.0	88
58	The rise of Network Ecology: Maps of the topic diversity and scientific collaboration. Ecological Modelling, 2014, 293, 111-127.	1.2	100
59	Disentangling the effect of hybrid interactions and of the constant effort hypothesis on ecological community stability. Oikos, 2014, 123, 525-532.	1.2	56
60	Synchronisation and stability in river metapopulation networks. Ecology Letters, 2014, 17, 273-283.	3.0	62
61	Bifurcation analysis of a diffusive ratio-dependent predator–prey model. Nonlinear Dynamics, 2014, 78, 49-70.	2.7	50
62	Specific non-monotonous interactions increase persistence of ecological networks. Proceedings of the Royal Society B: Biological Sciences, 2014, 281, 20132797.	1.2	16
63	Assembly of complex plant–fungus networks. Nature Communications, 2014, 5, 5273.	5. 8	160
64	Why are plant-pollinator networks nested?. Science, 2014, 345, 383-383.	6.0	14
65	On the structural stability of mutualistic systems. Science, 2014, 345, 1253497.	6.0	412
66	A universal transition in the robustness of evolving open systems. Scientific Reports, 2014, 4, 4082.	1.6	17
67	Stability of competition–antagonism–mutualism hybrid community and the role of community network structure. Journal of Theoretical Biology, 2014, 360, 54-58.	0.8	46
68	ORGANISMAL COMPLEXITY AND THE POTENTIAL FOR EVOLUTIONARY DIVERSIFICATION. Evolution; International Journal of Organic Evolution, 2014, 68, 3248-3259.	1.1	26
69	How interaction strength affects the role of functional and redundant connections in food webs. Ecological Complexity, 2014, 20, 97-106.	1.4	7
70	Conflict between dynamical and evolutionary stability in simple ecosystems. Theoretical Ecology, 2014, 7, 273-288.	0.4	3
71	Stability, Complexity and Robustness in Population Dynamics. Acta Biotheoretica, 2014, 62, 243-284.	0.7	8
72	Frugivores at higher risk of extinction are the key elements of a mutualistic network. Ecology, 2014, 95, 3440-3447.	1.5	88
73	Correlation between interaction strengths drives stability in large ecological networks. Ecology Letters, 2014, 17, 1094-1100.	3.0	113

#	Article	IF	Citations
74	Selecting food web models using normalized maximum likelihood. Methods in Ecology and Evolution, 2014, 5, 551-562.	2.2	10
75	Climatic seasonality may affect ecological network structure: Food webs and mutualistic networks. BioSystems, 2014, 121, 29-37.	0.9	18
76	Biodiversity loss, sustainability, and stability. , 0, , 119-147.		0
77	Diagnosing the biodiversity change problem. , 0, , 37-38.		O
78	On How Theoretical Analyses in Ecology can Enable Environmental Problem-Solving. Ethics and the Environment, 2014, 19, 91.	0.3	8
79	Interplay of mutation and disassortativity. Physical Review E, 2015, 92, 022802.	0.8	4
80	The network organization of protein interactions in the spliceosome is reproduced by the simple rules of food-web models. Scientific Reports, 2015, 5, 14865.	1.6	8
81	Emergence of (bi)multi-partiteness in networks having inhibitory and excitatory couplings. Europhysics Letters, 2015, 112, 48003.	0.7	4
82	Multiple regimes of robust patterns between network structure and biodiversity. Scientific Reports, 2015, 5, 17856.	1.6	11
83	A New, Necessary and Sufficient Vertex Solution for Robust Stability Check of Unstructured Convex Combination Matrix Families. , 2015 , , .		0
84	A call for applying trophic structure in ecological restoration. Restoration Ecology, 2015, 23, 503-507.	1.4	81
85	The restoration of tropical seed dispersal networks. Restoration Ecology, 2015, 23, 852-860.	1.4	65
86	Selection against instability: stable subgraphs are most frequent in empirical food webs. Oikos, 2015, 124, 1583-1588.	1.2	48
87	The Stability of Revegetated Ecosystems in Sandy Areas: An Assessment and Prediction Index. Water (Switzerland), 2015, 7, 1969-1990.	1.2	7
88	Species interactions differ in their genetic robustness. Frontiers in Microbiology, 2015, 6, 271.	1.5	19
89	The Robustness of Plant-Pollinator Assemblages: Linking Plant Interaction Patterns and Sensitivity to Pollinator Loss. PLoS ONE, 2015, 10, e0117243.	1.1	34
90	Native and Non-Native Supergeneralist Bee Species Have Different Effects on Plant-Bee Networks. PLoS ONE, 2015, 10, e0137198.	1.1	76
91	Balance of Interactions Determines Optimal Survival in Multi-Species Communities. PLoS ONE, 2015, 10, e0145278.	1.1	5

#	Article	IF	CITATIONS
92	Persistence of Plants and Pollinators in the Face of Habitat Loss. Advances in Ecological Research, 2015, 53, 201-257.	1.4	17
93	The role of biotic forces in driving macroevolution: beyond the Red Queen. Proceedings of the Royal Society B: Biological Sciences, 2015, 282, 20150186.	1.2	81
94	Individual Variation Decreases Interference Competition but Increases Species Persistence. Advances in Ecological Research, 2015, , 45-64.	1.4	16
95	A Convexity Embedded Necessary and Sufficient Condition for the Hurwitz stability of a Real Matrix using its elemental sign structure and qualitative determinant concept., 2015, , .		2
96	Increasing interaction strength will destroy persistence of mutualistic ecological networks. , 2015, , .		0
97	How plants connect pollination and herbivory networks and their contribution to community stability. Ecology, 2016, 97, 908-917.	1.5	55
98	Cellular population dynamics control the robustness of the stem cell niche. Biology Open, 2015, 4, 1420-1426.	0.6	15
99	Effect of localization on the stability of mutualistic ecological networks. Nature Communications, 2015, 6, 10179.	5.8	70
100	Limiting statistics of the largest and smallest eigenvalues in the correlated Wishart model. Europhysics Letters, 2015, 109, 20005.	0.7	8
101	The stability–complexity relationship at age 40: a random matrix perspective. Population Ecology, 2015, 57, 63-75.	0.7	186
102	Interactions among mutualism, competition, and predation foster species coexistence in diverse communities. Theoretical Ecology, 2015, 8, 297-312.	0.4	20
103	Highâ€throughput DNA barcoding for ecological network studies. Population Ecology, 2015, 57, 37-51.	0.7	26
104	Robustness of mutualistic networks under phenological change and habitat destruction. Oikos, 2015, 124, 22-32.	1.2	38
105	Interactionâ€type diversity hypothesis and interaction strength: the condition for the positive complexityâ€stability effect to arise. Population Ecology, 2015, 57, 21-27.	0.7	20
106	Inferring species interactions in ecological communities: a comparison of methods at different levels of complexity. Methods in Ecology and Evolution, 2015, 6, 895-906.	2,2	79
107	Emergence of structured communities through evolutionary dynamics. Journal of Theoretical Biology, 2015, 383, 138-144.	0.8	13
108	Predicting global community properties from uncertain estimates of interaction strengths. Journal of the Royal Society Interface, 2015, 12, 20150218.	1.5	15
109	Predicting the stability of large structured food webs. Nature Communications, 2015, 6, 7842.	5.8	108

#	Article	IF	Citations
110	Ecological non-monotonicity and its effects on complexity and stability of populations, communities and ecosystems. Ecological Modelling, 2015, 312, 374-384.	1.2	36
111	A hybrid behavioural rule of adaptation and drift explains the emergent architecture of antagonistic networks. Proceedings of the Royal Society B: Biological Sciences, 2015, 282, 20150320.	1.2	26
112	Metapopulation Persistence in Random Fragmented Landscapes. PLoS Computational Biology, 2015, 11, e1004251.	1.5	49
113	Network motifs emerge from interconnections that favour stability. Nature Physics, 2015, 11, 848-852.	6.5	16
114	An ecosystem approach to understanding and managing within-host parasite community dynamics. Trends in Parasitology, 2015, 31, 212-221.	1.5	114
115	Light-driven synchrony of <i>Prochlorococcus</i> growth and mortality in the subtropical Pacific gyre. Proceedings of the National Academy of Sciences of the United States of America, 2015, 112, 8008-8012.	3.3	126
116	Multiâ€faceted approaches toward unravelling complex ecological networks. Population Ecology, 2015, 57, 3-19.	0.7	31
117	A new measure of ecological network structure based on node overlap and segregation. Methods in Ecology and Evolution, 2015, 6, 907-915.	2.2	33
118	Bird–flower visitation networks in the Galápagos unveil a widespread interaction release. Nature Communications, 2015, 6, 6376.	5.8	77
119	On input-to-state stability for stochastic coupled control systems on networks. Applied Mathematics and Computation, 2015, 262, 90-101.	1.4	8
120	The Role of Body Size Variation in Community Assembly. Advances in Ecological Research, 2015, 52, 201-248.	1.4	17
122	Constructing Random Matrices to Represent Real Ecosystems. American Naturalist, 2015, 185, 680-692.	1.0	31
123	Stability and feedback levels in food web models. Ecology Letters, 2015, 18, 593-595.	3.0	3
124	Adaptive rewiring aggravates the effects of species loss in ecosystems. Nature Communications, 2015, 6, 8412.	5.8	61
125	Below-ground plant–fungus network topology is not congruent with above-ground plant–animal network topology. Science Advances, 2015, 1, e1500291.	4.7	74
126	The ecology of the microbiome: Networks, competition, and stability. Science, 2015, 350, 663-666.	6.0	1,618
127	Security and vulnerability in the stabilization of networks of controlled dynamical systems via robustness framework. , 2015 , , .		0
128	Plant–pollinator community network response to species invasion depends on both invader and community characteristics. Oikos, 2015, 124, 406-413.	1.2	22

#	Article	IF	CITATIONS
129	Pleistocene megafaunal interaction networks became more vulnerable after human arrival. Proceedings of the Royal Society B: Biological Sciences, 2015, 282, 20151367.	1.2	40
130	Conditional random matrix ensembles and the stability of dynamical systems. New Journal of Physics, 2015, 17, 083025.	1.2	14
131	Analysis of the intestinal microbial community structure of healthy and long-living elderly residents in Gaotian Village of Liuyang City. Applied Microbiology and Biotechnology, 2015, 99, 9085-9095.	1.7	47
132	Constructing more informative plant–pollinator networks: visitation and pollen deposition networks in a heathland plant community. Proceedings of the Royal Society B: Biological Sciences, 2015, 282, 20151130.	1.2	127
133	A new, convexity based, necessary and sufficient vertex solution for robust stability check of linear interval parameter matrix families. , 2015 , , .		2
134	Eight challenges in modelling disease ecology in multi-host, multi-agent systems. Epidemics, 2015, 10, 26-30.	1.5	69
135	Macroecological trends in nestedness and modularity of seedâ€dispersal networks: human impact matters. Global Ecology and Biogeography, 2015, 24, 293-303.	2.7	92
136	Experimental evidence for strong stabilizing forces at high functional diversity of aquatic microbial communities. Ecology, 2015, 96, 1340-1350.	1.5	40
137	A simple stochastic model for complex coextinctions in mutualistic networks: robustness decreases with connectance. Ecology Letters, 2015, 18, 144-152.	3.0	106
138	Beyond species: why ecological interaction networks vary through space and time. Oikos, 2015, 124, 243-251.	1.2	347
139	Theoretically exploring direct and indirect chemical effects across ecological and exposure scenarios using mechanistic fate and effects modelling. Environment International, 2015, 74, 181-190.	4.8	43
140	Parasite species richness and its effect on persistence in food webs. Journal of Theoretical Biology, 2015, 364, 377-382.	0.8	9
141	Spatial complexity reduces interaction strengths in the metaâ€food web of a river floodplain mosaic. Ecology, 2015, 96, 274-283.	1.5	51
142	Species interactions in an Andean bird–flowering plant network: phenology is more important than abundance or morphology. PeerJ, 2016, 4, e2789.	0.9	33
143	How Structured Is the Entangled Bank? The Surprisingly Simple Organization of Multiplex Ecological Networks Leads to Increased Persistence and Resilience. PLoS Biology, 2016, 14, e1002527.	2.6	154
144	Food Web Assembly Rules for Generalized Lotka-Volterra Equations. PLoS Computational Biology, 2016, 12, e1004727.	1.5	22
145	Short communication: Modulation of the small intestinal microbial community composition over short-term or long-term administration with Lactobacillus plantarum ZDY2013. Journal of Dairy Science, 2016, 99, 6913-6921.	1.4	28
146	Network analyses support the role of prey preferences in shaping resource use patterns within five animal populations. Oikos, 2016, 125, 492-501.	1.2	16

#	Article	IF	CITATIONS
147	Food web's backbones and energy delivery in ecosystems. Oikos, 2016, 125, 586-594.	1.2	24
148	Flexible foraging shapes the topology of plant–pollinator interaction networks. Ecology, 2016, 97, 1431-1441.	1.5	32
149	Ericaceous plant–fungus network in a harsh alpine–subalpine environment. Molecular Ecology, 2016, 25, 3242-3257.	2.0	111
150	Intermediate predation pressure leads to maximal complexity in food webs. Oikos, 2016, 125, 595-603.	1.2	18
151	Community assembly on isolated islands: macroecology meets evolution. Global Ecology and Biogeography, 2016, 25, 769-780.	2.7	62
152	Temporal variability of a single population can determine the vulnerability of communities to perturbations. Journal of Ecology, 2016, 104, 887-897.	1.9	23
153	On the integration of biotic interaction and environmental constraints at the biogeographical scale. Ecography, 2016, 39, 921-931.	2.1	33
154	Species interactions and random dispersal rather than habitat filtering drive community assembly during early plant succession. Oikos, 2016, 125, 698-707.	1.2	64
155	"Conservation value― a review of the concept and its quantification. Ecosphere, 2016, 7, e01476.	1.0	37
156	Modularity and stability in ecological communities. Nature Communications, 2016, 7, 12031.	5.8	208
157	Food-web complexity, meta-community complexity and community stability. Scientific Reports, 2016, 6, 24478.	1.6	65
158	High-order species interactions shape ecosystem diversity. Nature Communications, 2016, 7, 12285.	5.8	279
159	Relative species abundance of replicator dynamics with sparse interactions. Journal of Statistical Mechanics: Theory and Experiment, 2016, 2016, 113502.	0.9	1
160	Microbiome: Ecology of stable gut communities. Nature Microbiology, 2016, 1, 15016.	5.9	26
161	Invading a mutualistic network: to be or not to be similar. Ecology and Evolution, 2016, 6, 4981-4996.	0.8	22
162	Coevolutionary Dynamics of Rice Blast Resistance Gene <i>Pi-ta</i> and <i>Magnaporthe oryzae</i> Avirulence Gene <i>AVR-Pita 1</i> Phytopathology, 2016, 106, 676-683.	1.1	30
163	Symmetric and Asymmetric Tendencies in Stable Complex Systems. Scientific Reports, 2016, 6, 31762.	1.6	1
165	Communities as cliques. Scientific Reports, 2016, 6, 35648.	1.6	14

#	Article	IF	CITATIONS
166	Stability and complexity in model meta-ecosystems. Nature Communications, 2016, 7, 12457.	5.8	149
167	Inhibitory interactions promote frequent bistability among competing bacteria. Nature Communications, 2016, 7, 11274.	5.8	82
168	Stability of an adaptive hybrid community. Scientific Reports, 2016, 6, 28181.	1.6	10
169	Interspecific interaction strength influences population density more than carrying capacity in more complex ecological networks. Ecological Modelling, 2016, 332, 1-7.	1.2	6
170	The effects of climatic fluctuations and extreme events on running water ecosystems. Philosophical Transactions of the Royal Society B: Biological Sciences, 2016, 371, 20150274.	1.8	131
171	The meaning of functional trait composition of food webs for ecosystem functioning. Philosophical Transactions of the Royal Society B: Biological Sciences, 2016, 371, 20150268.	1.8	119
172	Niche partitioning due to adaptive foraging reverses effects of nestedness and connectance on pollination network stability. Ecology Letters, 2016, 19, 1277-1286.	3.0	91
173	Protecting an Ecosystem Service. Advances in Ecological Research, 2016, 54, 135-206.	1.4	115
174	Beyond connectedness: why pairwise metrics cannot capture community stability. Ecology and Evolution, 2016, 6, 7199-7206.	0.8	3
175	Analysis of Hurwitz stability/instability of a real matrix via the concepts of Qualitative Determinant and Signature of a matrix. , 2016 , , .		1
176	Unifying dynamical and structural stability of equilibria. Proceedings of the Royal Society A: Mathematical, Physical and Engineering Sciences, 2016, 472, 20150874.	1.0	17
177	The dark side of the "redundancy hypothesis―and ecosystem assessment. Ecological Complexity, 2016, 28, 222-229.	1.4	20
178	Multiple peaks of species abundance distributions induced by sparse interactions. Physical Review E, 2016, 94, 022312.	0.8	3
180	Attracting Complex Networks. Lecture Notes in Economics and Mathematical Systems, 2016, , 309-327.	0.3	6
181	Nonhierarchical Dispersal Promotes Stability and Resilience in a Tritrophic Metacommunity. American Naturalist, 2016, 187, E116-E128.	1.0	26
182	Statistical mechanics of ecological systems: Neutral theory and beyond. Reviews of Modern Physics, 2016, 88, .	16.4	122
183	Network nestedness as generalized core-periphery structures. Physical Review E, 2016, 93, 022306.	0.8	16
184	Hamiltonian dynamics for complex food webs. Physical Review E, 2016, 93, 032413.	0.8	4

#	Article	IF	CITATIONS
185	Navigating the complexity of ecological stability. Ecology Letters, 2016, 19, 1172-1185.	3.0	401
186	Consistent role of weak and strong interactions in high- and low-diversity trophic food webs. Nature Communications, $2016, 7, 11180$.	5.8	69
187	Species' traits and foodâ€web complexity interactively affect a food web's response to press disturbance. Ecosphere, 2016, 7, e01518.	1.0	9
188	Stability of Ecosystems Under Invasions. Bulletin of Mathematical Biology, 2016, 78, 2186-2211.	0.9	4
189	No complexity–stability relationship in empirical ecosystems. Nature Communications, 2016, 7, 12573.	5.8	121
190	The robustness of ecosystems to the species loss of community. Scientific Reports, 2016, 6, 35904.	1.6	20
191	The Google matrix controls the stability of structured ecological and biological networks. Nature Communications, 2016, 7, 12857.	5.8	21
192	The roles of amensalistic and commensalistic interactions in large ecological network stability. Scientific Reports, 2016, 6, 29929.	1.6	39
193	Determination of Most Desirable Nominal Closed-Loop State Space System Via Qualitative Ecological Principles. Journal of Dynamic Systems, Measurement and Control, Transactions of the ASME, 2016, 138, .	0.9	2
194	Marine Bacteria and Archaea: Diversity, Adaptations, and Culturability. , 2016, , 21-55.		15
195	Nonlinear analogue of the Mayâ^'Wigner instability transition. Proceedings of the National Academy of Sciences of the United States of America, 2016, 113, 6827-6832.	3.3	54
196	Molecular and genetic inflammation networks in major human diseases. Molecular BioSystems, 2016, 12, 2318-2341.	2.9	49
197	Patterns in intraspecific interaction strengths and the stability of food webs. Theoretical Ecology, 2016, 9, 95-106.	0.4	13
198	Host–parasite interactions in food webs: Diversity, stability, and coevolution. Food Webs, 2016, 6, 1-8.	0.5	29
199	Maximizing the Adjacent Possible in Automata Chemistries. Artificial Life, 2016, 22, 49-75.	1.0	8
200	Resilience, reactivity and variability: A mathematical comparison of ecological stability measures. Journal of Theoretical Biology, 2016, 389, 47-59.	0.8	114
201	Defining invasiveness and invasibility in ecological networks. Biological Invasions, 2016, 18, 971-983.	1.2	121
202	Incorporating demographic diversity into food web models: Effects on community structure and dynamics. Ecological Modelling, 2016, 322, 10-18.	1.2	4

#	Article	IF	Citations
203	Many weak interactions and few strong; food-web feasibility depends on the combination of the strength of species' interactions and their correct arrangement. Theoretical Ecology, 2016, 9, 185-195.	0.4	43
204	Pattern of functional extinctions in ecological networks with a variety of interaction types. Theoretical Ecology, 2016, 9, 83-94.	0.4	15
205	Nested speciesâ€rich networks of scavenging vertebrates support high levels of interspecific competition. Ecology, 2016, 97, 95-105.	1.5	54
206	The effects of space and diversity of interaction types on the stability of complex ecological networks. Theoretical Ecology, 2016, 9, 3-13.	0.4	50
207	Adaptive movement and food-chain dynamics: towards food-web theory without birth–death processes. Theoretical Ecology, 2016, 9, 15-25.	0.4	5
208	Predicting the consequences of species loss using sizeâ€structured biodiversity approaches. Biological Reviews, 2017, 92, 684-697.	4.7	108
209	Evidence of structural balance in spatial ecological networks. Ecography, 2017, 40, 733-741.	2.1	37
210	Species-rich networks and eco-evolutionary synthesis at the metacommunity level. Nature Ecology and Evolution, 2017, 1, 24.	3.4	95
211	Invasions Toolkit. Advances in Ecological Research, 2017, , 85-182.	1.4	41
212	Mutualism supports biodiversity when the direct competition is weak. Nature Communications, 2017, 8, 14326.	5.8	51
213	Weaving animal temperament into food webs: implications for biodiversity. Oikos, 2017, 126, 917-930.	1.2	20
214	Feasibility and coexistence of large ecological communities. Nature Communications, 2017, 8, .	5.8	115
215	Uneven abundances determine nestedness in climbing plant-host interaction networks. Perspectives in Plant Ecology, Evolution and Systematics, 2017, 26, 53-59.	1.1	8
216	Bayesian characterization of uncertainty in species interaction strengths. Oecologia, 2017, 184, 327-339.	0.9	12
217	Coevolution leaves a weak signal on ecological networks. Ecosphere, 2017, 8, e01798.	1.0	12
218	Effective competition determines the global stability of model ecosystems. Theoretical Ecology, 2017, 10, 195-205.	0.4	2
219	Degree heterogeneity and stability of ecological networks. Journal of the Royal Society Interface, 2017, 14, 20170189.	1.5	20
220	Network Structure and Selection Asymmetry Drive Coevolution in Species-Rich Antagonistic Interactions. American Naturalist, 2017, 190, 99-115.	1.0	42

#	Article	IF	CITATIONS
221	Beyond pairwise mechanisms of species coexistence in complex communities. Nature, 2017, 546, 56-64.	13.7	544
222	Applying pollen DNA metabarcoding to the study of plant–pollinator interactions. Applications in Plant Sciences, 2017, 5, 1600124.	0.8	115
223	Finding all multiple stable fixpoints ofn-species Lotka–Volterra competition models. Theoretical Population Biology, 2017, 115, 24-34.	0.5	10
224	The multilayer nature of ecological networks. Nature Ecology and Evolution, 2017, 1, 101.	3.4	383
225	Globally asymptotically stable analysis in a discrete time eco-epidemiological system. Chaos, Solitons and Fractals, 2017, 99, 20-31.	2.5	11
226	Data integration aids understanding of butterfly–host plant networks. Scientific Reports, 2017, 7, 43368.	1.6	23
227	Evolution of correlated multiplexity through stability maximization. Physical Review E, 2017, 95, 022309.	0.8	3
228	Viewing the effects of species loss in complex ecological networks. Mathematical Biosciences, 2017, 285, 55-60.	0.9	1
229	How lifeâ€history traits affect ecosystem properties: effects of dispersal in metaâ€ecosystems. Oikos, 2017, 126, 532-546.	1.2	54
230	Explorability and the origin of network sparsity in living systems. Scientific Reports, 2017, 7, 12323.	1.6	34
231	Persistence of a stage-structured food-web. Scientific Reports, 2017, 7, 11055.	1.6	8
232	Self-regulation and the stability of large ecological networks. Nature Ecology and Evolution, 2017, 1, $1870-1875$.	3.4	86
233	Weak Regulation of Many Targets Is Cumulatively Powerfulâ€"An Evolutionary Perspective on microRNA Functionality. Molecular Biology and Evolution, 2017, 34, 3041-3046.	3.5	28
234	Analysis of the intestinal microbial community in healthy and diarrheal perinatal yaks by high-throughput sequencing. Microbial Pathogenesis, 2017, 111, 60-70.	1.3	50
235	Identifying Causes of Patterns in Ecological Networks: Opportunities and Limitations. Annual Review of Ecology, Evolution, and Systematics, 2017, 48, 559-584.	3.8	152
236	Spatially destabilising effect of woody plant diversity on forest productivity in a subtropical mountain forest. Scientific Reports, 2017, 7, 9551.	1.6	5
237	Existence and construction of large stable food webs. Physical Review E, 2017, 96, 032406.	0.8	5
238	Conditions for Eltonian Pyramids in Lotka-Volterra Food Chains. Scientific Reports, 2017, 7, 10912.	1.6	18

#	ARTICLE	IF	CITATIONS
239	Redundant and incoherent regulations of multiple phenotypes suggest microRNAs' role in stability control. Genome Research, 2017, 27, 1665-1673.	2.4	40
240	Pollinator importance networks illustrate the crucial value of bees in a highly speciose plant community. Scientific Reports, 2017, 7, 8389.	1.6	78
241	Ecological Network Inference From Long-Term Presence-Absence Data. Scientific Reports, 2017, 7, 7154.	1.6	50
242	Effect of habitat degradation on competition, carrying capacity, and species assemblage stability. Ecology and Evolution, 2017, 7, 5784-5796.	0.8	45
243	Ecological network metrics: opportunities for synthesis. Ecosphere, 2017, 8, e01900.	1.0	70
244	Closed-Loop Control of Complex Networks: A Trade-Off between Time and Energy. Physical Review Letters, 2017, 119, 198301.	2.9	58
245	Forbidden versus permitted interactions: Disentangling processes from patterns in ecological network analysis. Ecology and Evolution, 2017, 7, 5476-5481.	0.8	9
246	Noise-processing by signaling networks. Scientific Reports, 2017, 7, 532.	1.6	14
247	Iterative control strategies for nonlinear systems. Physical Review E, 2017, 96, 012102.	0.8	1
248	Collapse of resilience patterns in generalized Lotka-Volterra dynamics and beyond. Physical Review E, 2017, 95, 062307.	0.8	27
249	Biodiversity, extinctions, and evolution of ecosystems with shared resources. Physical Review E, 2017, 95, 032413.	0.8	8
250	The Geography of Complex Knowledge. Economic Geography, 2017, 93, 1-23.	2.1	372
251	Trophic cascades in 3D: network analysis reveals how apex predators structure ecosystems. Methods in Ecology and Evolution, 2017, 8, 135-142.	2.2	30
252	Concise Review: Stem Cell Population Biology: Insights from Hematopoiesis. Stem Cells, 2017, 35, 80-88.	1.4	23
253	Life history and ecoâ€evolutionary dynamics in light of the gut microbiota. Oikos, 2017, 126, 508-531.	1.2	139
254	Species coexistence in a neutral dynamics with environmental noise. Journal of Theoretical Biology, 2017, 413, 1-10.	0.8	42
255	Motif centrality in food web networks. Journal of Complex Networks, 2017, 5, 641-664.	1.1	12
256	Food Webs versus Interaction Networks: Principles, Pitfalls, and Perspectives. , 0, , 9-18.		5

#	Article	IF	CITATIONS
257	What Kind of Interaction-Type Diversity Matters for Community Stability?., 0,, 19-30.		1
258	Symmetry, Asymmetry, and Beyond: The Crucial Role of Interaction Strength in the Complexity–Stability Debate. , 0, , 31-44.		1
259	Ecologically Effective Population Sizes and Functional Extinction of Species in Ecosystems. , 0, , 45-61.		2
260	Toward Multiplex Ecological Networks: Accounting for Multiple Interaction Types to Understand Community Structure and Dynamics., 0,, 73-87.		6
261	Rare but Important: Perturbations to Uncommon Species Can Have a Large Impact on the Structure of Ecological Communities., 0,, 324-341.		0
262	Linking Ecology and Epidemiology: The Case of Infected Resource. , 0, , 384-405.		0
263	Analysis of an epidemiological model with sub-optimal immune reaction and nonlinear incidence rate. , 2017, , .		0
264	Island Biogeography of Food Webs. Advances in Ecological Research, 2017, , 183-262.	1.4	27
265	Modeling Microbial Communities: A Call for Collaboration between Experimentalists and Theorists. Processes, 2017, 5, 53.	1.3	21
266	Linking obligate mutualism models in an extended consumer-resource framework. Ecological Modelling, 2018, 374, 1-13.	1.2	4
267	Interaction and coexistence with self-regulating species. Physica A: Statistical Mechanics and Its Applications, 2018, 502, 447-458.	1.2	0
268	Stream community richness predicts apex predator occupancy dynamics in riparian systems. Oikos, 2018, 127, 1422-1436.	1.2	11
269	Regulation of Large Number of Weak Targetsâ€"New Insights from Twin-microRNAs. Genome Biology and Evolution, 2018, 10, 1255-1264.	1.1	13
270	Complexity and Stability of Adaptive Ecological Networks: A Survey of the Theory in Community Ecology. , 2018, , 209-248.		26
271	Interactions between predation and disturbances shape prey communities. Scientific Reports, 2018, 8, 2968.	1.6	21
272	Local extinctions of obligate frugivores and patch size reduction disrupt the structure of seed dispersal networks. Ecography, 2018, 41, 1899-1909.	2.1	33
273	Betweenâ€year changes in community composition shape species' roles in an Arctic plant–pollinator network. Oikos, 2018, 127, 1163-1176.	1.2	35
274	Fluctuating interaction network and time-varying stability of a natural fish community. Nature, 2018, 554, 360-363.	13.7	209

#	Article	IF	CITATIONS
275	Ecology and Evolution of Species-Rich Interaction Networks. , 2018, , 43-58.		2
276	Dysbiosis of the fecal microbiota in feedlot cattle with hemorrhagic diarrhea. Microbial Pathogenesis, 2018, 115, 123-130.	1.3	72
277	Energy Flux: The Link between Multitrophic Biodiversity and Ecosystem Functioning. Trends in Ecology and Evolution, 2018, 33, 186-197.	4.2	195
278	Keystone taxa predict compositional change in microbial communities. Environmental Microbiology, 2018, 20, 2207-2217.	1.8	201
279	An Eco-inspired control strategy for DC microgrids. , 2018, , .		0
281	From Ecology to Finance (and Back?): A Review on Entropy-Based Null Models for the Analysis of Bipartite Networks. Journal of Statistical Physics, 2018, 173, 1252-1285.	0.5	8
283	Dome-shaped transition between positive and negative interactions maintains higher persistence and biomass in more complex ecological networks. Ecological Modelling, 2018, 370, 14-21.	1.2	5
284	Comparative analysis of gut microbial community in healthy and tibial dyschondroplasia affected chickens by high throughput sequencing. Microbial Pathogenesis, 2018, 118, 133-139.	1.3	26
285	Eco-evolutionary feedbacks promote fluctuating selection and long-term stability of antagonistic networks. Proceedings of the Royal Society B: Biological Sciences, 2018, 285, 20172596.	1.2	19
286	Stability of Switched Systems on Randomly Switching Durations With Random Interaction Matrices. IEEE Transactions on Automatic Control, 2018, 63, 21-36.	3.6	19
287	Multiple interactions networks: towards more realistic descriptions of the web of life. Oikos, 2018, 127, 5-22.	1.2	60
288	The simpler the better: When decreasing landscape complexity increases community stability. Ecological Indicators, 2018, 84, 828-836.	2.6	3
289	NOS: a software suite to compute node overlap and segregation in ecological networks. Ecography, 2018, 41, 558-566.	2.1	3
290	Ontogenetic antagonism–mutualism coupling: perspectives on resilience of stageâ€structured communities. Oikos, 2018, 127, 353-363.	1.2	11
291	Evaluating fishing effects on the stability of fish communities using a size-spectrum model. Fisheries Research, 2018, 197, 123-130.	0.9	7
292	Unifying relationships between complexity and stability in mutualistic ecological communities. Journal of Theoretical Biology, 2018, 439, 100-126.	0.8	5
293	Exact probabilities for the indeterminacy of complex networks as perceived through press perturbations. Journal of Mathematical Biology, 2018, 76, 877-909.	0.8	6
294	Connection is power: Near optimal advertisement infrastructure placement for vehicular fogs. Peer-to-Peer Networking and Applications, 2018, 11, 756-765.	2.6	3

#	ARTICLE	IF	CITATIONS
295	Direct and indirect influences of intercrops on the coconut defoliator Opisina arenosella. Journal of Pest Science, 2018, 91, 259-275.	1.9	15
296	A unified concept of dominance applicable at both community and species scales. Ecosphere, 2018, 9, e02477.	1.0	20
297	Nestedness Maximization in Complex Networks through the Fitness-Complexity Algorithm. Entropy, 2018, 20, 768.	1.1	10
298	Network resilience of mutualistic ecosystems and environmental changes: an empirical study. Royal Society Open Science, 2018, 5, 180706.	1.1	15
299	Non-Hermitian random matrices with a variance profile (I): deterministic equivalents and limiting ESDs. Electronic Journal of Probability, 2018, 23, .	0.5	21
300	Spectral control for ecological stability. European Physical Journal B, 2018, 91, 1.	0.6	1
301	Modelling Tools to Analyze and Assess the Ecological Impact of Hydropower Dams. Water (Switzerland), 2018, 10, 259.	1.2	30
302	Structural diversity across arbuscular mycorrhizal, ectomycorrhizal, and endophytic plant–fungus networks. BMC Plant Biology, 2018, 18, 292.	1.6	9
303	Link Prediction in Bipartite Nested Networks. Entropy, 2018, 20, 777.	1.1	5
304	Spatial compartmentation and food web stability. Scientific Reports, 2018, 8, 16237.	1.6	5
305	Marginally stable equilibria in critical ecosystems. New Journal of Physics, 2018, 20, 083051.	1.2	94
306	Topologically robust zero-sum games and Pfaffian orientation: How network topology determines the long-time dynamics of the antisymmetric Lotka-Volterra equation. Physical Review E, 2018, 98, .	0.8	7
307	Structure and dynamical behavior of non-normal networks. Science Advances, 2018, 4, eaau9403.	4.7	70
308	SPACETIME DISCOUNTED VALUE OF NETWORK CONNECTIVITY. International Journal of Modeling, Simulation, and Scientific Computing, 2018, 21, 1850018.	0.9	7
309	Dynamically evolved community size and stability of random Lotka-Volterra ecosystems ^(a) . Europhysics Letters, 2018, 123, 48004.	0.7	40
310	Biodiversity increases and decreases ecosystem stability. Nature, 2018, 563, 109-112.	13.7	261
311	Competition between strains of <i>Borrelia afzelii </i> Proceedings of the Royal Society B: Biological Sciences, 2018, 285, 20181804.	1.2	14
312	Spectral properties of complex networks. Chaos, 2018, 28, 102101.	1.0	37

#	ARTICLE	IF	CITATIONS
313	Protist species richness and soil microbiome complexity increase towards climax vegetation in the Brazilian Cerrado. Communications Biology, 2018, 1, 135.	2.0	58
314	Deciphering the Interdependence between Ecological and Evolutionary Networks. Trends in Ecology and Evolution, 2018, 33, 504-512.	4.2	28
315	Density-dependent interspecific interactions and the complexity–stability relationship. Proceedings of the Royal Society B: Biological Sciences, 2018, 285, 20180698.	1.2	15
316	Potential oscillators and keystone modules in food webs. Ecology Letters, 2018, 21, 1330-1340.	3.0	11
317	Robust Microgrid Clustering in a Distribution System With Inverter-Based DERs. IEEE Transactions on Industry Applications, 2018, 54, 5152-5162.	3.3	26
319	Frequency-dependent feedback constrains plant community coexistence. Nature Ecology and Evolution, 2018, 2, 1403-1407.	3.4	66
320	Stability criteria for complex microbial communities. Nature Communications, 2018, 9, 2970.	5.8	113
321	Biotic interactions in species distribution modelling: 10 questions to guide interpretation and avoid false conclusions. Global Ecology and Biogeography, 2018, 27, 1004-1016.	2.7	211
322	Signatures of ecological processes in microbial community time series. Microbiome, 2018, 6, 120.	4.9	81
323	Identifying a common backbone of interactions underlying food webs from different ecosystems. Nature Communications, 2018, 9, 2603.	5.8	34
324	Coexistence of many species in random ecosystems. Nature Ecology and Evolution, 2018, 2, 1237-1242.	3.4	90
325	Simplicity from complex interactions. Nature Ecology and Evolution, 2018, 2, 1201-1202.	3.4	4
326	A review of species role concepts in food webs. Food Webs, 2018, 16, e00093.	0.5	48
327	Decomposing the effects of ocean environments on predator–prey body-size relationships in food webs. Royal Society Open Science, 2018, 5, 180707.	1.1	6
328	Complexity and stability of ecological networks: a review of the theory. Population Ecology, 2018, 60, 319-345.	0.7	320
329	The effect of multiple biotic interaction types on species persistence. Ecology, 2018, 99, 2327-2337.	1.5	29
330	What drives interaction strengths in complex food webs? A test with feeding rates of a generalist stream predator. Ecology, 2018, 99, 1591-1601.	1.5	31
331	Coevolution Slows the Disassembly of Mutualistic Networks. American Naturalist, 2018, 192, 490-502.	1.0	16

#	Article	IF	Citations
332	A unifying framework for fast randomization of ecological networks with fixed (node) degrees. MethodsX, 2018, 5, 773-780.	0.7	8
333	Flow regime alteration degrades ecological networks in riparian ecosystems. Nature Ecology and Evolution, 2018, 2, 86-93.	3.4	188
334	The Necessity of Multitrophic Approaches in Community Ecology. Trends in Ecology and Evolution, 2018, 33, 754-764.	4.2	105
335	Biodiversity and robustness of large ecosystems. Ecological Complexity, 2018, 36, 101-109.	1.4	1
336	Emergence of weakâ€intransitive competition through adaptive diversification and ecoâ€evolutionary feedbacks. Journal of Ecology, 2018, 106, 877-889.	1.9	22
337	Effect of population abundances on the stability of large random ecosystems. Physical Review E, 2018, 98, 022410.	0.8	58
338	Direct measurement of pervasive weak repression by microRNAs and their role at the network level. BMC Genomics, 2018, 19, 362.	1.2	9
339	A New, Necessary and Sufficient condition for Hurwitz Stability of a Real Matrix Without Characteristic Polynomial, Using Qualitative Reasoning. , 2018, , .		0
340	The feasibility and stability of large complex biological networks: a random matrix approach. Scientific Reports, 2018, 8, 8246.	1.6	63
341	The feasibility of equilibria in large ecosystems: A primary but neglected concept in the complexity-stability debate. PLoS Computational Biology, 2018, 14, e1005988.	1.5	43
342	Biomonitoring for the 21st Century: Integrating Next-Generation Sequencing Into Ecological Network Analysis. Advances in Ecological Research, 2018, 58, 1-62.	1.4	68
343	Ecological and Evolutionary Modelling. SpringerBriefs in Ecology, 2018, , .	0.2	5
344	Ecological Networks. , 2019, , 1131-1141.		1
345	Predation risk influences foodâ€web structure by constraining species diet choice. Ecology Letters, 2019, 22, 1734-1745.	3.0	26
346	Global stability and persistence of complex foodwebs. Annali Di Matematica Pura Ed Applicata, 2019, 198, 1693-1709.	0.5	4
347	Breaking the Spell of Nestedness: The Entropic Origin of Nestedness in Mutualistic Systems. Physical Review X, 2019, 9, .	2.8	31
348	Universal hypotrochoidic law for random matrices with cyclic correlations. Physical Review E, 2019, 100, 010302.	0.8	10
349	Predicting the nonâ€linear collapse of plant–frugivore networks due to habitat loss. Ecography, 2019, 42, 1765-1776.	2.1	22

#	Article	IF	CITATIONS
350	Models in Microbial Ecology. , 2019, , 211-211.		6
351	Advancing our understanding of ecological stability. Ecology Letters, 2019, 22, 1349-1356.	3.0	147
352	Consistent temperature dependence of functional response parameters and their use in predicting population abundance. Journal of Animal Ecology, 2019, 88, 1670-1683.	1.3	23
353	Mutualistic networks: moving closer to a predictive theory. Ecology Letters, 2019, 22, 1517-1534.	3.0	128
354	Difficulty in inferring microbial community structure based on co-occurrence network approaches. BMC Bioinformatics, 2019, 20, 329.	1.2	121
355	Implications of non-native species for mutualistic network resistance and resilience. PLoS ONE, 2019, 14, e0217498.	1.1	12
356	A simple model predicts how warming simplifies wild food webs. Nature Climate Change, 2019, 9, 611-616.	8.1	50
357	An Approach to Study Species Persistence in Unconstrained Random Networks. Scientific Reports, 2019, 9, 14110.	1.6	1
358	Probiotic potential of Lactobacillus on the intestinal microflora against Escherichia coli induced mice model through high-throughput sequencing. Microbial Pathogenesis, 2019, 137, 103760.	1.3	34
359	Microbial Ecology: Complex Bacterial Communities Reduce Selection for Antibiotic Resistance. Current Biology, 2019, 29, R1143-R1145.	1.8	3
360	Metabolite-mediated modelling of microbial community dynamics captures emergent behaviour more effectively than species–species modelling. Journal of the Royal Society Interface, 2019, 16, 20190423.	1.5	17
361	Non-trophic interactions strengthen the diversityâ€"functioning relationship in an ecological bioenergetic network model. PLoS Computational Biology, 2019, 15, e1007269.	1.5	19
362	Gene regulatory network stabilized by pervasive weak repressions: microRNA functions revealed by the May–Wigner theory. National Science Review, 2019, 6, 1176-1188.	4.6	30
363	Interaction strength promotes robustness against cascading effects in mutualistic networks. Scientific Reports, 2019, 9, 676.	1.6	20
364	Laplacian matrices and Turing bifurcations: revisiting Levin 1974 and the consequences of spatial structure and movement for ecological dynamics. Theoretical Ecology, 2019, 12, 265-281.	0.4	14
365	Fineâ€ŧuning the nested structure of pollination networks by adaptive interaction switching, biogeography and sampling effect in the Galápagos Islands. Oikos, 2019, 128, 1413-1423.	1.2	6
366	Foodwebs based on unreliable foundations: spatiotemporal masting merged with consumer movement, storage, and diet. Ecological Monographs, 2019, 89, e01381.	2.4	37
367	Nestedness in complex networks: Observation, emergence, and implications. Physics Reports, 2019, 813, 1-90.	10.3	127

#	Article	IF	CITATIONS
368	Dynamic Modulation of the Gut Microbiota and Metabolome by Bacteriophages in a Mouse Model. Cell Host and Microbe, 2019, 25, 803-814.e5.	5.1	317
369	Minimal Interspecies Interaction Adjustment (MIIA): Inference of Neighbor-Dependent Interactions in Microbial Communities. Frontiers in Microbiology, 2019, 10, 1264.	1.5	12
370	Horizontal and vertical diversity jointly shape food web stability against small and large perturbations. Ecology Letters, 2019, 22, 1152-1162.	3.0	41
371	Microbial coexistence through chemical-mediated interactions. Nature Communications, 2019, 10, 2052.	5.8	99
372	Dominance network analysis provides a new framework for studying the diversity–stability relationship. Ecological Monographs, 2019, 89, e01358.	2.4	30
373	Plant species abundance and phylogeny explain the structure of recruitment networks. New Phytologist, 2019, 223, 366-376.	3.5	8
374	Impacts of consumer–resource interaction transitions on persistence and longâ€term interaction outcomes of random ecological networks. Oikos, 2019, 128, 1147-1157.	1.2	4
375	Analysis of productivity and stability of synthetic microbial communities. Journal of the Royal Society Interface, 2019, 16, 20180859.	1.5	12
376	Reconciling cooperation, biodiversity and stability in complex ecological communities. Scientific Reports, 2019, 9, 5580.	1.6	19
377	Impact of globalization on the resilience and sustainability of natural resources. Nature Sustainability, 2019, 2, 283-289.	11.5	74
378	Temperature directly and indirectly influences food web structure. Scientific Reports, 2019, 9, 5312.	1.6	47
379	Competition-induced increase of species abundance in mutualistic networks. Journal of Statistical Mechanics: Theory and Experiment, 2019, 2019, 033502.	0.9	1
380	Eco-Evolutionary Origins of Diverse Abundance, Biomass, and Trophic Structures in Food Webs. Frontiers in Ecology and Evolution, 2019, 7, .	1.1	17
381	Food web rewiring in a changing world. Nature Ecology and Evolution, 2019, 3, 345-354.	3.4	200
382	CONTROLLING NETWORK DYNAMICS. International Journal of Modeling, Simulation, and Scientific Computing, 2019, 22, 1950021.	0.9	8
383	Instability of Multilayer Networks Induced by Inter-Layer Coupling. , 2019, , .		1
384	Species richness and vulnerability to disturbance propagation in real food webs. Scientific Reports, 2019, 9, 19331.	1.6	15
385	Longitudinal study of the bacterial and fungal microbiota in the human sinuses reveals seasonal and annual changes in diversity. Scientific Reports, 2019, 9, 17416.	1.6	44

#	Article	IF	CITATIONS
386	Dynamical stability of water distribution networks. Proceedings of the Royal Society A: Mathematical, Physical and Engineering Sciences, 2019, 475, 20190291.	1.0	2
387	The impact of Bacillus subtilis 18 isolated from Tibetan yaks on growth performance and gut microbial community in mice. Microbial Pathogenesis, 2019, 128, 153-161.	1.3	17
388	Sexual selection sustains biodiversity via producing negative densityâ€dependent population growth. Journal of Ecology, 2019, 107, 1433-1438.	1.9	12
389	Global patterns of the double mutualism phenomenon. Ecography, 2019, 42, 826-835.	2.1	18
390	Genomeâ€wide association studies on the phyllosphere microbiome: Embracing complexity in host–microbe interactions. Plant Journal, 2019, 97, 164-181.	2.8	77
391	Microbial cross-feeding promotes multiple stable states and species coexistence, but also susceptibility to cheaters. Journal of Theoretical Biology, 2019, 465, 63-77.	0.8	22
392	Ecological drift and competitive interactions predict unique patterns in temporal fluctuations of population size. Ecology, 2019, 100, e02623.	1.5	2
393	A unifying framework for interpreting and predicting mutualistic systems. Nature Communications, 2019, 10, 242.	5.8	21
394	The k-core as a predictor of structural collapse in mutualistic ecosystems. Nature Physics, 2019, 15, 95-102.	6.5	100
395	An insight into gut microbiota and its functionalities. Cellular and Molecular Life Sciences, 2019, 76, 473-493.	2.4	552
396	Does God roll dice? Neutrality and determinism in evolutionary ecology. Biology and Philosophy, 2019, 34, 1.	0.7	4
397	The mechanics of predator–prey interactions: First principles of physics predict predator–prey size ratios. Functional Ecology, 2019, 33, 323-334.	1.7	52
398	How to Invade an Ecological Network. Trends in Ecology and Evolution, 2019, 34, 121-131.	4.2	63
399	Mycorrhizal network assembly in a community context: The presence of neighbours matters. Journal of Ecology, 2020, 108, 366-377.	1.9	15
400	Measuring, modeling, and managing systemic risk: the missing aspect of human agency. Journal of Risk Research, 2020, 23, 1301-1317.	1.4	12
401	Identifying important interaction modifications in ecological systems. Oikos, 2020, 129, 147-157.	1.2	5
402	A perspective on stageâ€structured mutualism and its community consequences. Oikos, 2020, 129, 297-310.	1.2	8
403	Predictive interactome modeling for precision microbiome engineering. Current Opinion in Chemical Engineering, 2020, 30, 77-85.	3.8	16

#	Article	IF	Citations
404	Ecological Networks as a Framework for Understanding and Predicting Contaminant Movement Across the Land-Water Interface., 2020, , 299-341.		0
405	Memory and mutualism in species sustainability: A time-fractional Lotka-Volterra model with harvesting. Heliyon, 2020, 6, e04816.	1.4	20
406	Individual species provide multifaceted contributions to the stability of ecosystems. Nature Ecology and Evolution, 2020, 4, 1594-1601.	3.4	48
407	Structural stability: Concepts, methods, and applications. Biodiversity Science, 2020, 28, 1345-1361.	0.2	5
408	From spears to automatic rifles: The shift in hunting techniques as a mammal depletion driver during the Angolan civil war. Biological Conservation, 2020, 249, 108744.	1.9	13
409	Spatial resolution and location impact group structure in a marine food web. Ecology Letters, 2020, 23, 1451-1459.	3.0	5
410	Stability Constrains How Populations Spread Risk in a Model of Food Exchange. One Earth, 2020, 2, 269-283.	3.6	5
411	Diverse interactions and ecosystem engineering can stabilize community assembly. Nature Communications, 2020, 11 , 3307.	5.8	21
412	Direct interaction network inference for compositional data via codaloss. Journal of Bioinformatics and Computational Biology, 2020, 18, 2050037.	0.3	0
413	Stage-Specific Parasitism by a Mutualistic Partner Can Increase the Host Abundance. Frontiers in Ecology and Evolution, 2020, 8, .	1.1	3
414	Dispersal-induced instability in complex ecosystems. Nature Communications, 2020, 11, 6032.	5.8	26
415	Stability of ecosystems enhanced by species-interaction constraints. Physical Review E, 2020, 102, 062405.	0.8	9
416	The Gut Microbiome, Aging, and Longevity: A Systematic Review. Nutrients, 2020, 12, 3759.	1.7	207
417	Dynamic global analysis of transcription reveals the role of miRNAs in synergistic stabilization of gene expression. Science Bulletin, 2020, 65, 2130-2140.	4.3	3
418	Revisiting the Links-Species Scaling Relationship in Food Webs. Patterns, 2020, 1, 100079.	3.1	9
419	Assessment of the Resilience of a Tartary Buckwheat (Fagopyrum tataricum) Cultivation System in Meigu, Southwest China. Sustainability, 2020, 12, 5683.	1.6	5
420	Resolving Food-Web Structure. Annual Review of Ecology, Evolution, and Systematics, 2020, 51, 55-80.	3.8	53
421	Stability and Double-Hopf Bifurcations of a Gause–Kolmogorov-Type Predator–Prey System with Indirect Prey-Taxis. Journal of Dynamics and Differential Equations, 2021, 33, 1917-1957.	1.0	26

#	Article	IF	Citations
422	Mutualistic networks emerging from adaptive niche-based interactions. Nature Communications, 2020, 11, 5470.	5.8	25
423	The potential of fatty acid isotopes to trace trophic transfer in aquatic food-webs. Philosophical Transactions of the Royal Society B: Biological Sciences, 2020, 375, 20190652.	1.8	16
424	The natural flow regime: A master variable for maintaining river ecosystem health. Ecohydrology, 2020, 13, e2247.	1.1	42
425	The Structure of Ecological Networks Across Levels of Organization. Annual Review of Ecology, Evolution, and Systematics, 2020, 51, 433-460.	3.8	128
426	The ghost of disturbance past: long-term effects of pulse disturbances on community biomass and composition. Proceedings of the Royal Society B: Biological Sciences, 2020, 287, 20200678.	1.2	24
427	Temporal stability vs. community matrix measures of stability and the role of weak interactions. Ecology Letters, 2020, 23, 1468-1478.	3.0	15
428	Spacing ratio characterization of the spectra of directed random networks. Physical Review E, 2020, 102, 062305.	0.8	12
429	Excluding arbuscular mycorrhiza lowers variability in soil respiration but slows down recovery from perturbations. Ecosphere, 2020, 11, e03308.	1.0	1
430	Diversity of Functional Traits and Interactions. Theoretical Biology, 2020, , .	0.0	4
431	A predator–prey model with Crowley–Martin functional response: A nonautonomous study. Natural Resource Modelling, 2020, 33, e12287.	0.8	8
432	Strong selfâ€regulation and widespread facilitative interactions in phytoplankton communities. Journal of Ecology, 2020, 108, 2232-2242.	1.9	12
433	Component response rate variation underlies the stability of highly complex finite systems. Scientific Reports, 2020, 10, 8296.	1.6	0
434	Control of ecological outcomes through deliberate parameter changes in a model of the gut microbiome. Physical Review E, 2020, 101, 052402.	0.8	0
435	Changes in stream foodâ€web structure across a gradient of acid mine drainage increase local community stability. Ecology, 2020, 101, e03102.	1.5	8
436	The effects of intraspecific and interspecific diversity on food web stability. Theoretical Ecology, 2020, 13, 399-407.	0.4	4
437	The stability of mutualism. Nature Communications, 2020, 11, 2648.	5.8	18
438	Pollinator Specific Richness and Their Interactions With Local Plant Species: 10 Years of Sampling in Mediterranean Habitats. Environmental Entomology, 2020, 49, 947-955.	0.7	10
439	How to balance ecosystem services and economic benefits? – A case study in the Pearl River Delta, China. Journal of Environmental Management, 2020, 271, 110917.	3.8	38

#	Article	IF	CITATIONS
440	Auxotrophic interactions: a stabilizing attribute of aquatic microbial communities?. FEMS Microbiology Ecology, 2020, 96, .	1.3	31
441	Comparative analysis of microbial community structure between healthy and Aeromonas veronii-infected Yangtze finless porpoise. Microbial Cell Factories, 2020, 19, 123.	1.9	28
442	Robustness to extinction and plasticity derived from mutualistic bipartite ecological networks. Scientific Reports, 2020, 10, 9783.	1.6	16
443	Asymmetric interactions of seedâ€predation network contribute to rareâ€species advantage. Ecology, 2020, 101, e03050.	1.5	9
444	Topology-based analysis of pelagic food web structure in the central and eastern tropical Pacific Ocean based on longline observer data. Acta Oceanologica Sinica, 2020, 39, 1-9.	0.4	3
445	Small vertebrates are key elements in the frugivory networks of a hyperdiverse tropical forest. Scientific Reports, 2020, 10, 10594.	1.6	25
446	Scoring Species for Synthetic Community Design: Network Analyses of Functional Core Microbiomes. Frontiers in Microbiology, 2020, 11, 1361.	1.5	26
447	Species dynamics and interactions via metabolically informed consumer-resource models. Theoretical Ecology, 2020, 13, 503-518.	0.4	10
448	Understanding the evolution of interspecies interactions in microbial communities. Philosophical Transactions of the Royal Society B: Biological Sciences, 2020, 375, 20190256.	1.8	68
449	The emergent interactions that govern biodiversity change. Proceedings of the National Academy of Sciences of the United States of America, 2020, 117, 17074-17083.	3.3	30
450	Comparative analysis of microbial community structure in the ponds with different aquaculture model and fish by high-throughput sequencing. Microbial Pathogenesis, 2020, 142, 104101.	1.3	32
451	Disturbance in human gut microbiota networks by parasites and its implications in the incidence of depression. Scientific Reports, 2020, 10, 3680.	1.6	22
452	Random walks on hypergraphs. Physical Review E, 2020, 101, 022308.	0.8	99
453	The balance of interaction types determines the assembly and stability of ecological communities. Nature Ecology and Evolution, 2020, 4, 356-365.	3.4	64
454	Constraints on the distribution of species abundances indicate universal mechanisms of community assembly. Ecological Research, 2020, 35, 362-371.	0.7	4
455	Mutualism increases diversity, stability, and function of multiplex networks that integrate pollinators into food webs. Nature Communications, 2020, 11, 2182.	5.8	48
456	How pulse disturbances shape sizeâ€abundance pyramids. Ecology Letters, 2020, 23, 1014-1023.	3.0	13
457	Ecological communities from random generalized Lotka-Volterra dynamics with nonlinear feedback. Physical Review E, 2020, 101, 032101.	0.8	16

#	Article	IF	Citations
458	Telling ecological networks apart by their structure: An environment-dependent approach. PLoS Computational Biology, 2020, 16, e1007787.	1.5	17
459	Diversity increases the stability of ecosystems. PLoS ONE, 2020, 15, e0228692.	1.1	18
460	Diversity and coexistence are influenced by timeâ€dependent species interactions in a predator–prey system. Ecology Letters, 2020, 23, 983-993.	3.0	39
461	Biochar affects taxonomic and functional community composition of protists. Biology and Fertility of Soils, 2021, 57, 15-29.	2.3	26
462	Robustness of a metaâ€network to alternative habitat loss scenarios. Oikos, 2021, 130, 133-142.	1.2	5
463	Structural stability of coexistence in evolutionary dynamics of cyclic competition. Applied Mathematics and Computation, 2021, 394, 125794.	1.4	4
464	Behaviour moderates the impacts of foodâ€web structure on species coexistence. Ecology Letters, 2021, 24, 298-309.	3.0	7
465	Mutualism between antagonists: its ecological and evolutionary implications. Integrative Zoology, 2021, 16, 84-96.	1.3	30
466	The multiple meanings of omnivory influence empirical, modular theory and whole food web stability relationships. Journal of Animal Ecology, 2021, 90, 447-459.	1.3	8
467	The development of nations conditions the disease space. PLoS ONE, 2021, 16, e0244843.	1.1	4
468	Exploring the effect of network topology, mRNA and protein dynamics on gene regulatory network stability. Nature Communications, 2021, 12, 130.	5.8	13
469	Bipartite network analysis of ant-task associations reveals task groups and absence of colonial daily activity. Royal Society Open Science, 2021, 8, 201637.	1.1	1
470	An overview of theoretical and experimental approach to study environmental microflora., 2021,, 119-139.		0
471	Dimensionality reduction of complex dynamical systems. IScience, 2021, 24, 101912.	1.9	19
472	Emergence of homochirality in large molecular systems. Proceedings of the National Academy of Sciences of the United States of America, 2021, 118, .	3.3	32
474	Role of Algal Community Stability in Harmful Algal Blooms in River-Connected Lakes. Microbial Ecology, 2021, 82, 309-318.	1.4	7
475	Merging dynamical and structural indicators to measure resilience in multispecies systems. Journal of Animal Ecology, 2021, 90, 2027-2040.	1.3	14
476	Ecological rules for the assembly of microbiome communities. PLoS Biology, 2021, 19, e3001116.	2.6	67

#	Article	IF	CITATIONS
477	Trait positions for elevated invasiveness in adaptive ecological networks. Biological Invasions, 2021, 23, 1965-1985.	1.2	18
478	Multitrophic diversity sustains ecological complexity by dampening topâ€down control of a shallow marine benthic food web. Ecology, 2021, 102, e03274.	1.5	6
479	An allometric niche model for species interactions in temperate freshwater ecosystems. Ecosphere, 2021, 12, e03420.	1.0	7
480	A novel approach to quantifying trophic interaction strengths and impact of invasive species in food webs. Biological Invasions, 2021, 23, 2093-2107.	1.2	18
483	Pollinator interaction flexibility across scales affects patch colonization and occupancy. Nature Ecology and Evolution, 2021, 5, 787-793.	3.4	8
485	Hybrid networks reveal contrasting effects of agricultural intensification on antagonistic and mutualistic motifs. Functional Ecology, 2021, 35, 1341-1352.	1.7	3
486	Bridging parametric and nonparametric measures of species interactions unveils new insights of nonâ€equilibrium dynamics. Oikos, 2021, 130, 1027-1034.	1.2	10
487	Constraints and variation in food web link-species space. Biology Letters, 2021, 17, 20210109.	1.0	3
488	Markets as ecological networks: inferring interactions and identifying communities. Journal of Complex Networks, 2021, 9, .	1.1	2
489	Parasitoid community responds indiscriminately to fluctuating spruce budworm (Lepidoptera:) Tj ETQq1 1 0.784	314 rgBT /0 0.4	Oyerlock 10
491	Identifying conversion efficiency as a key mechanism underlying food webs adaptive evolution: a step forward, or backward?. Oikos, 2021, 130, 904-930.	1.2	3
492	Niche Theory for Mutualism: A Graphical Approach to Plant-Pollinator Network Dynamics. American Naturalist, 2021, 197, 393-404.	1.0	16
493	Coexistence holes characterize the assembly and disassembly of multispecies systems. Nature Ecology and Evolution, 2021, 5, 1091-1101.	3.4	18
494	Recovering dynamic networks in big static datasets. Physics Reports, 2021, 912, 1-57.	10.3	29
495	Modeling genome-wide by environment interactions through omnigenic interactome networks. Cell Reports, 2021, 35, 109114.	2.9	20
496	Reinterpreting the relationship between number of species and number of links connects community structure and stability. Nature Ecology and Evolution, 2021, 5, 1102-1109.	3.4	17
497	Does differential phosphorus processing by plankton influence the ecological state of shallow lakes?. Science of the Total Environment, 2021, 769, 144357.	3.9	1

#	Article	IF	CITATIONS
499	How complementarity and selection affect the relationship between ecosystem functioning and stability. Ecology, 2021, 102, e03347.	1.5	38
500	Persistent individual bias in a voter model with quenched disorder. Physical Review E, 2021, 103, 052309.	0.8	4
501	Genetic and plastic rewiring of food webs under climate change. Journal of Animal Ecology, 2021, 90, 1814-1830.	1.3	18
502	Turing's Diffusive Threshold in Random Reaction-Diffusion Systems. Physical Review Letters, 2021, 126, 238101.	2.9	26
503	Statistical mechanics of clock gene networks underlying circadian rhythms. Applied Physics Reviews, 2021, 8, .	5 . 5	14
504	Smart grid architecture model for control, optimization and data analytics of future power networks with more renewable energy. Journal of Cleaner Production, 2021, 301, 126877.	4.6	92
505	Analytic approach for the number statistics of non-Hermitian random matrices. Physical Review E, 2021, 103, 062108.	0.8	1
506	Fluctuation spectra of large random dynamical systems reveal hidden structure in ecological networks. Nature Communications, 2021, 12, 3625.	5.8	12
507	Understanding the emergence of contingent and deterministic exclusion in multispecies communities. Ecology Letters, 2021, 24, 2155-2168.	3.0	8
510	Faster recovery of soil biodiversity in native species mixture than in <i>Eucalyptus</i> monoculture after 60Âyears afforestation in tropical degraded coastal terraces. Global Change Biology, 2021, 27, 5329-5340.	4.2	17
511	Biochar and Intercropping With Potato–Onion Enhanced the Growth and Yield Advantages of Tomato by Regulating the Soil Properties, Nutrient Uptake, and Soil Microbial Community. Frontiers in Microbiology, 2021, 12, 695447.	1.5	25
512	The joint role of coevolutionary selection and network structure in shaping trait matching in mutualisms. Proceedings of the Royal Society B: Biological Sciences, 2021, 288, 20211291.	1.2	1
514	Can a complex ecosystem survive the loss of a large fraction of its species? A random matrix theory of secondary extinction. Oikos, 2021, 130, 1512-1522.	1.2	6
515	A signal of competitive dominance in mid-latitude herbaceous plant communities. Royal Society Open Science, 2021, 8, 201361.	1.1	2
516	Inferring multilayer interactome networks shaping phenotypic plasticity and evolution. Nature Communications, 2021, 12, 5304.	5.8	13
517	Species richness increases fitness differences, but does not affect niche differences. Ecology Letters, 2021, 24, 2611-2623.	3.0	12
518	Ecosystem complexity enhances the resilience of plant-pollinator systems. One Earth, 2021, 4, 1286-1296.	3.6	9
520	Diverse communities behave like typical random ecosystems. Physical Review E, 2021, 104, 034416.	0.8	26

#	Article	IF	Citations
521	A roadmap towards predicting species interaction networks (across space and time). Philosophical Transactions of the Royal Society B: Biological Sciences, 2021, 376, 20210063.	1.8	33
522	The evolution of strategy in bacterial warfare via the regulation of bacteriocins and antibiotics. ELife, 2021, 10, .	2.8	40
523	Improving the pollinator pantry: Restoration and management of open farmland ponds enhances the complexity of plant-pollinator networks. Agriculture, Ecosystems and Environment, 2021, 320, 107611.	2.5	6
524	Organic phosphorus availability shapes the diversity of phoD-harboring bacteria in agricultural soil. Soil Biology and Biochemistry, 2021, 161, 108364.	4.2	38
525	Characterizing the dynamic evolutionary behavior of multivariate price movement fluctuation in the carbon-fuel energy markets system from complex network perspective. Energy, 2022, 239, 121896.	4.5	5
526	Metabolic cooperation and spatiotemporal niche partitioning in a kefir microbial community. Nature Microbiology, 2021, 6, 196-208.	5.9	138
527	Singing Fish in an Ocean of Noise: Effects of Boat Noise on the Plainfin Midshipman (Porichthys) Tj ETQq0 0 0 rg	BT/Overlo	ock ₁ 10 Tf 50 !
528	A Universal Mechanism of Determining the Robustness of Evolving Systems., 2015,, 95-117.		5
529	Cooperation and stability for complex systems in resource-limited environments. Theoretical Ecology, 2020, 13, 239-250.	0.4	24
530	Contests between species aid biodiversity. Nature, 2017, 548, 166-167.	13.7	2
531	Heterogeneity in ecological mutualistic networks dominantly determines community stability. Scientific Reports, 2014, 4, 5912.	1.6	30
532	Predicting collapse of complex ecological systems: quantifying the stability–complexity continuum. Journal of the Royal Society Interface, 2020, 17, 20190391.	1.5	20
560	Entropy production in systems with random transition rates close to equilibrium. Physical Review E, 2017, 96, 062110.	0.8	7
561	Subpopulations and stability in microbial communities. Physical Review Research, 2020, 2, .	1.3	10
562	Universal transient behavior in large dynamical systems on networks. Physical Review Research, 2020, 2, .	1.3	23
563	Linear stability analysis of large dynamical systems on random directed graphs. Physical Review Research, 2020, 2, .	1.3	19
564	Eco-evolutionary dynamics in a disturbed world: implications for the maintenance of ecological networks. F1000Research, 2019, 8, 97.	0.8	12
565	Factors Determining Nestedness in Complex Networks. PLoS ONE, 2013, 8, e74025.	1.1	78

#	Article	IF	Citations
566	Bounds on Transient Instability for Complex Ecosystems. PLoS ONE, 2016, 11, e0157876.	1.1	5
567	Human Impacts and Climate Change Influence Nestedness and Modularity in Food-Web and Mutualistic Networks. PLoS ONE, 2016, 11, e0157929.	1.1	31
568	Does a Species' Extinction–Proneness Predict Its Contribution to Nestedness? A Test Using a Sunbird-Tree Visitation Network. PLoS ONE, 2017, 12, e0170223.	1.1	1
569	The combined effects of biotic and abiotic stress on species richness and connectance. PLoS ONE, 2017, 12, e0172828.	1.1	6
570	Robustness of rigid and adaptive networks to species loss. PLoS ONE, 2017, 12, e0189086.	1.1	23
572	Lotka-Volterra pairwise modeling fails to capture diverse pairwise microbial interactions. ELife, 2017, 6, .	2.8	203
573	Multistability and regime shifts in microbial communities explained by competition for essential nutrients. ELife, $2019,8,.$	2.8	48
574	Qualitative community stability determines parasite establishment and richness in estuarine marshes. Peerl, 2013, 1, e92.	0.9	8
575	Addressing initialisation uncertainty for end-to-end ecosystem models: application to the Chatham Rise Atlantis model. PeerJ, 2020, 8, e9254.	0.9	3
576	Short Notes on Theories of Species Diversity. Creative Economy, 2021, , 33-53.	0.1	1
580	The impact of individual variation on abrupt collapses in mutualistic networks. Ecology Letters, 2022, 25, 26-37.	3.0	13
581	Planetary Boundaries for Forests and Their National Exceedance. Environmental Science & Emp; Technology, 2021, 55, 15423-15434.	4.6	7
583	Impact of invasive plants on food webs and pathways. Biodiversity Science, 2013, 21, 249-259.	0.2	0
585	Hunting in Groups—Dynamics of Chase-and-Escape. Journal of Applied Nonlinear Dynamics, 2014, 3, 105-113.	0.1	0
587	Methods of determining the stability of geosystems in zones of NPP influence. ScienceRise, 2015, 7, 62.	0.1	0
589	Noether's Conservation Laws and Stability in Nonlinear Conservative Interactions. Open Access Library Journal (oalib), 2016, 03, 1-18.	0.1	2
594	Expanded view of ecosystem stability: A grazed grassland case study. PLoS ONE, 2017, 12, e0178235.	1.1	0
613	Temporal variability in population and community dynamics. Ecology, 2022, 103, e03577.	1.5	3

#	Article	IF	CITATIONS
614	Strange invaders increase disturbance and promote generalists in an evolving food web. Scientific Reports, 2021, 11, 21274.	1.6	6
616	Spatial heterogeneity enhance robustness of large multi-species ecosystems. PLoS Computational Biology, 2021, 17, e1008899.	1.5	5
618	Ecology and Evolution of Density-Dependence. Theoretical Biology, 2020, , 161-174.	0.0	0
619	Fighting microbial pathogens by integrating host ecosystem interactions and evolution. BioEssays, 2021, 43, 2000272.	1.2	5
620	Genetic dissection of growth trajectories in forest trees: From FunMap to FunGraph. Forestry Research, 2021, 1, 1-10.	0.5	4
623	The Possibility that the Evolution of Sexual Traits Stabilizes Ecological Communities. Theoretical Biology, 2020, , 51-62.	0.0	0
624	Interaction-Type Diversity and Community Stability. Theoretical Biology, 2020, , 175-190.	0.0	1
625	Incorporating Ontogenetic Niche Shifts into Hybrid Community Dynamics. Theoretical Biology, 2020, , 3-18.	0.0	0
627	Modelling Ecological Systems from a Niche Theory to Lotka-Volterra Equations. SEMA SIMAI Springer Series, 2020, , 1-18.	0.4	0
632	Local stability properties of complex, speciesâ€rich soil food webs with functional block structure. Ecology and Evolution, 2021, 11, 16070-16081.	0.8	11
633	Positive interactions are common among culturable bacteria. Science Advances, 2021, 7, eabi7159.	4.7	107
636	The Lynx and Hare Data of 200 Years as the Nonlinear Conserving Interaction Based on Noether's Conservation Laws and Stability. Journal of Applied Mathematics and Physics, 2021, 09, 2807-2847.	0.2	0
637	A Multilayer Interactome Network Constructed in a Forest Poplar Population Mediates the Pleiotropic Control of Complex Traits. Frontiers in Genetics, 2021, 12, 769688.	1.1	0
639	Trophic rewilding benefits a tropical community through direct and indirect network effects. Ecography, 2022, 2022, .	2.1	8
640	Environmental perturbations and transitions between ecological and evolutionary equilibria: an eco-evolutionary feedback framework. , 0, 1, .		7
644	Periodontal and Peri-Implant Microbiome Dysbiosis Is Associated With Alterations in the Microbial Community Structure and Local Stability. Frontiers in Microbiology, 2021, 12, 785191.	1.5	14
645	Dynamical systems on large networks with predator-prey interactions are stable and exhibit oscillations. Physical Review E, 2022, 105, 014305.	0.8	8
646	The composition, biotic network, and assembly of plastisphere protistan taxonomic and functional communities in plastic-mulching croplands. Journal of Hazardous Materials, 2022, 430, 128390.	6.5	45

#	Article	IF	CITATIONS
647	On the Dynamic Nature of Omnivory in a Changing World. BioScience, 2022, 72, 416-430.	2.2	4
648	High-order correlations in species interactions lead to complex diversity-stability relationships for ecosystems. Physical Review E, 2022, 105, 014406.	0.8	4
649	Nestedness interacts with subnetwork structures and interconnection patterns to affect community dynamics in ecological multilayer networks. Journal of Animal Ecology, 2022, 91, 738-751.	1.3	6
650	Stability and selective extinction in complex mutualistic networks. Physical Review E, 2022, 105, 014309.	0.8	1
651	A robust transition to homochirality in complex chemical reaction networks. Proceedings of the Royal Society A: Mathematical, Physical and Engineering Sciences, 2022, 478, .	1.0	4
652	Traitâ€based inference of ecological network assembly: A conceptual framework and methodological toolbox. Ecological Monographs, 2022, 92, .	2.4	9
653	Disparate patterns of taxonomic and functional predator diversity under different forest management regimes. Ecological Indicators, 2022, 136, 108591.	2.6	5
654	The sensitivity of complex dynamic food webs to the loss of top omnivores. Journal of Theoretical Biology, 2022, 538, 111027.	0.8	1
655	Accuracy of a one-dimensional reduction of dynamical systems on networks. Physical Review E, 2022, 105, 024305.	0.8	15
657	Organisms as complex structures wrapped in a complex web of life. American Naturalist, 2022, 199, 804-807.	1.0	0
658	Limited Pairwise Synergistic and Antagonistic Interactions Impart Stability to Microbial Communities. Frontiers in Ecology and Evolution, 2022, 10, .	1.1	0
659	Interaction capacity as a potential driver of community diversity. Proceedings of the Royal Society B: Biological Sciences, 2022, 289, 20212690.	1.2	24
660	Eigenvalues of Random Matrices with Generalized Correlations: A Path Integral Approach. Physical Review Letters, 2022, 128, 120601.	2.9	8
661	Insect sociality plays a major role in a highly complex flower-visiting network in the neotropical savanna. Apidologie, 2022, 53, 1 .	0.9	2
663	Michaelis-Menten-Type Prey Harvesting in Discrete Modified Leslie-Gower Predator-Prey Model. Journal of Function Spaces, 2022, 2022, 1-23.	0.4	1
664	Community stability is related to animal diversity change. Ecosphere, 2022, 13, .	1.0	5
667	Fungal communities in feces of the frugivorous bat Ectophylla alba and its highly specialized Ficus colubrinae diet. Animal Microbiome, 2022, 4, 24.	1.5	2
669	A patchâ€dynamic metacommunity perspective on the persistence of mutualistic and antagonistic bipartite networks. Ecology, 2022, 103, e3686.	1.5	5

#	Article	IF	Citations
670	OxDNA to Study Species Interactions. Entropy, 2022, 24, 458.	1.1	1
671	Detectability and predator strategy affect egg depredation rates: Implications for mitigating nest depredation in farmlands. Science of the Total Environment, 2022, 829, 154558.	3.9	8
672	Financial stability and network complexity: A random matrix approach. International Review of Economics and Finance, 2022, 80, 177-185.	2.2	2
673	The stress gradient hypothesis explains plant-plant interaction networks in edapho climatic gradients. Acta Oecologica, 2022, 115, 103831.	0.5	3
674	Analysis of Plant-Insect Pollination Networkâ€"A Case Study on the Exotic Plants as Nectar Resource of Butterflies across Darjeeling District of West Bengal, India. , 2021, 11, .		0
675	The Genomic Physics of COVID-19 Pathogenesis and Spread. Cells, 2022, 11, 80.	1.8	8
677	Artefactual depiction of predator–prey trophic linkages in global soils. Scientific Reports, 2021, 11, 23861.	1.6	4
679	Ecological theory of mutualism: Robust patterns of stability and thresholds in twoâ€species population models. Ecology and Evolution, 2021, 11, 17651-17671.	0.8	15
682	Stability of large complex systems with heterogeneous relaxation dynamics. Journal of Statistical Mechanics: Theory and Experiment, 2021, 2021, 123301.	0.9	6
683	Food web rewiring drives long-term compositional differences and late-disturbance interactions at the community level. Proceedings of the National Academy of Sciences of the United States of America, 2022, 119, e2117364119.	3.3	6
684	Dynamical robustness of complex networks subject to long-range connectivity. Proceedings of the Royal Society A: Mathematical, Physical and Engineering Sciences, 2022, 478, .	1.0	3
693	Relentless Evolution. , 2022, , 50-108.		0
694	Regimes and Panarchy. , 2022, , 205-264.		0
695	Network Assembly. , 2022, , 109-204.		0
696	Rethinking Invasibility. , 2022, , 370-404.		0
697	Even shortâ€term revegetation complicates soil food webs and strengthens their links with ecosystem functions. Journal of Applied Ecology, 2022, 59, 1721-1733.	1.9	9
698	Generalized Structural Kinetic Modeling: A Survey and Guide. Frontiers in Molecular Biosciences, 2022, 9, 825052.	1.6	0
699	Linking multi-level population dynamics: state, role, and population. PeerJ, 2022, 10, e13315.	0.9	0

#	Article	IF	CITATIONS
700	The role of evolutionary modes for trait-based cascades in mutualistic networks. Ecological Modelling, 2022, 470, 109983.	1.2	2
701	Complexity–stability trade-off in empirical microbial ecosystems. Nature Ecology and Evolution, 2022, 6, 693-700.	3.4	29
705	Network resilience. Physics Reports, 2022, 971, 1-108.	10.3	51
706	Effect of delay on the emergent stability patterns in generalized Lotka–Volterra ecological dynamics. Philosophical Transactions Series A, Mathematical, Physical, and Engineering Sciences, 2022, 380, .	1.6	5
707	Stochastic Block Models Reveal a Robust Nested Pattern in Healthy Human Gut Microbiomes. , 0, , .		7
708	Dropping mortality by increasing connectivity in plant epidemics. Physical Review E, 2022, 105, .	0.8	1
709	Human limate Coupled Changes in Vegetation Community Complexity of China Since 1980s. Earth's Future, 2022, 10, .	2.4	4
710	Using ecological networks to answer questions in global biogeography and ecology. Journal of Biogeography, 2023, 50, 57-69.	1.4	24
711	Gut Microbiota Markers and Dietary Habits Associated with Extreme Longevity in Healthy Sardinian Centenarians. Nutrients, 2022, 14, 2436.	1.7	18
712	MiSDEED: a synthetic data engine for microbiome study power analysis and study design. Bioinformatics Advances, 0, , .	0.9	0
713	Satisfiability transition in asymmetric neural networks. Journal of Physics A: Mathematical and Theoretical, $0,$	0.7	3
714	Dimension reduction of dynamical systems on networks with leading and non-leading eigenvectors of adjacency matrices. Physical Review Research, 2022, 4, .	1.3	5
715	Monitoring fish using imaging sonar: Capacity, challenges and future perspective. Fish and Fisheries, 2022, 23, 1347-1370.	2.7	21
716	Primary Succession Changes the Composition and Functioning of the Protist Community on Mine Tailings, Especially Phototrophic Protists. ACS Environmental Au, 2022, 2, 396-408.	3.3	11
717	Global change reâ€structures alpine plant communities through interacting abiotic and biotic effects. Ecology Letters, 2022, 25, 1813-1826.	3.0	10
718	Removing flowers of a generalist plant changes pollinator visitation, composition, and interaction network structure. Ecosphere, 2022, 13 , .	1.0	7
719	Combining food web theory and population dynamics to assess the impact of invasive species. Frontiers in Ecology and Evolution, 0, 10 , .	1.1	2
720	The Synergy of Patterns vs. Processes at Community Level: A Key Linkage for Subtropical Native Forests along the Urban Riparian Zone. Forests, 2022, 13, 1041.	0.9	0

#	ARTICLE	IF	CITATIONS
721	Network structural origin of instabilities in large complex systems. Science Advances, 2022, 8, .	4.7	10
722	Indirect facilitation between prey promotes asymmetric apparent competition. Journal of Animal Ecology, 0, , .	1.3	2
723	Local and collective transitions in sparsely-interacting ecological communities. PLoS Computational Biology, 2022, 18, e1010274.	1.5	7
724	Balance of positive and negative regulation for trade-off between efficiency and resilience of high-dimensional networks. Physica A: Statistical Mechanics and Its Applications, 2022, 603, 127879.	1.2	4
725	Cross-kingdom co-occurrence networks in the plant microbiome: Importance and ecological interpretations. Frontiers in Microbiology, 0, 13 , .	1.5	15
726	Interkingdom Plant–Soil Microbial Ecological Network Analysis under Different Anthropogenic Impacts in a Tropical Rainforest. Forests, 2022, 13, 1167.	0.9	2
727	Economic complexity of cities and its role for resilience. PLoS ONE, 2022, 17, e0269797.	1.1	3
728	Microbial Diversity and Community Composition of Duodenum Microbiota of High and Low Egg-Yielding Taihang Chickens Identified Using 16S rRNA Amplicon Sequencing. Life, 2022, 12, 1262.	1.1	1
729	Reconstruction of a Soil Microbial Network Induced by Stress Temperature. Microbiology Spectrum, 2022, 10 , .	1.2	3
730	Modeling spatial interaction networks of the gut microbiota. Gut Microbes, 2022, 14, .	4.3	8
731	Stability-instability transition in tripartite merged ecological networks. Journal of Mathematical Biology, 2022, 85, .	0.8	0
733	Equilibrium in a large Lotka–Volterra system with pairwise correlated interactions. Stochastic Processes and Their Applications, 2022, 153, 423-444.	0.4	3
734	Stable motifs delay species loss in simulated food webs. Oikos, 2022, 2022, .	1.2	3
735	Mean-field theory for double-well systems on degree-heterogeneous networks. Proceedings of the Royal Society A: Mathematical, Physical and Engineering Sciences, 2022, 478, .	1.0	6
736	The geometry of evolved community matrix spectra. Scientific Reports, 2022, 12, .	1.6	1
737	No strong evidence that modularity, specialization or nestedness are linked to seasonal climatic variability in bipartite networks. Global Ecology and Biogeography, 2022, 31, 2510-2523.	2.7	4
738	Stabilization of microbial communities by responsive phenotypic switching. Physical Review Research, 2022, 4, .	1.3	3
739	Plant–bee interactions and resource utilisation in an urban landscape. Urban Ecosystems, 2022, 25, 1913-1924.	1.1	1

#	ARTICLE	IF	CITATIONS
740	Stability criteria for the consumption and exchange of essential resources. PLoS Computational Biology, 2022, 18, e1010521.	1.5	5
741	Emergent phases of ecological diversity and dynamics mapped in microcosms. Science, 2022, 378, 85-89.	6.0	83
742	The Resilience of Plant–Pollinator Networks. Annual Review of Entomology, 2023, 68, 363-380.	5.7	17
744	Coexistence in diverse communities with higher-order interactions. Proceedings of the National Academy of Sciences of the United States of America, 2022, 119, .	3.3	23
745	Phenomenology and dynamics of competitive ecosystems beyond the niche-neutral regimes. Proceedings of the National Academy of Sciences of the United States of America, 2022, 119, .	3.3	3
746	Diversity, food web structure and the temporal stability of total plant and animal biomasses. Oikos, 2023, 2023, .	1.2	2
747	Smoking by altering the peri-implant microbial community structure compromises the responsiveness to treatment. Frontiers in Cellular and Infection Microbiology, $0,12,.$	1.8	1
748	Characteristics of Bacterial Community in Pelteobagrus fulvidraco Integrated Multi-Trophic Aquaculture System. Water (Switzerland), 2022, 14, 3192.	1.2	2
749	Controlling species densities in structurally perturbed intransitive cycles with higher-order interactions. Chaos, 2022, 32, .	1.0	17
751	Methods of quantifying interactions among populations using Lotka-Volterra models. Frontiers in Systems Biology, 0, 2, .	0.5	7
752	Chaos in synthetic microbial communities. PLoS Computational Biology, 2022, 18, e1010548.	1.5	4
753	Prey fear of a specialist predator in a tri-trophic food web can eliminate the superpredator. Frontiers in Applied Mathematics and Statistics, 0, 8, .	0.7	0
754	Delay effects on the stability of large ecosystems. Proceedings of the National Academy of Sciences of the United States of America, 2022, 119, .	3.3	6
755	Guided by the principles of microbiome engineering: Accomplishments and perspectives for environmental use., 2022, 1, 382-398.		13
756	Response of soil protists to antimony and arsenic contamination. Environmental Pollution, 2022, 315, 120387.	3.7	11
757	Feasibility of sparse large Lotka-Volterra ecosystems. Journal of Mathematical Biology, 2022, 85, .	0.8	3
758	Modeling Community Dynamics Through Environmental Effects, Species Interactions and Movement. Journal of Agricultural, Biological, and Environmental Statistics, 0, , .	0.7	0
759	Differentiation and seasonality in suitable microsites of seed dispersal by an assemblage of omnivorous mammals. Global Ecology and Conservation, 2022, 40, e02335.	1.0	2

#	Article	IF	Citations
760	Regime Shifts in Coastal Marine Ecosystems: Theory, Methods and Management Perspectives. , 2024, , 50-72.		3
761	Evolution of the concept of ecological integrity and its study through networks. Ecological Modelling, 2023, 476, 110224.	1.2	5
762	High seed diversity and availability increase rodent community stability under human disturbance and climate variation. Frontiers in Plant Science, $0,13,.$	1.7	9
764	Eigenvalue spectra and stability of directed complex networks. Physical Review E, 2022, 106, .	0.8	4
765	Metabolic responses of predators to prey density. Frontiers in Ecology and Evolution, 0, 10, .	1.1	1
766	Impacts of extreme climatic events on trophic network complexity and multidimensional stability. Ecology, 2023, 104, .	1.5	6
767	Ecological networks of an Antarctic ecosystem: a full description of non-trophic interactions. Marine Biology, 2023, 170, .	0.7	3
771	The effect of global warming on the Australian endemic orchid Cryptostylis leptochila and its pollinator. PLoS ONE, 2023, 18, e0280922.	1.1	1
772	Stabilization through self-coupling in networks of small-world and scale-free topology. Scientific Reports, 2023, 13, .	1.6	2
773	SOC-reactivity analysis for a newly defined class of two-dimensional soil organic carbon dynamics. Applied Mathematical Modelling, 2023, 118, 1-21.	2.2	6
774	Dynamic network modeling of gut microbiota during Alzheimer's disease progression in mice. Gut Microbes, 2023, 15, .	4.3	10
775	Maximal ecological diversity exceeds evolutionary diversity in model ecosystems. Ecology Letters, 2023, 26, 384-397.	3.0	2
776	EU MECI: A Network-Structured Indicator for a Union of Equality. Social Indicators Research, 2023, 166, 465-483.	1.4	0
777	Temporal assessment of N-cycle microbial functions in a tropical agricultural soil using gene co-occurrence networks. PLoS ONE, 2023, 18, e0281442.	1.1	2
779	Stability of multi-layer ecosystems. Journal of the Royal Society Interface, 2023, 20, .	1.5	3
780	Generalized Lotka-Volterra model with hierarchical interactions. Physical Review E, 2023, 107 , .	0.8	1
783	Combining generalized modeling and specific modeling in the analysis of ecological networks. Chaos, 2023, 33, .	1.0	1
784	Transient and asymptotic dynamics of Bazykin's prey-predator model on managing reactivity, resilience, and maximum sustainable yield. European Physical Journal Plus, 2023, 138, .	1.2	O

#	ARTICLE	IF	CITATIONS
786	Deforestation alters species interactions. Natural Sciences, 2023, 3, .	1.0	2
788	Breakdown of Random-Matrix Universality in Persistent Lotka-Volterra Communities. Physical Review Letters, 2023, 130, .	2.9	4
789	Shortcomings of reusing species interaction networks created by different sets of researchers. PLoS Biology, 2023, 21, e3002068.	2.6	4
790	Facilitative interaction networks in experimental microbial community dynamics. Frontiers in Microbiology, 0, 14 , .	1.5	4
791	Invasion Consequences in Communities Maintained by Niche and Intransitive Coexistence Mechanisms. Diversity, 2023, 15, 554.	0.7	1
792	Keystone intransitive loops. Proceedings of the National Academy of Sciences of the United States of America, 2023, 120, .	3.3	O
794	Emergent stability in complex network dynamics. Nature Physics, 2023, 19, 1033-1042.	6.5	9
837	Food Webs as Multilayer Networks. , 2024, , 84-91.		O
852	Ecological Networks., 2024, , 151-165.		0
854	Populations and Communities. , 2023, , 415-589.		1