

Mobility promotes and jeopardizes biodiversity in rock

Nature

448, 1046-1049

DOI: [10.1038/nature06095](https://doi.org/10.1038/nature06095)

Citation Report

#	ARTICLE	IF	CITATIONS
1	PROGRESS IN THE CHEMISTRY OF LOCAL ANAESTHETICS IN THE LAST DECADE. Russian Chemical Reviews, 1962, 31, 452-465.	6.5	3
2	Noise and Correlations in a Spatial Population Model with Cyclic Competition. Physical Review Letters, 2007, 99, 238105.	7.8	146
3	The effect of dispersal and neighbourhood in games of cooperation. Journal of Theoretical Biology, 2008, 253, 221-227.	1.7	30
4	Self-organization of mobile populations in cyclic competition. Journal of Theoretical Biology, 2008, 254, 368-383.	1.7	135
5	Anomalous finite-size effects in the Battle of the Sexes. European Physical Journal B, 2008, 63, 373-380.	1.5	24
6	MIGRATION AS A MECHANISM TO PROMOTE COOPERATION. International Journal of Modeling, Simulation, and Scientific Computing, 2008, 11, 641-652.	1.4	84
7	Sex and space destabilize intransitive competition within and between species. Proceedings of the Royal Society B: Biological Sciences, 2008, 275, 1857-1864.	2.6	13
8	Resonance and frequency-locking phenomena in spatially extended phytoplankton-zooplankton system with additive noise and periodic forces. Journal of Statistical Mechanics: Theory and Experiment, 2008, 2008, P05011.	2.3	25
9	Cyclic Dominance and Biodiversity in Well-Mixed Populations. Physical Review Letters, 2008, 100, 058104.	7.8	127
10	Three- and four-state rock-paper-scissors games with diffusion. Physical Review E, 2008, 78, 031906.	2.1	101
11	Oscillations and patterns in interacting populations of two species. Physical Review E, 2008, 78, 050903.	2.1	8
12	Self-organizing patterns maintained by competing associations in a six-species predator-prey model. Physical Review E, 2008, 77, 041919.	2.1	56
13	Effect of memory on the prisoner's dilemma game in a square lattice. Physical Review E, 2008, 78, 041129.	2.1	93
14	Instability of Spatial Patterns and Its Ambiguous Impact on Species Diversity. Physical Review Letters, 2008, 101, 058102.	7.8	94
15	Spatial three-player prisoners' dilemma. Physical Review E, 2008, 78, 041101.	2.1	5
16	Intransitivity Cycles, and Complex Problem Solving. SSRN Electronic Journal, 2009, , .	0.4	1
17	Evolutionary dynamics on graphs: Efficient method for weak selection. Physical Review E, 2009, 79, 046707.	2.1	89
18	Four-state rock-paper-scissors games in constrained Newman-Watts networks. Physical Review E, 2009, 79, 062901.	2.1	23

#	ARTICLE	IF	CITATIONS
19	Phase diagrams for three-strategy evolutionary prisonerâ€™s dilemma games on regular graphs. Physical Review E, 2009, 80, 056104.	2.1	88
20	Deterministic evolutionary game dynamics in finite populations. Physical Review E, 2009, 80, 011909.	2.1	65
21	Evolutionary game dynamics in finite populations with migration. , 2009, , .		0
22	Phase transitions in cellular automata models of spatial susceptibleâ€“infectedâ€“resistantâ€“susceptible epidemics. Chinese Physics B, 2009, 18, 489-500.	1.4	2
23	Social Evolution of Spatial Patterns in Bacterial Biofilms: When Conflict Drives Disorder. American Naturalist, 2009, 174, 1-12.	2.1	273
24	The edge of neutral evolution in social dilemmas. New Journal of Physics, 2009, 11, 093029.	2.9	40
25	Characterizing spatiotemporal patterns in three-state lattice models. Journal of Statistical Mechanics: Theory and Experiment, 2009, 2009, P02042.	2.3	5
26	Emergence of target waves in paced populations of cyclically competing species. New Journal of Physics, 2009, 11, 103001.	2.9	33
27	Nash Equilibria in Multi-Agent Motor Interactions. PLoS Computational Biology, 2009, 5, e1000468.	3.2	75
28	The outbreak of cooperation among success-driven individuals under noisy conditions. Proceedings of the National Academy of Sciences of the United States of America, 2009, 106, 3680-3685.	7.1	459
29	Evolutionary Dynamics on Scale-Free Interaction Networks. IEEE Transactions on Evolutionary Computation, 2009, 13, 895-912.	10.0	37
30	Species coexistence, intransitivity, and topological variation in competitive tournaments. Journal of Theoretical Biology, 2009, 256, 90-95.	1.7	39
31	The role of noise in a predatorâ€“prey model with Allee effect. Journal of Biological Physics, 2009, 35, 185-196.	1.5	57
32	Dynamics of Microbial Growth and Coexistence on Variably Saturated Rough Surfaces. Microbial Ecology, 2009, 58, 262-275.	2.8	36
33	Parasiteâ€“grassâ€“forb interactions and rockâ€“paperâ€“scissor dynamics: predicting the effects of the parasitic plant <i>Rhinanthus minor</i> on host plant communities. Journal of Ecology, 2009, 97, 1311-1319.	4.0	90
34	What is microbial community ecology?. ISME Journal, 2009, 3, 1223-1230.	9.8	371
35	Spatiotemporal modulation of biodiversity in a synthetic chemical-mediated ecosystem. Nature Chemical Biology, 2009, 5, 929-935.	8.0	89
36	On competitive Lotkaâ€“Volterra model in random environments. Journal of Mathematical Analysis and Applications, 2009, 357, 154-170.	1.0	201

#	ARTICLE	IF	CITATIONS
37	Thermal noise suppression: how much does it cost?. Journal of Physics A: Mathematical and Theoretical, 2009, 42, 095005.	2.1	4
38	Zero-One Survival Behavior of Cyclically Competing Species. Physical Review Letters, 2009, 102, 048102.	7.8	101
39	Persistence, extinction and spatio-temporal synchronization of SIRS spatial models. Journal of Statistical Mechanics: Theory and Experiment, 2009, 2009, P07007.	2.3	12
40	Decoding biological principles using gene circuits. Molecular BioSystems, 2009, 5, 695.	2.9	13
41	Effects of mobility on ordering dynamics. Journal of Statistical Mechanics: Theory and Experiment, 2009, 2009, L11001.	2.3	8
42	Large fluctuations and fixation in evolutionary games. Journal of Statistical Mechanics: Theory and Experiment, 2010, 2010, P09009.	2.3	27
43	Oscillatory dynamics in rockâ€“paperâ€“scissors games with mutations. Journal of Theoretical Biology, 2010, 264, 1-10.	1.7	117
44	Effect of swarming on biodiversity in non-symmetric rockâ€“paperâ€“scissor game. IET Systems Biology, 2010, 4, 177-184.	1.5	3
46	Pattern formation in spatial games. Physics Procedia, 2010, 3, 1933-1939.	1.2	0
47	Positive interactions and the emergence of community structure in metacommunities. Journal of Theoretical Biology, 2010, 266, 419-429.	1.7	18
48	Effects of migration on the evolutionary game dynamics in finite populations with community structures. Physica A: Statistical Mechanics and Its Applications, 2010, 389, 67-78.	2.6	7
49	Evolutionary game theory: Theoretical concepts and applications to microbial communities. Physica A: Statistical Mechanics and Its Applications, 2010, 389, 4265-4298.	2.6	214
50	Learning intransitive reciprocal relations with kernel methods. European Journal of Operational Research, 2010, 206, 676-685.	5.7	28
51	Engineering bacteria to recognize and follow small molecules. Current Opinion in Biotechnology, 2010, 21, 653-656.	6.6	19
52	Rich dynamics in a predatorâ€“prey model with both noise and periodic force. BioSystems, 2010, 100, 14-22.	2.0	34
53	DILEMMAS OF PARTIAL COOPERATION. Evolution; International Journal of Organic Evolution, 2010, 64, 2458-65.	2.3	13
54	Bacterial competition: surviving and thriving in the microbial jungle. Nature Reviews Microbiology, 2010, 8, 15-25.	28.6	2,085
55	Aqueous films limit bacterial cell motility and colony expansion on partially saturated rough surfaces. Environmental Microbiology, 2010, 12, 1363-1373.	3.8	79

#	ARTICLE	IF	CITATIONS
56	Social behaviour in microorganisms. , 2010, , 331-356.		18
57	Coexistence and Extinction Pattern of Asymmetric Cyclic Game Species in a Square Lattice. Communications in Theoretical Physics, 2010, 53, 1201-1204.	2.5	3
58	Competitive Exclusion Principle Revised by Noise. Chinese Physics Letters, 2010, 27, 018701.	3.3	0
59	Globally coupled chaotic maps and demographic stochasticity. Physical Review E, 2010, 81, 036111.	2.1	6
60	Evolutionary dynamics of populations with conflicting interactions: Classification and analytical treatment considering asymmetry and power. Physical Review E, 2010, 81, 016112.	2.1	22
61	Role of intraspecific competition in the coexistence of mobile populations in spatially extended ecosystems. Chaos, 2010, 20, 023113.	2.5	45
62	Basins of coexistence and extinction in spatially extended ecosystems of cyclically competing species. Chaos, 2010, 20, 045116.	2.5	34
63	Basins of attraction for species extinction and coexistence in spatial rock-paper-scissors games. Physical Review E, 2010, 81, 030901.	2.1	61
64	Nonlinear Patterns in Urban Crime: Hotspots, Bifurcations, and Suppression. SIAM Journal on Applied Dynamical Systems, 2010, 9, 462-483.	1.6	110
65	Effect of epidemic spreading on species coexistence in spatial rock-paper-scissors games. Physical Review E, 2010, 81, 046113.	2.1	50
66	Effects of demographic stochasticity on biological community assembly on evolutionary time scales. Physical Review E, 2010, 81, 041908.	2.1	10
67	Mobility and asymmetry effects in one-dimensional rock-paper-scissors games. Physical Review E, 2010, 81, 021917.	2.1	45
68	Optimizing Metapopulation Sustainability through a Checkerboard Strategy. PLoS Computational Biology, 2010, 6, e1000643.	3.2	24
69	Cyclic competition of four species: Mean-field theory and stochastic evolution. Europhysics Letters, 2010, 92, 58003.	2.0	34
70	Mobility induces global synchronization of oscillators in periodic extended systems. New Journal of Physics, 2010, 12, 093029.	2.9	36
71	A stochastic spatial model of HIV dynamics with an asymmetric battle between the virus and the immune system. New Journal of Physics, 2010, 12, 043051.	2.9	17
72	Dynamically generated cyclic dominance in spatial prisoner's dilemma games. Physical Review E, 2010, 82, 036110.	2.1	70
73	Coexistence in a one-dimensional cyclic dominance process. Physical Review E, 2010, 81, 060901.	2.1	19

#	ARTICLE	IF	CITATIONS
74	Evolutionary dynamics, intrinsic noise, and cycles of cooperation. Physical Review E, 2010, 81, 066122.	2.1	50
75	Spatial rock-paper-scissors models with inhomogeneous reaction rates. Physical Review E, 2010, 82, 051909.	2.1	85
76	How community size affects survival chances in cyclic competition games that microorganisms play. Physical Review E, 2010, 82, 052901.	2.1	24
77	Cyclic competition of mobile species on continuous space: Pattern formation and coexistence. Physical Review E, 2010, 82, 066211.	2.1	56
78	Entropy Production of Cyclic Population Dynamics. Physical Review Letters, 2010, 104, 218102.	7.8	48
80	A competitive network theory of species diversity. Proceedings of the National Academy of Sciences of the United States of America, 2011, 108, 5638-5642.	7.1	289
81	Natural roles of antimicrobial peptides in microbes, plants and animals. Research in Microbiology, 2011, 162, 363-374.	2.1	232
82	Strong violation of the competitive exclusion principle. Nature Precedings, 2011, , .	0.1	0
83	Towards the Full Lyapunov Spectrum of Elementary Cellular Automata. , 2011, , .		2
84	Interaction rules affect species coexistence in intransitive networks. Ecology, 2011, 92, 1174-1180.	3.2	27
85	Threefold way to extinction in populations of cyclically competing species. Journal of Statistical Mechanics: Theory and Experiment, 2011, 2011, L01003.	2.3	19
86	Asymptotically stable equilibrium and limit cycles in the Rockâ€“Paperâ€“Scissors game in a population of players with complex personalities. Physica A: Statistical Mechanics and Its Applications, 2011, 390, 4219-4226.	2.6	9
87	Phase diagrams for the spatial public goods game with pool punishment. Physical Review E, 2011, 83, 036101.	2.1	309
88	Programming microbial population dynamics by engineered cellâ€“cell communication. Biotechnology Journal, 2011, 6, 837-849.	3.5	34
89	Smart-Strategy's Invasion of Traditional Evolutionarily Stable Strategy Based on Hawk and Dove Game. , 2011, , .		1
90	In search for universal patterns in the organization of communities: The concept of neutrality has paved the way to a new approach. Biology Bulletin Reviews, 2011, 1, 13-25.	0.9	5
91	Social dynamics with peer support on heterogeneous networks. European Physical Journal B, 2011, 83, 507-518.	1.5	5
92	Cyclic dominance in adaptive networks. European Physical Journal B, 2011, 84, 541-548.	1.5	26

#	ARTICLE	IF	CITATIONS
93	Coexistence in the two-dimensional May-Leonard model with random rates. European Physical Journal B, 2011, 82, 97-105.	1.5	41
94	Reinfection induced disease in a spatial SIRS model. Journal of Biological Physics, 2011, 37, 133-140.	1.5	10
95	Impact of noise on pattern formation in a predator-prey model. Nonlinear Dynamics, 2011, 66, 689-694.	5.2	16
96	Partner Selection Shapes the Strategic and Topological Evolution of Cooperation. Dynamic Games and Applications, 2011, 1, 354-369.	1.9	22
97	The evolution of cooperation in spatial groups. Chaos, Solitons and Fractals, 2011, 44, 131-136.	5.1	32
98	Imitation, internal absorption and the reversal of local drift in stochastic evolutionary games. Journal of Theoretical Biology, 2011, 269, 46-56.	1.7	11
99	Range expansion with mutation and selection: dynamical phase transition in a two-species Eden model. New Journal of Physics, 2011, 13, 113013.	2.9	32
100	Cycles of cooperation and defection in imperfect learning. Journal of Statistical Mechanics: Theory and Experiment, 2011, 2011, P08007.	2.3	10
101	Evolutionary and population dynamics: A coupled approach. Physical Review E, 2011, 84, 051921.	2.1	43
102	Saddles, arrows, and spirals: Deterministic trajectories in cyclic competition of four species. Physical Review E, 2011, 83, 051108.	2.1	31
103	Pattern formation, synchronization, and outbreak of biodiversity in cyclically competing games. Physical Review E, 2011, 83, 011917.	2.1	63
104	Effects of competition on pattern formation in the rock-paper-scissors game. Physical Review E, 2011, 84, 021912.	2.1	62
105	Evolutionary dynamics on stochastic evolving networks for multiple-strategy games. Physical Review E, 2011, 84, 046111.	2.1	33
106	Transportation dynamics on networks of mobile agents. Physical Review E, 2011, 83, 016102.	2.1	41
108	Memory and obesity affect the population dynamics of asexual freshwater planarians. Physical Biology, 2011, 8, 026003.	1.8	20
109	The relation between survivor probability and activeness of species in a well-mixed rock-paper-scissors game. , 2011, , .		0
110	Cyclic competition of four species: domains and interfaces. Journal of Statistical Mechanics: Theory and Experiment, 2012, 2012, P07014.	2.3	45
111	Emergence of stable polymorphisms driven by evolutionary games between mutants. Nature Communications, 2012, 3, 919.	12.8	51

#	ARTICLE	IF	CITATIONS
112	Stochastic differential equations for evolutionary dynamics with demographic noise and mutations. Physical Review E, 2012, 85, 041901.	2.1	53
113	Clonal selection prevents tragedy of the commons when neighbors compete in a rock-paper-scissors game. Physical Review E, 2012, 85, 061924.	2.1	24
114	Kinetic Monte Carlo simulations of travelling pulses and spiral waves in the lattice Lotka-Volterra model. Chaos, 2012, 22, 023141.	2.5	1
115	von Neumann's and related scaling laws in rock-paper-scissors-type games. Physical Review E, 2012, 86, 031119.	2.1	63
116	Discriminating the effects of spatial extent and population size in cyclic competition among species. Physical Review E, 2012, 86, 021911.	2.1	21
117	Junctions and spiral patterns in generalized rock-paper-scissors models. Physical Review E, 2012, 86, 036112.	2.1	80
118	Extinction in neutrally stable stochastic Lotka-Volterra models. Physical Review E, 2012, 85, 051903.	2.1	69
119	SPATIAL COMPLEXITY OF A PREDATOR-“PREY MODEL WITH BOTH NOISE AND DIFFUSION. Fluctuation and Noise Letters, 2012, 11, 1250006.	1.5	1
120	Fixation and escape times in stochastic game learning. Journal of Statistical Mechanics: Theory and Experiment, 2012, 2012, P10022.	2.3	7
121	Stochastic evolution of four species in cyclic competition. Journal of Statistical Mechanics: Theory and Experiment, 2012, 2012, P06014.	2.3	21
122	Comments on “Evolutionary dynamics of RNA-like replicator systems”. Physics of Life Reviews, 2012, 9, 270-271.	2.8	1
123	Connections between the Sznajd model with general confidence rules and graph theory. Physical Review E, 2012, 86, 046109.	2.1	9
124	Multi-armed spirals and multi-pairs antispirals in spatial rock-“paper-“scissors games. Physics Letters, Section A: General, Atomic and Solid State Physics, 2012, 376, 2292-2297.	2.1	26
125	Stochastic formulation of ecological models and their applications. Trends in Ecology and Evolution, 2012, 27, 337-345.	8.7	191
126	On the relationship between cyclic and hierarchical three-species predator-prey systems and the two-species Lotka-Volterra model. European Physical Journal B, 2012, 85, 1.	1.5	21
127	A Kernel-Based Framework for Learning Graded Relations From Data. IEEE Transactions on Fuzzy Systems, 2012, 20, 1090-1101.	9.8	16
128	Effect of spatial patterns on population size. Physica A: Statistical Mechanics and Its Applications, 2012, 391, 6016-6023.	2.6	1
129	Killing as means of promoting biodiversity. Biochemical Society Transactions, 2012, 40, 1512-1516.	3.4	19

#	ARTICLE	IF	CITATIONS
130	Revising the Role of Species Mobility in Maintaining Biodiversity in Communities with Cyclic Competition. Bulletin of Mathematical Biology, 2012, 74, 2004-2031.	1.9	33
131	Migration, coherence and persistence in a fragmented landscape. Theoretical Ecology, 2012, 5, 481-493.	1.0	5
132	Eurofuse 2011. Advances in Intelligent and Soft Computing, 2012, , .	0.2	0
133	Co-evolution of Social Behavior and Spatial Organization. Understanding Complex Systems, 2012, , 139-151.	0.6	0
134	Coherence Resonance in an Epidemic Model with Noise. Brazilian Journal of Physics, 2012, 42, 248-252.	1.4	2
135	Effect of asynchronous updating on the stability of cellular automata. Chaos, Solitons and Fractals, 2012, 45, 383-394.	5.1	30
136	Coherence, conservation and patch occupancy analysis. Oikos, 2012, 121, 985-997.	2.7	7
137	Understanding microbial cooperation. Journal of Theoretical Biology, 2012, 299, 31-41.	1.7	108
138	On equilibrium properties of evolutionary multi-player games with random payoff matrices. Theoretical Population Biology, 2012, 81, 264-272.	1.1	45
139	The elimination of hierarchy in a completely cyclic competition system. Physica A: Statistical Mechanics and Its Applications, 2012, 391, 125-131.	2.6	12
140	Coevolutionary dynamics with clustering behaviors on cyclic competition. Physica A: Statistical Mechanics and Its Applications, 2012, 391, 2964-2970.	2.6	6
141	Sustainability without coexistence state in Durrett's "Levin hawk" dove model. Theoretical Ecology, 2012, 5, 51-60.	1.0	3
142	Pattern dynamics of a spatial predator-prey model with noise. Nonlinear Dynamics, 2012, 67, 1737-1744.	5.2	64
143	Global Migration Can Lead to Stronger Spatial Selection than Local Migration. Journal of Statistical Physics, 2013, 151, 637-653.	1.2	51
144	Clustering Determines Who Survives for Competing Brownian and Lévy Walkers. Physical Review Letters, 2013, 110, 258101.	7.8	12
145	Global attractors and extinction dynamics of cyclically competing species. Physical Review E, 2013, 87, 052710.	2.1	30
146	Biased sex ratio and sex-biased heterozygote disadvantage affect the maintenance of a genetic polymorphism and the properties of hybrid zones. Journal of Evolutionary Biology, 2013, 26, 1774-1783.	1.7	0
147	Effects of mixing in threshold models of social behavior. Physical Review E, 2013, 88, 012816.	2.1	9

#	ARTICLE	IF	CITATIONS
148	Coexistence and Survival in Conservative Lotka-Volterra Networks. <i>Physical Review Letters</i> , 2013, 110, 168106.	7.8	73
149	Exploration and prediction of interactions between methanotrophs and heterotrophs. <i>Research in Microbiology</i> , 2013, 164, 1045-1054.	2.1	57
150	Environmental versus demographic variability in stochastic predator-prey models. <i>Journal of Statistical Mechanics: Theory and Experiment</i> , 2013, 2013, P10001.	2.3	4
151	Integrating movement ecology with biodiversity research - exploring new avenues to address spatiotemporal biodiversity dynamics. <i>Movement Ecology</i> , 2013, 1, 6.	2.8	169
152	Verification and reformulation of the competitive exclusion principle. <i>Chaos, Solitons and Fractals</i> , 2013, 56, 124-131.	5.1	22
153	Spatial heterogeneity promotes coexistence of rock-paper-scissors metacommunities. <i>Theoretical Population Biology</i> , 2013, 86, 1-11.	1.1	53
154	Intransitivity and coexistence in four species cyclic games. <i>Journal of Theoretical Biology</i> , 2013, 317, 286-292.	1.7	46
155	From inter-specific behavioural interactions to species distribution patterns along gradients of habitat heterogeneity. <i>Oecologia</i> , 2013, 171, 207-215.	2.0	18
156	A rock-paper-scissors evolutionary algorithm for the TDMA broadcast scheduling problem. <i>Computers and Operations Research</i> , 2013, 40, 1963-1971.	4.0	1
157	Quantifying the impact of noise on macroscopic organization of cooperation in spatial games. <i>Chaos, Solitons and Fractals</i> , 2013, 56, 35-44.	5.1	8
158	Interplay between partnership formation and competition in generalized May-Leonard games. <i>Physical Review E</i> , 2013, 87, .	2.1	46
159	A golden point rule in rock-paper-scissors-lizard-spock game. <i>Physica A: Statistical Mechanics and Its Applications</i> , 2013, 392, 2652-2659.	2.6	33
160	Self-organization of five species in a cyclic competition game. <i>Physica A: Statistical Mechanics and Its Applications</i> , 2013, 392, 4675-4682.	2.6	16
161	Antagonism influences assembly of a <i>Bacillus</i> guild in a local community and is depicted as a food-chain network. <i>ISME Journal</i> , 2013, 7, 487-497.	9.8	94
162	Hydration dynamics promote bacterial coexistence on rough surfaces. <i>ISME Journal</i> , 2013, 7, 395-404.	9.8	76
163	Labyrinthine clustering in a spatial rock-paper-scissors ecosystem. <i>Physical Review E</i> , 2013, 87, 042702.	2.1	25
164	Cellular automata for contact ecoepidemic processes in predator-prey systems. <i>Ecological Complexity</i> , 2013, 13, 8-20.	2.9	9
165	XMDS2: Fast, scalable simulation of coupled stochastic partial differential equations. <i>Computer Physics Communications</i> , 2013, 184, 201-208.	7.5	167

#	ARTICLE	IF	CITATIONS
166	Extinction in four species cyclic competition. Journal of Statistical Mechanics: Theory and Experiment, 2013, 2013, P08011.	2.3	20
167	High Variation of Fluorescence Protein Maturation Times in Closely Related Escherichia coli Strains. PLoS ONE, 2013, 8, e75991.	2.5	83
168	Cyclic Game Dynamics Driven by Iterated Reasoning. PLoS ONE, 2013, 8, e56416.	2.5	26
169	Four- and three-state rock-paper-scissors games with long-range selection. Europhysics Letters, 2013, 101, 38004.	2.0	12
170	When does cyclic dominance lead to stable spiral waves?. Europhysics Letters, 2013, 102, 28012.	2.0	47
171	Species diversity in rockâ€”paperâ€”scissors game coupling with Levy flight. Chinese Physics B, 2013, 22, 128702.	1.4	4
172	The paradox of enrichment in phytoplankton by induced competitive interactions. Scientific Reports, 2013, 3, 2835.	3.3	24
173	Spatial pattern dynamics due to the fitness gradient flux in evolutionary games. Physical Review E, 2013, 87, 062138.	2.1	13
174	Diverging fluctuations in a spatial five-species cyclic dominance game. Physical Review E, 2013, 88, 022123.	2.1	70
175	Correlation of Positive and Negative Reciprocity Fails to Confer an Evolutionary Advantage: Phase Transitions to Elementary Strategies. Physical Review X, 2013, 3, .	8.9	46
176	Persistent coexistence of cyclically competing species in spatially extended ecosystems. Chaos, 2013, 23, 023128.	2.5	30
177	Dynamics of mobile coupled phase oscillators. Physical Review E, 2013, 87, .	2.1	41
178	Adaptive long-range migration promotes cooperation under tempting conditions. Scientific Reports, 2013, 3, 2509.	3.3	51
179	Speciation, Diversification, and Coexistence of Sessile Species That Compete for Space. PLoS ONE, 2014, 9, e96665.	2.5	2
180	Microbial dispersal in unsaturated porous media: Characteristics of motile bacterial cell motions in unsaturated angular pore networks. Water Resources Research, 2014, 50, 7406-7429.	4.2	73
181	Adaptation and irreversibility in microevolution. Europhysics Letters, 2014, 108, 68002.	2.0	3
182	Nutrient-responsive regulation determines biodiversity in a colicin-mediated bacterial community. BMC Biology, 2014, 12, 68.	3.8	42
183	Effects of aspiration-induced adaptation and migration on the evolution of cooperation. International Journal of Modern Physics C, 2014, 25, 1450025.	1.7	11

#	ARTICLE	IF	CITATIONS
184	Rich Spatiotemporal Dynamics of a Vegetation Model with Noise and Periodic Forcing. Discrete Dynamics in Nature and Society, 2014, 2014, 1-7.	0.9	2
185	Characterization of spiraling patterns in spatial rock-paper-scissors games. Physical Review E, 2014, 90, 032704.	2.1	52
186	Self-organizing patterns in an evolutionary rock-paper-scissors game for stochastic synchronized strategy updates. Physical Review E, 2014, 90, 042920.	2.1	7
187	Disturbance accelerates the transition from low- to high-diversity state in a model ecosystem. Physical Review E, 2014, 89, 022704.	2.1	3
188	Phenotypically heterogeneous populations in spatially heterogeneous environments. Physical Review E, 2014, 89, 030702.	2.1	13
189	Interfaces with internal structures in generalized rock-paper-scissors models. Physical Review E, 2014, 89, 042710.	2.1	41
190	From pairwise to group interactions in games of cyclic dominance. Physical Review E, 2014, 89, 062125.	2.1	36
191	Specialization and Bet Hedging in Heterogeneous Populations. Physical Review Letters, 2014, 113, 108102.	7.8	9
192	Mobility-dependent selection of competing strategy associations. Physical Review E, 2014, 89, 012721.	2.1	21
193	Cyclic dominance in evolutionary games: a review. Journal of the Royal Society Interface, 2014, 11, 20140735.	3.4	392
194	Chemical warfare and survival strategies in bacterial range expansions. Journal of the Royal Society Interface, 2014, 11, 20140172.	3.4	90
195	Complex response of a food-web module to symmetric and asymmetric migration between several patches. Journal of Theoretical Biology, 2014, 354, 54-59.	1.7	15
196	Globally synchronized oscillations in complex cyclic games. Physical Review E, 2014, 89, 032133.	2.1	30
197	Matrix models for quantifying competitive intransitivity from species abundance data. Oikos, 2014, 123, 1057-1070.	2.7	45
198	Selective Advantage of Diffusing Faster. Physical Review Letters, 2014, 112, 188102.	7.8	28
199	Non-equilibrium physics and evolutionâ€”adaptation, extinction, and ecology: a Key Issues review. Reports on Progress in Physics, 2014, 77, 102602.	20.1	24
200	Population interaction structure and the coexistence of bacterial strains playing â€œrockâ€œpaperâ€œscissorsâ€œ™. Oikos, 2014, 123, 472-480.	2.7	28
201	Games of life and death: antibiotic resistance and production through the lens of evolutionary game theory. Current Opinion in Microbiology, 2014, 21, 35-44.	5.1	36

#	ARTICLE	IF	CITATION
202	Evolutionary game theory: cells as players. Molecular BioSystems, 2014, 10, 3044-3065.	2.9	108
203	Cumulative frequency-dependent selective episodes allow for rapid morph cycles and rock-paper-scissors dynamics in species with overlapping generations. Proceedings of the Royal Society B: Biological Sciences, 2014, 281, 20140976.	2.6	31
204	String networks in Lotka-Volterra competition models. Physics Letters, Section A: General, Atomic and Solid State Physics, 2014, 378, 393-397.	2.1	38
205	Spirals and coarsening patterns in the competition of many species: a complex Ginzburg-Landau approach. Journal of Physics A: Mathematical and Theoretical, 2014, 47, 165001.	2.1	23
206	Active-to-absorbing-state phase transition in an evolving population with mutation. Physical Review E, 2015, 92, 042110.	2.1	5
207	Zealotry promotes coexistence in the rock-paper-scissors model of cyclic dominance. Physical Review E, 2015, 92, 052807.	2.1	5
208	Synchronization and extinction in cyclic games with mixed strategies. Physical Review E, 2015, 91, 052135.	2.1	14
209	Generating functionals and Gaussian approximations for interruptible delay reactions. Physical Review E, 2015, 92, 042105.	2.1	1
210	Competition for space during bacterial colonization of a surface. Journal of the Royal Society Interface, 2015, 12, 20150608.	3.4	60
211	Competitive intransitivity among species in biotic communities. Biology Bulletin Reviews, 2015, 5, 213-219.	0.9	2
212	Mesosopic Interactions and Species Coexistence in Evolutionary Game Dynamics of Cyclic Competitions. Scientific Reports, 2014, 4, 7486.	3.3	74
213	Frequency-dependent selection at rough expanding fronts. New Journal of Physics, 2015, 17, 103035.	2.9	2
214	Heterogeneous nucleation on complex networks with mobile impurities. Europhysics Letters, 2015, 111, 48005.	2.0	2
215	Intransitivity in Theory and in the Real World. Entropy, 2015, 17, 4364-4412.	2.2	13
216	Balance of Interactions Determines Optimal Survival in Multi-Species Communities. PLoS ONE, 2015, 10, e0145278.	2.5	5
217	Information Transfer between Generations Linked to Biodiversity in Rock-Paper-Scissors Games. International Journal of Biodiversity, 2015, 2015, 1-9.	0.7	3
218	Vortices determine the dynamics of biodiversity in cyclical interactions with protection spillovers. New Journal of Physics, 2015, 17, 113033.	2.9	54
219	Evolutionary games on multilayer networks: a colloquium. European Physical Journal B, 2015, 88, 1.	1.5	604

#	ARTICLE	IF	CITATIONS
220	Counteraction of antibiotic production and degradation stabilizes microbial communities. <i>Nature</i> , 2015, 521, 516-519.	27.8	272
221	RGB algorithm for spatial evolutionary game theory with finite populations. , 2015, , .		0
222	Using the Simulation of Ecological Systems to Explain the Wheel of Retailing. , 2015, , .		1
223	The impact of initial evenness on biodiversity maintenance for a four-species in silico bacterial community. <i>Journal of Theoretical Biology</i> , 2015, 387, 189-205.	1.7	15
224	How turbulence regulates biodiversity in systems with cyclic competition. <i>Physical Review E</i> , 2015, 91, 033009.	2.1	30
225	Pattern-fluid interpretation of chemical turbulence. <i>Physical Review E</i> , 2015, 91, 042907.	2.1	3
226	Evolutionary games of condensates in coupled birthâ€“death processes. <i>Nature Communications</i> , 2015, 6, 6977.	12.8	38
227	Cyclical succession in grazed ecosystems: The importance of interactions between different-sized herbivores and different-sized predators. <i>Theoretical Population Biology</i> , 2015, 101, 31-39.	1.1	15
228	Nonlinear dynamics of the rock-paper-scissors game with mutations. <i>Physical Review E</i> , 2015, 91, 052907.	2.1	60
229	Universal scaling for the dilemma strength in evolutionary games. <i>Physics of Life Reviews</i> , 2015, 14, 1-30.	2.8	426
230	Spatial reciprocity for discrete, continuous and mixed strategy setups. <i>Applied Mathematics and Computation</i> , 2015, 259, 552-568.	2.2	34
231	Social cycling and conditional responses in the Rock-Paper-Scissors game. <i>Scientific Reports</i> , 2014, 4, 5830.	3.3	75
232	Transition from wave pattern to stationary pattern in a spatial predator-prey system with delay. <i>Chaos, Solitons and Fractals</i> , 2015, 78, 156-161.	5.1	1
233	Dilemma strength as a framework for advancing evolutionary game theory. <i>Physics of Life Reviews</i> , 2015, 14, 56-58.	2.8	26
234	On the interplay of speciation and dispersal: An evolutionary food web model in space. <i>Journal of Theoretical Biology</i> , 2015, 366, 46-56.	1.7	20
235	Competitive intransitivity, population interaction structure, and strategy coexistence. <i>Journal of Theoretical Biology</i> , 2015, 365, 149-158.	1.7	26
236	The Physical Basis of Bacterial Quorum Communication. <i>Biological and Medical Physics Series</i> , 2015, , .	0.4	11
237	A Five Species Cyclically Dominant Evolutionary Game with Fixed Direction: A New Way to Produce Self-Organized Spatial Patterns. <i>Entropy</i> , 2016, 18, 284.	2.2	8

#	ARTICLE	IF	CITATIONS
238	Emergent patterns from probabilistic generalizations of lateral activation and inhibition. Journal of the Royal Society Interface, 2016, 13, 20151077.	3.4	2
239	Bacterial Communities: Interactions to Scale. Frontiers in Microbiology, 2016, 7, 1234.	3.5	465
240	The Influence of Mobility Rate on Spiral Waves in Spatial Rock-Paper-Scissors Games. Games, 2016, 7, 24.	0.6	32
241	Stability and distribution of predator-prey systems: local and regional mechanisms and patterns. Ecology Letters, 2016, 19, 279-288.	6.4	12
242	Species interactions and random dispersal rather than habitat filtering drive community assembly during early plant succession. Oikos, 2016, 125, 698-707.	2.7	64
243	Impact of migration on the multi-strategy selection in finite group-structured populations. Scientific Reports, 2016, 6, 35114.	3.3	17
244	Evolution of creation-annihilation cyclic games in regular networks. , 2016, , .		0
245	The impact of resource dependence of the mechanisms of life on the spatial population dynamics of an <i>in silico</i> microbial community. Chaos, 2016, 26, 123121.	2.5	2
246	Stochastic Evolution Dynamic of the Rock-Scissors-Paper Game Based on a Quasi Birth and Death Process. Scientific Reports, 2016, 6, 28585.	3.3	10
247	Challenges in microbial ecology: building predictive understanding of community function and dynamics. ISME Journal, 2016, 10, 2557-2568.	9.8	570
248	A theoretical approach to understand spatial organization in complex ecologies. Journal of Theoretical Biology, 2016, 403, 10-16.	1.7	31
249	Design, analysis and application of synthetic microbial consortia. Synthetic and Systems Biotechnology, 2016, 1, 109-117.	3.7	87
251	A Game Theoretical Approach to Microbial Coexistence. , 2016, , 267-282.		4
252	Revisiting Brownian motion as a description of animal movement: a comparison to experimental movement data. Methods in Ecology and Evolution, 2016, 7, 1525-1537.	5.2	20
253	Evolutionary game theory using agent-based methods. Physics of Life Reviews, 2016, 19, 1-26.	2.8	143
254	<i>In silico</i> substrate dependence increases community productivity but threatens biodiversity. Physical Review E, 2016, 93, 042414.	2.1	2
255	Zealots tame oscillations in the spatial rock-paper-scissors game. Physical Review E, 2016, 93, 062307.	2.1	60
256	Rock-paper-scissors played within competing domains in predator-prey games. Journal of Statistical Mechanics: Theory and Experiment, 2016, 2016, 113402.	2.3	10

#	ARTICLE	IF	CITATIONS
257	Evolutionary consequences of behavioral diversity. Proceedings of the National Academy of Sciences of the United States of America, 2016, 113, E7003-E7009.	7.1	43
258	Competition promotes the persistence of populations in ecosystems. Scientific Reports, 2016, 6, 30477.	3.3	0
259	Biodiversity in models of cyclic dominance is preserved by heterogeneity in site-specific invasion rates. Scientific Reports, 2016, 6, 38608.	3.3	40
260	Presence of a loner strain maintains cooperation and diversity in well-mixed bacterial communities. Proceedings of the Royal Society B: Biological Sciences, 2016, 283, 20152682.	2.6	47
261	Data based identification and prediction of nonlinear and complex dynamical systems. Physics Reports, 2016, 644, 1-76.	25.6	268
262	Resilience, tipping, and hydra effects in public health: emergent collective behavior in two agent-based models. BMC Public Health, 2016, 16, 265.	2.9	2
263	Symmetry breaking in cyclic competition by niche construction. Applied Mathematics and Computation, 2016, 284, 66-78.	2.2	11
264	Mathematical modeling of population dynamics with Allee effect. Nonlinear Dynamics, 2016, 85, 1-12.	5.2	278
265	Swarming motility in plant-associated bacteria. Hellenic Plant Protection Journal, 2016, 9, 16-27.	0.4	22
266	The rockâ€paperâ€scissors game. Contemporary Physics, 2016, 57, 151-163.	1.8	16
267	Competitive interactions change the pattern of species co-occurrences under neutral dispersal. Oikos, 2017, 126, 91-100.	2.7	44
268	Cheating fosters species co-existence in well-mixed bacterial communities. ISME Journal, 2017, 11, 1179-1188.	9.8	69
269	Global oscillations in the Optional Public Goods Game under spatial diffusion. Physica A: Statistical Mechanics and Its Applications, 2017, 474, 61-69.	2.6	12
270	Models of life: epigenetics, diversity and cycles. Reports on Progress in Physics, 2017, 80, 042601.	20.1	9
271	String networks with junctions in competition models. Physics Letters, Section A: General, Atomic and Solid State Physics, 2017, 381, 1014-1020.	2.1	20
272	Intransitivity is infrequent and fails to promote annual plant coexistence without pairwise niche differences. Ecology, 2017, 98, 1193-1200.	3.2	93
273	Geographic distribution, large-scale spatial structure and diversity of parasitoids of the seed-feeding beetle <i>Acanthoscelides macrophthalmus</i> . Bulletin of Entomological Research, 2017, 107, 322-331.	1.0	15
274	Diversity begets diversity in competition for space. Nature Ecology and Evolution, 2017, 1, 156.	7.8	79

#	ARTICLE	IF	CITATIONS
275	A New Improved and Extended Version of the Multicell Bacterial Simulator <tt>gro</tt>. ACS Synthetic Biology, 2017, 6, 1496-1508.	3.8	44
276	Space promotes the coexistence of species: Effective medium approximation for rock-paper-scissors system. Ecological Modelling, 2017, 359, 240-245.	2.5	8
277	Large fluctuations in anti-coordination games on scale-free graphs. Journal of Statistical Mechanics: Theory and Experiment, 2017, 2017, 053405.	2.3	3
278	The effects of intransitive competition on coexistence. Ecology Letters, 2017, 20, 791-800.	6.4	90
279	Statistical physics of human cooperation. Physics Reports, 2017, 687, 1-51.	25.6	1,036
280	Bacteria exploit a polymorphic instability of the flagellar filament to escape from traps. Proceedings of the National Academy of Sciences of the United States of America, 2017, 114, 6340-6345.	7.1	123
281	Diverse modes of eco-evolutionary dynamics in communities of antibiotic-producing microorganisms. Nature Ecology and Evolution, 2017, 1, .	7.8	26
282	Deterministic extinction by mixing in cyclically competing species. Physical Review E, 2017, 95, 032318.	2.1	3
283	Master equations and the theory of stochastic path integrals. Reports on Progress in Physics, 2017, 80, 046601.	20.1	61
284	A novel procedure for the identification of chaos in complex biological systems. Scientific Reports, 2017, 7, 44900.	3.3	26
285	Spatial vs. non-spatial eco-evolutionary dynamics in a tumor growth model. Journal of Theoretical Biology, 2017, 435, 78-97.	1.7	60
286	Strategic tradeoffs in competitor dynamics on adaptive networks. Scientific Reports, 2017, 7, 7576.	3.3	4
287	Collective strategies and cyclic dominance in asymmetric predator-prey spatial games. Journal of Theoretical Biology, 2017, 430, 45-52.	1.7	14
288	Biophysical processes supporting the diversity of microbial life in soil. FEMS Microbiology Reviews, 2017, 41, 599-623.	8.6	314
289	Emergence of unusual coexistence states in cyclic game systems. Scientific Reports, 2017, 7, 7465.	3.3	44
290	A stochastic analysis of the spatially extended May-Leonard model. Journal of Physics A: Mathematical and Theoretical, 2017, 50, 404005.	2.1	9
291	Hamming distance and mobility behavior in generalized rock-paper-scissors models. Europhysics Letters, 2017, 119, 58003.	2.0	13
292	Spirals and heteroclinic cycles in a spatially extended Rock-Paper-Scissors model of cyclic dominance. Europhysics Letters, 2017, 117, 48006.	2.0	23

#	ARTICLE	IF	CITATIONS
293	Second-Order Free-Riding on Antisocial Punishment Restores the Effectiveness of Prosocial Punishment. <i>Physical Review X</i> , 2017, 7, .	8.9	63
294	Behavioral self-organization underlies the resilience of a coastal ecosystem. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2017, 114, 8035-8040.	7.1	55
295	Apex predator and the cyclic competition in a rock-paper-scissors game of three species. <i>Physical Review E</i> , 2017, 95, 062411.	2.1	14
296	Mobility-induced persistent chimera states. <i>Physical Review E</i> , 2017, 96, 062210.	2.1	9
297	Basins of distinct asymptotic states in the cyclically competing mobile five species game. <i>Chaos</i> , 2017, 27, 103117.	2.5	12
298	Plasmid-Mediated Bioaugmentation for the Bioremediation of Contaminated Soils. <i>Frontiers in Microbiology</i> , 2017, 8, 1966.	3.5	104
299	Threshold-activated transport stabilizes chaotic populations to steady states. <i>PLoS ONE</i> , 2017, 12, e0183251.	2.5	4
300	Interactions mediated by a public good transiently increase cooperativity in growing <i>Pseudomonas putida</i> metapopulations. <i>Scientific Reports</i> , 2018, 8, 4093.	3.3	20
301	Impact of stochastic migration on species diversity in meta-food webs consisting of several patches. <i>Journal of Theoretical Biology</i> , 2018, 443, 147-156.	1.7	7
302	Intransitive competition is common across five major taxonomic groups and is driven by productivity, competitive rank and functional traits. <i>Journal of Ecology</i> , 2018, 106, 852-864.	4.0	36
303	Everything you always wanted to know about intransitive competition but were afraid to ask. <i>Journal of Ecology</i> , 2018, 106, 807-814.	4.0	38
304	Spatial patterns and biodiversity in off-lattice simulations of a cyclic three-species Lotka-Volterra model. <i>Europhysics Letters</i> , 2018, 121, 48003.	2.0	30
305	Metapopulation model for rockâ€paperâ€scissors game: Mutation affects paradoxical impacts. <i>Journal of Theoretical Biology</i> , 2018, 450, 22-29.	1.7	20
306	Coexistence and Pattern Formation in Bacterial Mixtures with Contact-Dependent Killing. <i>Biophysical Journal</i> , 2018, 114, 1741-1750.	0.5	11
307	Survival behavior in the cyclic Lotka-Volterra model with a randomly switching reaction rate. <i>Physical Review E</i> , 2018, 97, 022406.	2.1	15
308	Allee effect induced diversity in evolutionary dynamics. <i>Chaos, Solitons and Fractals</i> , 2018, 108, 32-38.	5.1	5
310	Water column processes differentially influence richness and diversity of neutral, lumpy and intransitive phytoplankton assemblages. <i>Ecological Modelling</i> , 2018, 370, 22-32.	2.5	4
311	Network spandrels reflect ecological assembly. <i>Ecology Letters</i> , 2018, 21, 324-334.	6.4	45

#	ARTICLE	IF	CITATIONS
312	Novel Method Reveals a Narrow Phylogenetic Distribution of Bacterial Dispersers in Environmental Communities Exposed to Low-Hydration Conditions. <i>Applied and Environmental Microbiology</i> , 2018, 84, .	3.1	2
313	Traffic jams induce dynamical phase transition in spatial rock-paper-scissors game. <i>Physica A: Statistical Mechanics and Its Applications</i> , 2018, 492, 1081-1087.	2.6	8
314	Exploring the performance of intransitivity indices in predicting coexistence in multispecies systems. <i>Journal of Ecology</i> , 2018, 106, 815-825.	4.0	9
315	Emergent properties arising from spatial heterogeneity influence fungal community dynamics. <i>Fungal Ecology</i> , 2018, 33, 32-39.	1.6	13
316	Imitate or innovate: Competition of strategy updating attitudes in spatial social dilemma games. <i>Europhysics Letters</i> , 2018, 121, 18002.	2.0	49
317	How directional mobility affects coexistence in rock-paper-scissors models. <i>Physical Review E</i> , 2018, 97, 032415.	2.1	35
318	Risk and Interaction Aversion: Screening Mechanisms in the Prisoner's Dilemma Game. <i>Journal of Statistical Physics</i> , 2018, 172, 279-292.	1.2	14
319	Predicting population extinction from early observations of the Lotka-Volterra system. <i>Applied Mathematics and Computation</i> , 2018, 320, 371-379.	2.2	19
320	Balancedness among competitions for biodiversity in the cyclic structured three species system. <i>Applied Mathematics and Computation</i> , 2018, 320, 425-436.	2.2	21
321	Stochastic population dynamics in spatially extended predator-prey systems. <i>Journal of Physics A: Mathematical and Theoretical</i> , 2018, 51, 063001.	2.1	93
322	Effects of different dispersal patterns on the presence-absence of multiple species. <i>Communications in Nonlinear Science and Numerical Simulation</i> , 2018, 56, 115-130.	3.3	21
323	Movement, competition and pattern formation in a two prey-one predator food chain model. <i>Computational and Applied Mathematics</i> , 2018, 37, 2445-2459.	1.3	10
324	Phase transitions in dependence of apex predator decaying ratio in a cyclic dominant system. <i>Europhysics Letters</i> , 2018, 124, 68001.	2.0	13
325	The evolution of antibiotic production rate in a spatial model of bacterial competition. <i>PLoS ONE</i> , 2018, 13, e0205202.	2.5	11
326	Three-species competition with non-deterministic outcomes. <i>Chaos</i> , 2018, 28, 123124.	2.5	3
327	Delays in Fitness Adjustment Can Lead to Coexistence of Hierarchically Interacting Species. <i>Physical Review Letters</i> , 2018, 121, 268101.	7.8	4
328	Perturbing cyclic predator-prey systems: How a six-species coarsening system with nontrivial in-domain dynamics responds to sudden changes. <i>Physical Review E</i> , 2018, 98, .	2.1	20
329	Evolutionary hypergame dynamics. <i>Physical Review E</i> , 2018, 98, .	2.1	8

#	ARTICLE	IF	CITATIONS
330	Emergence of evolutionarily stable communities through eco-evolutionary tunnelling. <i>Nature Ecology and Evolution</i> , 2018, 2, 1644-1653.	7.8	38
331	Clustering Effect on the Dynamics in a Spatial Rock-Paper-Scissors System. <i>Journal of the Physical Society of Japan</i> , 2018, 87, 014801.	1.6	5
332	Multistability in the cyclic competition system. <i>Chaos</i> , 2018, 28, 113110.	2.5	27
333	Cycles in Zero-Sum Differential Games and Biological Diversity. , 2018, , .		1
335	Metapopulation model of rock-scissors-paper game with subpopulation-specific victory rates stabilized by heterogeneity. <i>Journal of Theoretical Biology</i> , 2018, 458, 103-110.	1.7	4
336	Emergent interactions influence functional traits and success of dune building ecosystem engineers. <i>Journal of Plant Ecology</i> , 2018, 11, 524-532.	2.3	16
337	Complex microbial systems across different levels of description. <i>Physical Biology</i> , 2018, 15, 051002.	1.8	4
338	Noise-driven bias in the non-local voter model. <i>Europhysics Letters</i> , 2018, 122, 10004.	2.0	5
339	Biodiversity in the cyclic competition system of three species according to the emergence of mutant species. <i>Chaos</i> , 2018, 28, 053111.	2.5	24
340	Changes in political party systems arising from conflict and transfer among political parties. <i>Chaos</i> , 2018, 28, 061105.	2.5	5
341	Delayed adaptation in stochastic metapopulation models. <i>Europhysics Letters</i> , 2018, 122, 68002.	2.0	6
342	Predicted Bacterial Interactions Affect in Vivo Microbial Colonization Dynamics in <i>Nematostella</i> . <i>Frontiers in Microbiology</i> , 2018, 9, 728.	3.5	36
343	The “Lvy or Diffusion” Controversy: How Important Is the Movement Pattern in the Context of Trapping?. <i>Mathematics</i> , 2018, 6, 77.	2.2	6
344	Individual-Based Modelling of Invasion in Bioaugmented Sand Filter Communities. <i>Processes</i> , 2018, 6, 2.	2.8	7
345	Multistability of extinction states in the toy model for three species. <i>Chaos, Solitons and Fractals</i> , 2018, 114, 92-98.	5.1	4
346	Sequential interactions “in which one player plays first and another responds” promote cooperation in evolutionary-dynamical simulations of single-shot Prisoner's Dilemma and Snowdrift games. <i>Journal of Theoretical Biology</i> , 2018, 452, 69-80.	1.7	4
347	CsrA and its regulators control the time-point of ColicinE2 release in <i>Escherichia coli</i> . <i>Scientific Reports</i> , 2018, 8, 6537.	3.3	14
348	Heterogeneous network promotes species coexistence: metapopulation model for rock-paper-scissors game. <i>Scientific Reports</i> , 2018, 8, 7094.	3.3	30

#	ARTICLE	IF	CITATIONS
349	Emergence of weakâ€intransitive competition through adaptive diversification and ecoâ€evolutionary feedbacks. <i>Journal of Ecology</i> , 2018, 106, 877-889.	4.0	22
350	Metaphase kinetochore movements are regulated by kinesin-8 motors and microtubule dynamic instability. <i>Molecular Biology of the Cell</i> , 2018, 29, 1332-1345.	2.1	21
351	Interface networks in models of competing species. <i>International Journal of Modeling, Simulation, and Scientific Computing</i> , 2018, 09, 1850046.	1.4	5
352	Asymmetric interplay leads to robust coexistence by means of a global attractor in the spatial dynamics of cyclic competition. <i>Chaos</i> , 2018, 28, 081103.	2.5	8
353	Lotkaâ€Volterra systems with stochastic resetting. <i>Journal of Physics A: Mathematical and Theoretical</i> , 2018, 51, 405601.	2.1	26
354	Mobility restores the mechanism which supports cooperation in the voluntary prisonerâ€™s dilemma game. <i>New Journal of Physics</i> , 2019, 21, 073038.	2.9	28
355	Phenotypic variability promotes diversity and stability in competitive communities. <i>Ecology Letters</i> , 2019, 22, 1776-1786.	6.4	30
356	Emergence of oscillatory coexistence with exponentially decayed waiting times in a coupled cyclic competition system. <i>Chaos</i> , 2019, 29, 071107.	2.5	5
357	Burst statistics in an early biofilm quorum sensing model: the role of spatial colony-growth heterogeneity. <i>Scientific Reports</i> , 2019, 9, 12077.	3.3	26
358	Spatial metagenomic characterization of microbial biogeography in the gut. <i>Nature Biotechnology</i> , 2019, 37, 877-883.	17.5	103
359	Three-player repeated games with an opt-out option. <i>Journal of Theoretical Biology</i> , 2019, 480, 13-22.	1.7	9
360	Death by starvation in May-Leonard models. <i>Europhysics Letters</i> , 2019, 126, 68002.	2.0	4
361	Metacommunityâ€scale biodiversity regulation and the selfâ€organised emergence of macroecological patterns. <i>Ecology Letters</i> , 2019, 22, 1428-1438.	6.4	50
362	Uneven rock-paper-scissors models: Patterns and coexistence. <i>Europhysics Letters</i> , 2019, 126, 18003.	2.0	35
363	Microcins in Enterobacteriaceae: Peptide Antimicrobials in the Eco-Active Intestinal Chemosphere. <i>Frontiers in Microbiology</i> , 2019, 10, 2261.	3.5	101
364	Predominance of the weakest species in Lotka-Volterra and May-Leonard formulations of the rock-paper-scissors model. <i>Physical Review E</i> , 2019, 100, 042209.	2.1	36
365	Cooperation in Microbial Populations: Theory and Experimental Model Systems. <i>Journal of Molecular Biology</i> , 2019, 431, 4599-4644.	4.2	30
366	An Evolutionary Game Coordinated Control Approach to Division of Labor in Multi-Agent Systems. <i>IEEE Access</i> , 2019, 7, 124295-124308.	4.2	10

#	ARTICLE	IF	CITATIONS
367	Toxin production spontaneously becomes regulated by local cell density in evolving bacterial populations. PLoS Computational Biology, 2019, 15, e1007333.	3.2	15
368	Qualitative analysis of a diffusive Crowleyâ€“Martin predatorâ€“prey model: the role of nonlinear predator harvesting. Nonlinear Dynamics, 2019, 98, 1169-1189.	5.2	17
369	Lattice-based versus lattice-free individual-based models: impact on coexistence in competitive communities. Natural Computing, 2019, 18, 855-864.	3.0	1
370	Reaction processes among self-propelled particles. Soft Matter, 2019, 15, 497-503.	2.7	9
371	Expanding spatial domains and transient scaling regimes in populations with local cyclic competition. Physical Review E, 2019, 99, 052310.	2.1	23
372	Dynamically generated hierarchies in games of competition. Physical Review E, 2019, 99, 062116.	2.1	17
373	Fitness-based mutation in the spatial rock-paper-scissors game: Shifting of critical mobility for extinction. Europhysics Letters, 2019, 126, 38004.	2.0	22
374	Synchronization dynamics of mobile oscillators in the presence of coupling delays. Physical Review E, 2019, 99, 062207.	2.1	8
375	Robust coexistence with alternative competition strategy in the spatial cyclic game of five species. Chaos, 2019, 29, 051105.	2.5	17
376	Analysing the impact of trap shape and movement behaviour of groundâ€“dwelling arthropods on trap efficiency. Methods in Ecology and Evolution, 2019, 10, 1246-1264.	5.2	31
377	Biochemical Warfare Between Living Organisms for Survival: Mathematical Modelling. Reference Series in Phytochemistry, 2019, , 1-38.	0.4	0
378	Invasion-controlled pattern formation in a generalized multispecies predator-prey system. Physical Review E, 2019, 99, 052408.	2.1	13
379	Computation and Simulation of Evolutionary Game Dynamics in Finite Populations. Scientific Reports, 2019, 9, 6946.	3.3	41
380	Diffusively coupled Lotkaâ€“Volterra system stabilized by heterogeneous graphs. Physica A: Statistical Mechanics and Its Applications, 2019, 525, 1114-1123.	2.6	10
381	Basin entropy behavior in a cyclic model of the rock-paper-scissors type. Europhysics Letters, 2019, 125, 58003.	2.0	11
382	Cooperation promotes the sustainability of companies: Lattice-gas model for a market. Physica A: Statistical Mechanics and Its Applications, 2019, 525, 119-127.	2.6	2
383	Bursts in three-strategy evolutionary ordinal potential games on a square lattice. Physica A: Statistical Mechanics and Its Applications, 2019, 525, 1379-1387.	2.6	9
384	Parent-preferred dispersal promotes cooperation in structured populations. Proceedings of the Royal Society B: Biological Sciences, 2019, 286, 20181949.	2.6	19

#	ARTICLE	IF	CITATIONS
385	Nonlinear dynamics with Hopf bifurcations by targeted mutation in the system of rock-paper-scissors metaphor. <i>Chaos</i> , 2019, 29, 033102.	2.5	12
386	Diversity in interaction strength promotes rich dynamical behaviours in a three-species ecological system. <i>Applied Mathematics and Computation</i> , 2019, 353, 243-253.	2.2	14
387	A pedestrian review of games on structured populations. <i>International Journal of Advances in Engineering Sciences and Applied Mathematics</i> , 2019, 11, 138-152.	1.1	5
388	Mathematical modeling of cyclic population dynamics. <i>Physica D: Nonlinear Phenomena</i> , 2019, 394, 56-78.	2.8	4
389	Coevolution of nodes and links: Diversity-driven coexistence in cyclic competition of three species. <i>Physical Review E</i> , 2019, 99, 022309.	2.1	4
390	Infection promotes species coexistence: Rock-paper-scissors game with epidemic on graphs. <i>Physica A: Statistical Mechanics and Its Applications</i> , 2019, 535, 122531.	2.6	8
391	Nucleation of spatiotemporal structures from defect turbulence in the two-dimensional complex Ginzburg-Landau equation. <i>Physical Review E</i> , 2019, 100, 052210.	2.1	1
392	Three-Way Interactions in an Artificial Community of Bacterial Strains Directly Isolated From the Environment and Their Effect on the System Population Dynamics. <i>Frontiers in Microbiology</i> , 2019, 10, 2555.	3.5	6
393	Structured environments fundamentally alter dynamics and stability of ecological communities. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2019, 116, 379-388.	7.1	77
394	Metapopulation dynamics in the rock-paper-scissors game with mutation: Effects of time-varying migration paths. <i>Journal of Theoretical Biology</i> , 2019, 462, 425-431.	1.7	11
395	Migration difference in diffusively-coupled prey-predator system on heterogeneous graphs. <i>Physica A: Statistical Mechanics and Its Applications</i> , 2020, 537, 122705.	2.6	6
396	Using intransitive triads to determine final species richness of competition networks. <i>Physica A: Statistical Mechanics and Its Applications</i> , 2020, 540, 123249.	2.6	4
397	Effect of mobility and predator switching on the dynamical behavior of a predator-prey model. <i>Chaos, Solitons and Fractals</i> , 2020, 132, 109584.	5.1	5
398	The effect of habitats and fitness on species coexistence in systems with cyclic dominance. <i>Journal of Theoretical Biology</i> , 2020, 486, 110084.	1.7	21
399	Breaking unidirectional invasions jeopardizes biodiversity in spatial May-Leonard systems. <i>Chaos, Solitons and Fractals</i> , 2020, 141, 110356.	5.1	9
400	Pattern formations driven by cyclic interactions: A brief review of recent developments. <i>Europhysics Letters</i> , 2020, 131, 68001.	2.0	42
401	Toward a Model of Investigating "Coordinated Stasis" Through Habitat Tracking in Communities of Digital Organisms. <i>Genetic and Evolutionary Computation</i> , 2020, , 309-331.	1.0	0
402	Survival of the weakest in non-transitive asymmetric interactions among strains of <i>E. coli</i> . <i>Nature Communications</i> , 2020, 11, 6055.	12.8	23

#	ARTICLE	IF	CITATIONS
403	Diffusively-Coupled Rock-Paper-Scissors Game with Mutation in Scale-Free Hierarchical Networks. Complexity, 2020, 2020, 1-8.	1.6	6
404	Mortality makes coexistence vulnerable in evolutionary game of rock-paper-scissors. Physical Review E, 2020, 102, 012220.	2.1	9
405	Multi-AI competing and winning against humans in iterated Rock-Paper-Scissors game. Scientific Reports, 2020, 10, 13873.	3.3	5
406	Equal partners do better in defensive alliances. Europhysics Letters, 2020, 131, 58002.	2.0	9
407	Cooperative pattern formation in multi-component bacterial systems through reciprocal motility regulation. Nature Physics, 2020, 16, 1152-1157.	16.7	44
408	Distance Dependent Competitive Interactions in a Frustrated Network of Mobile Agents. IEEE Transactions on Network Science and Engineering, 2020, 7, 3159-3170.	6.4	28
409	Developing a Lightweight Rock-Paper-Scissors Framework for Human-Robot Collaborative Gaming. IEEE Access, 2020, 8, 202958-202968.	4.2	11
410	Pattern-induced local symmetry breaking in active-matter systems. Proceedings of the National Academy of Sciences of the United States of America, 2020, 117, 31623-31630.	7.1	18
411	The dynamics of cooperation in asymmetric sub-populations. New Journal of Physics, 2020, 22, 083015.	2.9	22
412	Non-king elimination, intransitive triad interactions, and species coexistence in ecological competition networks. Theoretical Ecology, 2020, 13, 385-397.	1.0	2
413	Performance of weak species in the simplest generalization of the rock-paper-scissors model to four species. Physical Review E, 2020, 101, 062312.	2.1	13
414	A novel route to cyclic dominance in voluntary social dilemmas. Journal of the Royal Society Interface, 2020, 17, 20190789.	3.4	40
415	Gene expression noise in a complex artificial toxin expression system. PLoS ONE, 2020, 15, e0227249.	2.5	1
416	Analytical treatment for cyclic three-state dynamics on static networks. Physical Review E, 2020, 101, 012305.	2.1	1
417	Space and patchiness affects diversityâ€“function relationships in fungal decay communities. ISME Journal, 2021, 15, 720-731.	9.8	2
418	Structural stability of coexistence in evolutionary dynamics of cyclic competition. Applied Mathematics and Computation, 2021, 394, 125794.	2.2	4
419	Evolutionary dynamics in the rock-paper-scissors system by changing community paradigm with population flow. Chaos, Solitons and Fractals, 2021, 142, 110424.	5.1	4
420	How competitive intransitivity and niche overlap affect spatial coexistence. Oikos, 2021, 130, 260-273.	2.7	17

#	ARTICLE	IF	CITATIONS
421	Structured environments foster competitor coexistence by manipulating interspecies interfaces. PLoS Computational Biology, 2021, 17, e1007762.	3.2	6
422	Untangling the mechanisms of cryptic species coexistence in a nematode community through individual-based modelling. Oikos, 2021, 130, 587-600.	2.7	4
424	Species coexistence in resource-limited patterned ecosystems is facilitated by the interplay of spatial self-organisation and intraspecific competition. Oikos, 2021, 130, 609-623.	2.7	10
425	Behavioural movement strategies in cyclic models. Scientific Reports, 2021, 11, 6413.	3.3	17
426	Diffusive coupling of two well-mixed compartments elucidates elementary principles of protein-based pattern formation. Physical Review Research, 2021, 3, .	3.6	5
428	Stochastic simulation algorithms for Interacting Particle Systems. PLoS ONE, 2021, 16, e0247046.	2.5	1
429	Complex Dynamics of a Ratio-Dependent Predator-Prey Model Induced by Spatial Motion. Complexity, 2021, 2021, 1-14.	1.6	0
430	EcoQBNs: First Application of Ecological Modeling with Quantum Bayesian Networks. Entropy, 2021, 23, 441.	2.2	3
431	Rare extinction events in cyclic predator-prey games. Journal of Physics A: Mathematical and Theoretical, 2021, 54, 235001.	2.1	2
432	A finite population destroys a traveling wave in spatial replicator dynamics. Chaos, Solitons and Fractals, 2021, 146, 110847.	5.1	5
433	Weak species in rock-paper-scissors models. Europhysics Letters, 2021, 134, 48001.	2.0	12
434	Antipredator behavior in the rock-paper-scissors model. Physical Review E, 2021, 103, 052216.	2.1	20
435	Intrinsic ecological dynamics drive biodiversity turnover in model metacommunities. Nature Communications, 2021, 12, 3627.	12.8	25
436	Environment driven oscillation in an off-lattice May-Leonard model. Scientific Reports, 2021, 11, 12512.	3.3	6
437	Numerical continuation of spiral waves in heteroclinic networks of cyclic dominance. IMA Journal of Applied Mathematics, 0, , .	1.6	1
438	Spatiotemporal stability of periodic travelling waves in a heteroclinic-cycle model. Nonlinearity, 2021, 34, 5576-5598.	1.4	2
439	The interplay between mutualism, competition and dispersal promotes species coexistence in a multiple interactions type system. Ecological Modelling, 2021, 452, 109595.	2.5	2
440	Stabilizing spiral structures and population diversity in the asymmetric May-Leonard model through immigration. European Physical Journal B, 2021, 94, 1.	1.5	6

#	ARTICLE	IF	CITATIONS
441	Effects of Dimensionality of Space on the Presence/Absence of Multiple Species. Environmental Modeling and Assessment, 0, , 1.	2.2	1
442	Complex evolutionary dynamics due to punishment and free space in ecological multigames. Proceedings of the Royal Society A: Mathematical, Physical and Engineering Sciences, 2021, 477, .	2.1	29
443	The interplay of diffusion and heterogeneity in nucleation of the networked Ising model. Communications in Theoretical Physics, 2021, 73, 115601.	2.5	0
444	Belowground feedbacks as drivers of spatial self-organization and community assembly. Physics of Life Reviews, 2021, 38, 1-24.	2.8	23
445	Role of bacterial persistence in spatial population expansion. Physical Review E, 2021, 104, 034401.	2.1	1
446	Population dynamics for systems with cyclic predator–prey relations and pheromone dependent movement. Physica A: Statistical Mechanics and Its Applications, 2021, 580, 126137.	2.6	2
447	Effects of a pestilent species on the stability of cyclically dominant species. Chaos, Solitons and Fractals, 2021, 151, 111255.	5.1	4
448	Nitrogen enrichment affects the competition network of aboveground species on the Inner Mongolia steppe. Global Ecology and Conservation, 2021, 31, e01826.	2.1	0
449	The cooperation–defection evolution on social networks. Physica A: Statistical Mechanics and Its Applications, 2021, 584, 126381.	2.6	0
450	Calculating biodiversity under stochastic evolutionary dynamics. Applied Mathematics and Computation, 2021, 411, 126543.	2.2	3
451	Persistent homology and the shape of evolutionary games. Journal of Theoretical Biology, 2021, 531, 110903.	1.7	1
452	Influence of Topology on the Dynamics of in Silico Ecosystems with Non-hierarchical Competition. Lecture Notes in Computer Science, 2021, , 113-122.	1.3	0
453	Exit rights open complex pathways to cooperation. Journal of the Royal Society Interface, 2021, 18, 20200777.	3.4	29
454	Lyapunov Exponents of One-Dimensional, Binary Stochastic Cellular Automata. Lecture Notes in Computer Science, 2014, , 96-104.	1.3	1
455	Biochemical Warfare Between Living Organisms for Survival: Mathematical Modeling. Reference Series in Phytochemistry, 2020, , 467-504.	0.4	1
456	Bacterial Games. The Frontiers Collection, 2011, , 297-329.	0.2	7
457	Contests between species aid biodiversity. Nature, 2017, 548, 166-167.	27.8	2
458	Bacterial coexistence driven by motility and spatial competition. Nature, 2020, 578, 588-592.	27.8	83

#	ARTICLE	IF	CITATIONS
459	Modelling population dynamics in a unicellular social organism community using a minimal model and evolutionary game theory. Open Biology, 2020, 10, 200206.	3.6	11
466	Coevolutionary dynamics of a variant of the cyclic Lotka–Volterra model with three-agent interactions. European Physical Journal B, 2020, 93, 1.	1.5	10
467	Fluctuations and the role of collision duration in reaction-diffusion systems. Europhysics Letters, 2013, 102, 58001.	2.0	8
468	Rock-paper-scissors models with a preferred mobility direction. Europhysics Letters, 2020, 132, 48003.	2.0	5
469	Effects of stochasticity and division of labor in toxin production on two-strain bacterial competition in Escherichia coli. PLoS Biology, 2017, 15, e2001457.	5.6	27
470	Hierarchical Post-transcriptional Regulation of Colicin E2 Expression in Escherichia coli. PLoS Computational Biology, 2016, 12, e1005243.	3.2	13
471	Optimal Cooperation-Trap Strategies for the Iterated Rock-Paper-Scissors Game. PLoS ONE, 2014, 9, e111278.	2.5	14
472	Amount of Colicin Release in Escherichia coli Is Regulated by Lysis Gene Expression of the Colicin E2 Operon. PLoS ONE, 2015, 10, e0119124.	2.5	26
473	A Five-Species Jungle Game. PLoS ONE, 2016, 11, e0157938.	2.5	6
474	Interaction rules affect species coexistence in intransitive networks. Ecology, 2011, 92, 1174-1180.	3.2	13
475	Competitive hierarchies among three species of juvenile coral reef fishes. Marine Ecology - Progress Series, 2013, 472, 239-248.	1.9	10
476	Why is cyclic dominance so rare?. ELife, 2020, 9, .	6.0	19
477	Adaptive evolution of nontransitive fitness in yeast. ELife, 2020, 9, .	6.0	23
478	Snowdrift game induces pattern formation in systems of self-propelled particles. Physical Review E, 2021, 104, 044408.	2.1	3
479	Influence of the neighborhood on cyclic models of biodiversity. Physica A: Statistical Mechanics and Its Applications, 2022, 587, 126547.	2.6	3
480	Internal-Evolution Driven Growth in Creation-Annihilation Cyclic Games. Lecture Notes of the Institute for Computer Sciences, Social-Informatics and Telecommunications Engineering, 2009, , 2377-2387.	0.3	1
481	Spiral Waves Emergence in a Cyclic Predator-Prey Model. Lecture Notes of the Institute for Computer Sciences, Social-Informatics and Telecommunications Engineering, 2009, , 894-899.	0.3	0
482	Sexual Recombination in Self-Organizing Interaction Networks. Lecture Notes in Computer Science, 2010, , 41-50.	1.3	0

#	ARTICLE	IF	CITATIONS
483	Learning Valued Relations from Data. Advances in Intelligent and Soft Computing, 2011, , 257-268.	0.2	0
484	Complex Domain Layering in Even-Odd Cyclic State Rock-Paper-Scissors Game Simulations. , 2011, , .		4
485	The network model of mobile agents with the human mobility. Wuli Xuebao/Acta Physica Sinica, 2012, 61, 238901.	0.5	2
486	Intransitivity Cycles and Their Transformations: How Dynamically Adapting Systems Function?. , 2013, , 357-406.		0
487	Cyclical game coupling with Levy flight and Brownian motion and stable coexistence conditions of species. Wuli Xuebao/Acta Physica Sinica, 2014, 63, 168701.	0.5	1
488	The Role of Opportunistic Migration in Cyclic Games. PLoS ONE, 2014, 9, e98190.	2.5	0
495	Cooperation in Repeated Rock-Paper-Scissors Games in Uncertain Environments. , 2018, , .		0
499	Fixation in competing populations: Diffusion and strategies for survival. Physical Review Research, 2020, 2, .	3.6	1
502	Multi-layered model for rock-paper-scissors game: A swarm intelligence sustains biodiversity. Ecological Informatics, 2021, 66, 101477.	5.2	6
503	Mobility-limiting antipredator response in the rock-paper-scissors model. Physical Review E, 2021, 104, 054201.	2.1	12
504	Evolutionary dynamics of rock-paper-scissors game in the patchy network with mutations. Chaos, Solitons and Fractals, 2021, 153, 111538.	5.1	2
505	The interplay of rock-paper-scissors competition and environments mediates species coexistence and intriguing dynamics. Chaos, Solitons and Fractals, 2021, 153, 111579.	5.1	5
506	A Method for Parameters Estimation in a Dynamical Model of Ebola Virus Transmission in Sierra Leone. Complexity, 2020, 2020, 1-9.	1.6	1
508	Control attenuation and temporary immunity in a cellular automata SEIR epidemic model. Chaos, Solitons and Fractals, 2022, 155, 111784.	5.1	8
509	Effects of antibiotics on Vietnam koi, Anabas testudineus, exposed to Aeromonas dhakensis as a co-infection. Acta Tropica, 2022, 226, 106281.	2.0	2
510	Parity effects in rock-paper-scissors type models with a number of species NSâ%12. Chaos, Solitons and Fractals, 2022, 155, 111738.	5.1	6
511	Noise-Induced Quasi-Heteroclinic Cycle in a Rockâ€“Paperâ€“Scissors Game with Random Payoffs. Dynamic Games and Applications, 2022, 12, 1280-1292.	1.9	2
512	Effect of mobility in the rock-paper-scissor dynamics with high mortality. Physical Review E, 2022, 105, 014215.	2.1	11

#	ARTICLE	IF	CITATIONS
513	Brenneria goodwinii growth in vitro is improved by competitive interactions with other bacterial species associated with Acute Oak Decline. Current Research in Microbial Sciences, 2022, 3, 100102.	2.3	4
514	The effect of territorial awareness in a three-species cyclic predator–prey model. Scientific Reports, 2022, 12, 1821.	3.3	9
515	Species coexistence in spatial cyclic game of five species. Chaos, Solitons and Fractals, 2022, 156, 111806.	5.1	4
516	Modulation of microbial community dynamics by spatial partitioning. Nature Chemical Biology, 2022, 18, 394-402.	8.0	23
517	Quorum Sensing Controls the CRISPR and Type VI Secretion Systems in Aliivibrio wodanis 06/09/139. Frontiers in Veterinary Science, 2022, 9, 799414.	2.2	7
519	Control problems with vanishing Lie Bracket arising from complete odd circulant evolutionary games. Journal of Dynamics and Games, 2022, .	1.0	1
520	Lotka-Volterra versus May-Leonard formulations of the spatial stochastic rock-paper-scissors model: The missing link. Physical Review E, 2022, 105, 024309.	2.1	6
521	Stability of cycling behaviour near a heteroclinic network model of Rock–Paper–Scissors–Lizard–Spock. Nonlinearity, 2022, 35, 1702-1733.	1.4	15
522	Multi-strategy evolutionary games: A Markov chain approach. PLoS ONE, 2022, 17, e0263979.	2.5	6
523	Oscillation and burst transition of human cooperation. Nonlinear Dynamics, 2022, 108, 4599-4610.	5.2	5
524	Generalized Hamiltonian dynamics and chaos in evolutionary games on networks. Physica A: Statistical Mechanics and Its Applications, 2022, 597, 127281.	2.6	5
525	Pattern formation and coarsening dynamics in apparent competition models. Chaos, Solitons and Fractals, 2022, 157, 111903.	5.1	8
526	Competition among alliances of different sizes. Chaos, Solitons and Fractals, 2022, 157, 111940.	5.1	4
527	Effect of external migration on biodiversity in evolutionary dynamics of coupled cyclic competitions. Chaos, Solitons and Fractals, 2022, 158, 112019.	5.1	4
528	Higher-order effects, continuous species interactions, and trait evolution shape microbial spatial dynamics. Proceedings of the National Academy of Sciences of the United States of America, 2022, 119, .	7.1	13
531	éžă1/4é€’æ€\$ç«žă°%ăœ’ç%©ç\$â...±â~ă,ç\$,,ă1/2œç””. Chinese Science Bulletin, 2022, , .	0.7	0
532	Dynamic Hybrid Flagellar Motors–Fuel Switch and More. Frontiers in Microbiology, 2022, 13, 863804.	3.5	2
533	Environment-driven migration enhances cooperation in evolutionary public goods games. European Physical Journal B, 2022, 95, 1.	1.5	8

#	ARTICLE	IF	CITATIONS
539	The Network HHD: Quantifying Cyclic Competition in Trait-Performance Models of Tournaments. SIAM Review, 2022, 64, 360-391.	9.5	1
540	Emerging spatiotemporal patterns in cyclic predator-prey systems with habitats. Physical Review E, 2022, 105, .	2.1	4
541	Combination of survival movement strategies in cyclic game systems during an epidemic. BioSystems, 2022, 217, 104689.	2.0	5
542	ĐŸĐ¾Đ½Đ,Đ¼Đ°Đ½Đ,Đµ Đ½ĐµŃ,ŃĐ°Đ½Đ-Đ,Ń,Đ,Đ²Đ½Đ¾ŃŃ,Đ, Đ¿ŃĐµĐ²Đ¾ŃŃ...Đ¾ĐŃŃ,Đ²Đ° Đ, ŃĐ°Đ-ŃĐ°Đ-Đ¾Đ¾Ń,ĐŸĐ		
543	A theoretical framework for multi- <i>species</i> range expansion in spatially heterogeneous landscapes. Oikos, 2022, 2022, .	2.7	3
544	Polar flagellar wrapping and lateral flagella jointly contribute to <i>Shewanella putrefaciens</i> environmental spreading. Environmental Microbiology, 0, , .	3.8	6
545	Self-consistent dispersal puts tight constraints on the spatiotemporal organization of species-rich metacommunities. Proceedings of the National Academy of Sciences of the United States of America, 2022, 119, .	7.1	5
546	Survival and thriving behavior of bacteria in microbial jungle. , 2022, , 1-21.		1
547	Adaptive movement strategy may promote biodiversity in the rock-paper-scissors model. Europhysics Letters, 2022, 139, 57002.	2.0	6
548	Adaptive movement strategy in rock-paper-scissors models. Chaos, Solitons and Fractals, 2022, 162, 112430.	5.1	10
549	Correlation between the formation of new competing group and spatial scale for biodiversity in the evolutionary dynamics of cyclic competition. Chaos, 2022, 32, .	2.5	5
550	Enhancing coexistence of mobile species in the cyclic competition system by wildlife refuge. Chaos, 2022, 32, .	2.5	8
551	Evolutionary stability is sensitive on the conflict between reproduction and survival: proofs. Journal of Mathematical Biology, 2022, 85, .	1.9	0
553	Spatial organisation plasticity reduces disease infection risk in rock- <i>paper</i> - <i>scissors</i> models. BioSystems, 2022, 221, 104777.	2.0	3
554	Competition modes determine ecosystem stability in rock- <i>paper</i> - <i>scissors</i> games. Physica A: Statistical Mechanics and Its Applications, 2022, 607, 128176.	2.6	2
555	Multi-species Generalized Rock-Paper-Scissors Model Based on <i>Cyclic Dominant Mechanism</i> . Lecture Notes in Electrical Engineering, 2022, , 35-44.	0.4	0
556	Oppressed species can form a winning pair in a multi-species ecosystem. Applied Mathematics and Computation, 2023, 438, 127568.	2.2	2
557	Effects of species vigilance on coexistence in evolutionary dynamics of spatial rock- <i>paper</i> - <i>scissors</i> game. Chaos, 2022, 32, .	2.5	5

#	ARTICLE	IF	CITATIONS
558	Stabilization of microbial communities by responsive phenotypic switching. <i>Physical Review Research</i> , 2022, 4, .	3.6	3
559	Community formation in wealth-mediated thermodynamic strategy evolution. <i>Chaos</i> , 2022, 32, 103103.	2.5	0
560	Quo vadis, agent-based modelling tools?. <i>Environmental Modelling and Software</i> , 2022, 157, 105514.	4.5	7
561	Linking microbial body size to community co-occurrences and stability at multiple geographical scales in agricultural soils. <i>Advances in Ecological Research</i> , 2022, , 1-26.	2.7	1
562	Controlling species densities in structurally perturbed intransitive cycles with higher-order interactions. <i>Chaos</i> , 2022, 32, .	2.5	17
563	Contrasting effects of dispersal network heterogeneity on ecosystem stability in rock-paper-scissors games. <i>Frontiers in Ecology and Evolution</i> , 0, 10, .	2.2	0
564	Adaptive altruistic strategy in cyclic models during an epidemic. <i>Europhysics Letters</i> , 2022, 140, 57001.	2.0	3
565	Emerging diversity in a population of evolving intransitive dice. <i>Physical Review E</i> , 2022, 106, .	2.1	1
566	Mobility unevenness in rock-paper-scissors models. <i>Ecological Complexity</i> , 2022, 52, 101028.	2.9	1
567	Triangular norms on bounded trellises. <i>Fuzzy Sets and Systems</i> , 2023, 462, 108468.	2.7	2
568	Universal scaling of extinction time in stochastic evolutionary dynamics. <i>Scientific Reports</i> , 2022, 12, .	3.3	0
569	How local antipredator response unbalances the rock-paper-scissors model. <i>Chaos</i> , 2022, 32, .	2.5	6
570	Landscapes of Biochemical Warfare: Spatial Self-Organization Woven from Allelopathic Interactions. <i>Life</i> , 2023, 13, 512.	2.4	1
571	How multiple weak species jeopardise biodiversity in spatial rock-paper-scissors models. <i>Chaos, Solitons and Fractals</i> , 2023, 169, 113290.	5.1	4
572	Emergence of oscillatory cooperation in a population with incomplete information. <i>Physica A: Statistical Mechanics and Its Applications</i> , 2023, 617, 128682.	2.6	0
573	Eco-evolutionary cyclic dominance among predators, prey, and parasites. <i>Journal of Theoretical Biology</i> , 2023, 564, 111446.	1.7	7
574	Higher order dynamics in the replicator equation produce a limit cycle in rock-paper-scissors. <i>Europhysics Letters</i> , 0, , .	2.0	0
575	Order and Disorder in a Cyclically Competitive Ecological Community. <i>SIAM Journal on Applied Dynamical Systems</i> , 2023, 22, 129-161.	1.6	0

#	ARTICLE	IF	CITATIONS
578	The reciprocal changes in dominant species with complete metabolic functions explain the decoupling phenomenon of microbial taxonomic and functional composition in a grassland. <i>Frontiers in Microbiology</i> , 0, 14, .	3.5	1
579	Nutrients and flow shape the cyclic dominance games between <i>Escherichia coli</i> strains. <i>Philosophical Transactions of the Royal Society B: Biological Sciences</i> , 2023, 378, .	4.0	2
580	The future of theoretical evolutionary game theory. <i>Philosophical Transactions of the Royal Society B: Biological Sciences</i> , 2023, 378, .	4.0	15
582	Random migration with tie retention promotes cooperation in the prisoner's dilemma game. <i>Chaos</i> , 2023, 33, 043126.	2.5	0
583	Complex evolutionary interactions in multiple populations. <i>Physical Review E</i> , 2023, 107, .	2.1	6
585	Role of predator-prey reversal in rock-paper-scissors models. <i>Europhysics Letters</i> , 0, , .	2.0	1
586	Spatial patterns and biodiversity in rock-paper-scissors models with regional unevenness. <i>Journal of Physics Complexity</i> , 0, , .	2.2	1
587	Role of adaptive intraspecific competition on collective behavior in the rock-paper-scissors game. <i>Chaos, Solitons and Fractals</i> , 2023, 171, 113448.	5.1	1
588	Trade-off between reproduction and mobility prolongs organisms' survival in rock-paper-scissors models. <i>Europhysics Letters</i> , 2023, 142, 47002.	2.0	0
589	Fitness-based mobility enhances the maintenance of biodiversity in the spatial system of cyclic competition. <i>Applied Mathematics and Computation</i> , 2023, 456, 128135.	2.2	0
590	Government regulation strategy, leading firms' innovation strategy, and following firms imitation strategy: An analysis based on evolutionary game theory. <i>PLoS ONE</i> , 2023, 18, e0286730.	2.5	1
591	Perturbative field-theoretical analysis of three-species cyclic predator-prey models. <i>Journal of Physics A: Mathematical and Theoretical</i> , 2023, 56, 225001.	2.1	0
592	Periodic environmental effect: stochastic resonance in evolutionary games of rock-paper-scissors. <i>Physica Scripta</i> , 2023, 98, 065210.	2.5	0
593	Locally adaptive aggregation of organisms under death risk in rock-paper-scissors models. <i>BioSystems</i> , 2023, 227-228, 104901.	2.0	0
595	Exploring inbreeding dynamics by considering reproductive bound and polygyny. <i>Chaos</i> , 2023, 33, .	2.5	0
596	The evolutionary ecology of fungal killer phenotypes. <i>Proceedings of the Royal Society B: Biological Sciences</i> , 2023, 290, .	2.6	1
597	Evolutionary dynamics in the cyclic competition system of seven species: Common cascading dynamics in biodiversity. <i>Chaos, Solitons and Fractals</i> , 2023, 175, 113949.	5.1	3
598	Spatial dynamics of synergistic coinfection in rock-paper-scissors models. <i>Chaos</i> , 2023, 33, .	2.5	0

#	ARTICLE	IF	CITATIONS
599	Periodic temporal environmental variations induce coexistence in resource competition models. <i>Physical Review E</i> , 2023, 108, .	2.1	4
600	Influence of physical interactions on spatiotemporal patterns. <i>Physical Review E</i> , 2023, 108, .	2.1	0
601	Is the public goods game a chaotic system?. <i>Europhysics Letters</i> , 0, , .	2.0	0
602	VisualPDE: Rapid Interactive Simulations of Partial Differential Equations. <i>Bulletin of Mathematical Biology</i> , 2023, 85, .	1.9	2
603	Similarity Suppresses Cyclicity: Why Similar Competitors Form Hierarchies. <i>SIAM Journal on Applied Mathematics</i> , 2023, 83, 2027-2051.	1.8	0
604	Community composition and the environment modulate the population dynamics of type VI secretion in human gut bacteria. <i>Nature Ecology and Evolution</i> , 2023, 7, 2092-2107.	7.8	4
605	Coupled environmental and demographic fluctuations shape the evolution of cooperative antimicrobial resistance. <i>Journal of the Royal Society Interface</i> , 2023, 20, .	3.4	1
606	Response of a three-species cyclic ecosystem to a short-lived elevation of death rate. <i>Scientific Reports</i> , 2023, 13, .	3.3	1
607	Incorporating Computational Challenges into a Multidisciplinary Course on Stochastic Processes. <i>SIAM Review</i> , 2023, 65, 1152-1170.	9.5	0
608	Solving polymicrobial puzzles: evolutionary dynamics and future directions. <i>Frontiers in Cellular and Infection Microbiology</i> , 0, 13, .	3.9	0
609	Coexistence of Competing Microbial Strains under Twofold Environmental Variability and Demographic Fluctuations. <i>New Journal of Physics</i> , 2023, 25, 123010.	2.9	3
610	Adaptive rock-paper-scissors game enhances eco-evolutionary performance at cost of dynamic stability. <i>Applied Mathematics and Computation</i> , 2024, 468, 128535.	2.2	0
611	Understanding the role of neutral species by means of high-order interaction in the rock-paper-scissors dynamics. <i>Physical Review E</i> , 2024, 109, .	2.1	0
612	The effect of intraspecific cooperation in a three-species cyclic predator-prey model. <i>Applied Mathematics and Computation</i> , 2024, 470, 128574.	2.2	0
613	Ecological resilience in a circular world: Mutation and extinction in five-species ecosystems. <i>Chaos, Solitons and Fractals</i> , 2024, 180, 114548.	5.1	0
614	Uninorms on bounded trellises. <i>Fuzzy Sets and Systems</i> , 2024, 481, 108898.	2.7	0
615	Diversity and ecotones in a model ecosystems of sessile species. <i>Physical Review E</i> , 2024, 109, .	2.1	0
616	Nonreciprocal Frustration: Time Crystalline Order-by-Disorder Phenomenon and a Spin-Glass-like State. <i>Physical Review X</i> , 2024, 14, .	8.9	0