Simon A Levin

List of Publications by Citations

487 papers	51,660 citations	106 h-index	220 g-index
541 ext. papers	59,747 ext. citations	7.9 avg, IF	7.93 L-index

#	Paper	IF	Citations
487	The Problem of Pattern and Scale in Ecology: The Robert H. MacArthur Award Lecture. *Ecology*, **1992**, 73, 1943-1967	4.6	4212
486	Effective leadership and decision-making in animal groups on the move. *Nature*, **2005**, 433, 513-6	50.4	1748
485	Global trends in antimicrobial use in food animals. *Proceedings of the National Academy of Sciences of the United States of America*, **2015**, 112, 5649-54	11.5	1574
484	Global antibiotic consumption 2000 to 2010: an analysis of national pharmaceutical sales data. *Lancet Infectious Diseases, The*, **2014**, 14, 742-750	25.5	1285
483	Anticipating critical transitions. *Science*, **2012**, 338, 344-8	33.3	1207
482	Global increase and geographic convergence in antibiotic consumption between 2000 and 2015. *Proceedings of the National Academy of Sciences of the United States of America*, **2018**, 115, E3463-E3470	11.5	1111
481	Economic growth, carrying capacity, and the environment. *Science*, **1995**, 268, 520-1	33.3	1077
480	Intertidal Landscapes: Disturbance and the Dynamics of Pattern. *Ecological Monographs*, **1981**, 51, 145-178	7	888
479	Towards a general theory of adaptive walks on rugged landscapes. *Journal of Theoretical Biology*, **1987**, 128, 11-45	2.3	886
478	Ecosystems and the Biosphere as Complex Adaptive Systems. *Ecosystems*, **1998**, 1, 431-436	3.9	884
477	Dispersion and Population Interactions. *American Naturalist*, **1974**, 108, 207-228	3.7	827
476	The global extent and determinants of savanna and forest as alternative biome states. *Science*, **2011**, 334, 230-2	33.3	814
475	The Importance of Being Discrete (and Spatial). *Theoretical Population Biology*, **1994**, 46, 363-394	1.2	760
474	Marine taxa track local climate velocities. *Science*, **2013**, 341, 1239-42	33.3	732
473	Optimal nitrogen-to-phosphorus stoichiometry of phytoplankton. *Nature*, **2004**, 429, 171-4	50.4	648
472	Ecology. The value of nature and the nature of value. *Science*, **2000**, 289, 395-6	33.3	614
471	Disturbance, patch formation, and community structure. *Proceedings of the National Academy of Sciences of the United States of America*, **1974**, 71, 2744-7	11.5	597

470	Trading-off fish biodiversity, food security, and hydropower in the Mekong River Basin. *Proceedings of the National Academy of Sciences of the United States of America*, **2012**, 109, 5609-14	11.5	553
469	The Ecology and Evolution of Seed Dispersal: A Theoretical Perspective. *Annual Review of Ecology, Evolution, and Systematics*, **2003**, 34, 575-604	13.5	552
468	Influence of nonlinear incidence rates upon the behavior of SIRS epidemiological models. *Journal of Mathematical Biology*, **1986**, 23, 187-204	2	520
467	Diffusion and Ecological Problems: Modern Perspectives. *Interdisciplinary Applied Mathematics*, **2001**,	0.7	510
466	Dynamical behavior of epidemiological models with nonlinear incidence rates. *Journal of Mathematical Biology*, **1987**, 25, 359-80	2	509
465	Mechanisms of long-distance dispersal of seeds by wind. *Nature*, **2002**, 418, 409-13	50.4	476
464	Comparing classical community models: theoretical consequences for patterns of diversity. *American Naturalist*, **2002**, 159, 1-23	3.7	475
463	Are We Consuming Too Much?. *Journal of Economic Perspectives*, **2004**, 18, 147-172	9.9	463
462	The Sustainable Biosphere Initiative: An Ecological Research Agenda: A Report from the Ecological Society of America. *Ecology*, **1991**, 72, 371-412	4.6	459
461	Community Equilibria and Stability, and an Extension of the Competitive Exclusion Principle. *American Naturalist*, **1970**, 104, 413-423	3.7	436
460	Selection of Intermediate Rates of Increase in Parasite-Host Systems. *American Naturalist*, **1981**, 117, 308-315	3.7	424
459	Spread of invading organisms. *Landscape Ecology*, **1990**, 4, 177-188	4.3	385
458	Social-ecological systems as complex adaptive systems: modeling and policy implications. *Environment and Development Economics*, **2013**, 18, 111-132	1.8	381
457	Economic growth, carrying capacity, and the environment. *Ecological Economics*, **1995**, 15, 91-95	5.6	370
456	Dispersal strategies in patchy environments. *Theoretical Population Biology*, **1984**, 26, 165-191	1.2	367
455	Does aquaculture add resilience to the global food system?. *Proceedings of the National Academy of Sciences of the United States of America*, **2014**, 111, 13257-63	11.5	340
454	Resilience, Robustness, and Marine Ecosystem-based Management. *BioScience*, **2008**, 58, 27-32	5.7	340
453	Stochastic Spatial Models: A User's Guide to Ecological Applications. *Philosophical Transactions of the Royal Society B: Biological Sciences*, **1994**, 343, 329-350	5.8	338

452	Phenotypic diversity and ecosystem functioning in changing environments: a theoretical framework. *Proceedings of the National Academy of Sciences of the United States of America*, **2001**, 98, 11376-81	11.5	334
451	Social norms as solutions. *Science*, **2016**, 354, 42-43	33.3	314
450	Strong latitudinal patterns in the elemental ratios of marine plankton and organic matter. *Nature Geoscience*, **2013**, 6, 279-283	18.3	311
449	The role of mosaic phenomena in natural communities. *Theoretical Population Biology*, **1977**, 12, 117-39	1.2	308
448	A Theoretical Framework for Data Analysis of Wind Dispersal of Seeds and Pollen. *Ecology*, **1989**, 70, 329-338	4.6	293
447	Uninformed individuals promote democratic consensus in animal groups. *Science*, **2011**, 334, 1578-80	33.3	290
446	Mathematical and computational challenges in population biology and ecosystems science. *Science*, **1997**, 275, 334-43	33.3	288
445	Positive feedbacks promote power-law clustering of Kalahari vegetation. *Nature*, **2007**, 449, 209-12	50.4	285
444	From individuals to aggregations: the interplay between behavior and physics. *Journal of Theoretical Biology*, **1999**, 196, 397-454	2.3	282
443	Tree cover in sub-Saharan Africa: rainfall and fire constrain forest and savanna as alternative stable states. *Ecology*, **2011**, 92, 1063-72	4.6	278
442	The evolution of quorum sensing in bacterial biofilms. *PLoS Biology*, **2008**, 6, e14	9.7	276
441	Hypothesis for origin of planktonic patchiness. *Nature*, **1976**, 259, 659-659	50.4	268
440	Dynamical resonance can account for seasonality of influenza epidemics. *Proceedings of the National Academy of Sciences of the United States of America*, **2004**, 101, 16915-6	11.5	260
439	Environment. Looming global-scale failures and missing institutions. *Science*, **2009**, 325, 1345-6	33.3	259
438	LEAKY PREZYGOTIC ISOLATION AND POROUS GENOMES: RAPID INTROGRESSION OF MATERNALLY INHERITED DNA. *Evolution; International Journal of Organic Evolution*, **2005**, 59, 720-729	3.8	242
437	Visual sensory networks and effective information transfer in animal groups. *Current Biology*, **2013**, 23, R709-11	6.3	238
436	Reducing antimicrobial use in food animals. *Science*, **2017**, 357, 1350-1352	33.3	236
435	Allelopathy in Spatially Distributed Populations. *Journal of Theoretical Biology*, **1997**, 185, 165-71	2.3	232

434	The Dynamics of Herds: From Individuals to Aggregations. *Journal of Theoretical Biology*, **1996**, 182, 85-98	2.3	231
433	Coherence and conservation. *Science*, **2000**, 290, 1360-4	33.3	228
432	Extinction Thresholds and Metapopulation Persistence in Dynamic Landscapes. *American Naturalist*, **2000**, 156, 478-494	3.7	228
431	On the use of IPCC-class models to assess the impact of climate on Living Marine Resources. *Progress in Oceanography*, **2011**, 88, 1-27	3.8	227
430	The dynamics of cocirculating influenza strains conferring partial cross-immunity. *Journal of Mathematical Biology*, **1997**, 35, 825-42	2	222
429	Evolution of human-driven fire regimes in Africa. *Proceedings of the National Academy of Sciences of the United States of America*, **2012**, 109, 847-52	11.5	215
428	Mechanistic analytical models for long-distance seed dispersal by wind. *American Naturalist*, **2005**, 166, 368-81	3.7	209
427	Phytoplankton growth and stoichiometry under multiple nutrient limitation. *Limnology and Oceanography*, **2004**, 49, 1463-1470	4.8	206
426	Limitations of Laboratory Bioassays: The Need for Ecosystem-Level Testing. *BioScience*, **1985**, 35, 165-171	5.7	205
425	Complex adaptive systems: Exploring the known, the unknown and the unknowable. *Bulletin of the American Mathematical Society*, **2002**, 40, 3-20	1.3	200
424	Generalized models reveal stabilizing factors in food webs. *Science*, **2009**, 325, 747-50	33.3	197
423	Ecology and evolution of the flu. *Trends in Ecology and Evolution*, **2002**, 17, 334-340	10.9	196
422	Spatial aspects of interspecific competition. *Theoretical Population Biology*, **1998**, 53, 30-43	1.2	196
421	Coevolutionary arms races between bacteria and bacteriophage. *Proceedings of the National Academy of Sciences of the United States of America*, **2005**, 102, 9535-40	11.5	195
420	Epidemiological models with age structure, proportionate mixing, and cross-immunity. *Journal of Mathematical Biology*, **1989**, 27, 233-58	2	189
419	Aggregation in model ecosystems. I. Perfect aggregation. *Ecological Modelling*, **1987**, 37, 287-302	3	188
418	Spatial attributes and reserve design models: A review. *Environmental Modeling and Assessment*, **2005**, 10, 163-181	2	186
417	Hemagglutinin sequence clusters and the antigenic evolution of influenza A virus. *Proceedings of the National Academy of Sciences of the United States of America*, **2002**, 99, 6263-8	11.5	178

416	The Effects of Disturbance Architecture on Landscape-Level Population Dynamics. *Ecology*, **1996**, 77, 375-394	4.6	177
415	A Simulation Model of the Population Dynamics and Evolution of Myxomatosis. *Ecological Monographs*, **1990**, 60, 423-447	9	169
414	Sex-Ratio Selection in Species with Helpers-At-The-Nest. *American Naturalist*, **1986**, 127, 1-8	3.7	169
413	A Spatial Patch Dynamic Modeling Approach to Pattern and Process in an Annual Grassland. *Ecological Monographs*, **1994**, 64, 447-464	9	167
412	Resilience in natural and socioeconomic systems. *Environment and Development Economics*, **1998**, 3, 221-262	2.6	161
411	Social Norms and Global Environmental Challenges: The Complex Interaction of Behaviors, Values, and Policy. *BioScience*, **2013**, 63, 164-175	5.7	156
410	Pattern Generation in Space and Aspect. *SIAM Review*, **1985**, 27, 45-67	7.4	154
409	Multiple Scales and the Maintenance of Biodiversity. *Ecosystems*, **2000**, 3, 498-506	3.9	150
408	Dispersal in patchy environments: The effects of temporal and spatial structure. *Theoretical Population Biology*, **1991**, 39, 63-99	1.2	150
407	Ecological feedbacks. Termite mounds can increase the robustness of dryland ecosystems to climatic change. *Science*, **2015**, 347, 651-5	33.3	149
406	The Spread of a Reinvading Species: Range Expansion in the California Sea Otter. *American Naturalist*, **1988**, 131, 526-543	3.7	147
405	From Management to Stewardship: Viewing Forests As Complex Adaptive Systems in an Uncertain World. *Conservation Letters*, **2015**, 8, 368-377	6.9	140
404	Fractal reorientation clocks: Linking animal behavior to statistical patterns of search. *Proceedings of the National Academy of Sciences of the United States of America*, **2008**, 105, 19072-7	11.5	139
403	Persistent colonization and the spread of antibiotic resistance in nosocomial pathogens: resistance is a regional problem. *Proceedings of the National Academy of Sciences of the United States of America*, **2004**, 101, 3709-14	11.5	139
402	Spatial Models for Species-Area Curves. *Journal of Theoretical Biology*, **1996**, 179, 119-127	2.3	138
401	Analysis of an age-structured fishery model. *Journal of Mathematical Biology*, **1980**, 9, 245-274	2	138
400	Terrestrial models and global change: challenges for the future. *Global Change Biology*, **1998**, 4, 581-590	11.4	134
399	Self-organization and the Emergence of Complexity in Ecological Systems. *BioScience*, **2005**, 55, 1075	5.7	134

398	Regime shifts in a social-ecological system. *Theoretical Ecology*, **2013**, 6, 359-372	1.6	131
397	Cascading regime shifts within and across scales. *Science*, **2018**, 362, 1379-1383	33.3	128
396	Immune life history, vaccination, and the dynamics of SARS-CoV-2 over the next 5 years. *Science*, **2020**, 370, 811-818	33.3	121
395	River networks as ecological corridors: A complex systems perspective for integrating hydrologic, geomorphologic, and ecologic dynamics. *Water Resources Research*, **2009**, 45,	5.4	119
394	A note on difference-delay equations. *Theoretical Population Biology*, **1976**, 9, 178-87	1.2	119
393	Fishery discards impact on seabird movement patterns at regional scales. *Current Biology*, **2010**, 20, 215-22	8.3	117
392	Climate change and the integrity of science. *Science*, **2010**, 328, 689-90	33.3	116
391	Limiting Similarity, Species Packing, and System Stability for Hierarchical Competition-Colonization Models. *American Naturalist*, **1999**, 153, 371-383	3.7	116
390	Transnational corporations and the challenge of biosphere stewardship. *Nature Ecology and Evolution*, **2019**, 3, 1396-1403	12.3	116
389	Phytoplankton stoichiometry. *Ecological Research*, **2008**, 23, 479-485	1.9	113
388	Pathogen-Driven Outbreaks in Forest Defoliators Revisited: Building Models from Experimental Data. *American Naturalist*, **2000**, 156, 105-120	3.7	112
387	Aggregation in Model Ecosystems II. Approximate Aggregation. *Mathematical Medicine and Biology*, **1989**, 6, 1-23	1.3	111
386	The dynamics of group formation. *Mathematical Biosciences*, **1995**, 128, 243-64	3.9	108
385	From individuals to epidemics. *Philosophical Transactions of the Royal Society B: Biological Sciences*, **1996**, 351, 1615-21	5.8	108
384	The SIRC model and influenza A. *Mathematical Biosciences*, **2006**, 200, 152-69	3.9	106
383	Allelopathy of bacteria in a lattice population: Competition between colicin-sensitive and colicin-producing strains. *Evolutionary Ecology*, **1998**, 12, 785-802	1.8	105
382	Using mathematical optimization models to design nature reserves. *Frontiers in Ecology and the Environment*, **2004**, 2, 98-105	5.5	105
381	Species diversity and ecosystem response to carbon dioxide fertilization: conclusions from a temperate forest model. *Global Change Biology*, **1995**, 1, 373-381	11.4	104

380	Integrating theoretical climate and fire effects on savanna and forest systems. *American Naturalist*, **2012**, 180, 211-24	3.7	102
379	Strategic interactions in multi-institutional epidemics of antibiotic resistance. *Proceedings of the National Academy of Sciences of the United States of America*, **2005**, 102, 3153-8	11.5	101
378	On the role of long incubation periods in the dynamics of acquired immunodeficiency syndrome (AIDS). Part 1: Single population models. *Journal of Mathematical Biology*, **1989**, 27, 373-98	2	101
377	FROM INDIVIDUALS TO POPULATION DENSITIES: SEARCHING FOR THE INTERMEDIATE SCALE OF NONTRIVIAL DETERMINISM. *Ecology*, **1999**, 80, 2225-2236	4.6	95
376	MARINE RESERVE DESIGN AND THE EVOLUTION OF SIZE AT MATURATION IN HARVESTED FISH **2005**, 15, 882-901		94
375	Facultative versus obligate nitrogen fixation strategies and their ecosystem consequences. *American Naturalist*, **2009**, 174, 465-77	3.7	93
374	The Multifaceted Aspects of Ecosystem Integrity. *Ecology and Society*, **1997**, 1,		93
373	What is blue growth? The semantics of "Sustainable Development" of marine environments. *Marine Policy*, **2018**, 87, 177-179	3.5	92
372	Dynamic response of grass cover to rainfall variability: implications for the function and persistence of savanna ecosystems. *Advances in Water Resources*, **2005**, 28, 291-302	4.7	91
371	Epidemiological and evolutionary considerations of SARS-CoV-2 vaccine dosing regimes. *Science*, **2021**, 372, 363-370	33.3	90
370	The evolution of norms. *PLoS Biology*, **2005**, 3, e194	9.7	89
369	The right incentives enable ocean sustainability successes and provide hope for the future. *Proceedings of the National Academy of Sciences of the United States of America*, **2016**, 113, 14507-14514	11.5	89
368	Cutting through the complexity of cell collectives. *Proceedings of the Royal Society B: Biological Sciences*, **2013**, 280, 20122770	4.4	88
367	A Mathematical Model of Coevolving Populations. *American Naturalist*, **1977**, 111, 657-675	3.7	87
366	Long-distance biological transport processes through the air: can nature's complexity be unfolded in silico?. *Diversity and Distributions*, **2005**, 11, 131-137	5	86
365	New perspectives in ecotoxicology. *Environmental Management*, **1984**, 8, 375-442	3.1	86
364	The Dependence of Plant Root: Shoot Ratios on Internal Nitrogen Concentration. *Annals of Botany*, **1989**, 64, 71-75	4.1	85
363	Dynamic model of flexible phytoplankton nutrient uptake. *Proceedings of the National Academy of Sciences of the United States of America*, **2011**, 108, 20633-8	11.5	84

362	Designing marine reserves for interacting species: Insights from theory. *Biological Conservation*, **2007**, 137, 163-179	6.2	84
361	Differential neutralization efficiency of hemagglutinin epitopes, antibody interference, and the design of influenza vaccines. *Proceedings of the National Academy of Sciences of the United States of America*, **2009**, 106, 8701-6	11.5	83
360	Periodicity in Epidemiological Models. *Biomathematics*, **1989**, 193-211		83
359	Coping with uncertainty: a call for a new science-policy forum. *Ambio*, **2003**, 32, 330-5	6.5	81
358	Evolutionary tradeoffs can select against nitrogen fixation and thereby maintain nitrogen limitation. *Proceedings of the National Academy of Sciences of the United States of America*, **2008**, 105, 1573-8	11.5	80
357	The evolution of dispersal in reserve networks. *American Naturalist*, **2007**, 170, 59-78	3.7	79
356	Learning to live in a global commons: socioeconomic challenges for a sustainable environment. *Ecological Research*, **2006**, 21, 328-333	1.9	79
355	The timing of life history events. *Journal of Theoretical Biology*, **1995**, 172, 33-42	2.3	78
354	Our future in the Anthropocene biosphere. *Ambio*, **2021**, 50, 834-869	6.5	78
353	HIDDEN EFFECTS OF CHRONIC TUBERCULOSIS IN AFRICAN BUFFALO. *Ecology*, **2005**, 86, 2358-2364	4.6	77
352	Climate policies under wealth inequality. *Proceedings of the National Academy of Sciences of the United States of America*, **2014**, 111, 2212-6	11.5	75
351	The survival of the conformist: social pressure and renewable resource management. *Journal of Theoretical Biology*, **2012**, 299, 152-61	2.3	74
350	Increased plant growth from nitrogen addition should conserve phosphorus in terrestrial ecosystems. *Proceedings of the National Academy of Sciences of the United States of America*, **2008**, 105, 1971-6	11.5	74
349	The effect of global travel on the spread of sars. *Mathematical Biosciences and Engineering*, **2006**, 3, 205-18	1.1	73
348	Role of economics in analyzing the environment and sustainable development. *Proceedings of the National Academy of Sciences of the United States of America*, **2019**, 116, 5233-5238	11.5	72
347	A model of flexible uptake of two essential resources. *Journal of Theoretical Biology*, **2007**, 246, 278-89	2.3	72
346	Dynamics of influenza A drift: the linear three-strain model. *Mathematical Biosciences*, **1999**, 162, 33-51	3.9	72
345	Eluding catastrophic shifts. *Proceedings of the National Academy of Sciences of the United States of America*, **2015**, 112, E1828-36	11.5	71

344	A neutral metapopulation model of biodiversity in river networks. *Journal of Theoretical Biology*, **2007**, 245, 351-63	2.3	71
343	Food production, population growth, and the environment. *Science*, **1998**, 281, 1291-2	33.3	71
342	Resource limitation in a competitive context determines complex plant responses to experimental resource additions. *Ecology*, **2013**, 94, 2505-17	4.6	70
341	Size and scaling of predator-prey dynamics. *Ecology Letters*, **2006**, 9, 548-57	10	69
340	Impact of ocean phytoplankton diversity on phosphate uptake. *Proceedings of the National Academy of Sciences of the United States of America*, **2014**, 111, 17540-5	11.5	68
339	Competition for water and light in closed-canopy forests: a tractable model of carbon allocation with implications for carbon sinks. *American Naturalist*, **2013**, 181, 314-30	3.7	68
338	Public goods in relation to competition, cooperation, and spite. *Proceedings of the National Academy of Sciences of the United States of America*, **2014**, 111 Suppl 3, 10838-45	11.5	66
337	Decision versus compromise for animal groups in motion. *Proceedings of the National Academy of Sciences of the United States of America*, **2012**, 109, 227-32	11.5	65
336	Local frequency dependence and global coexistence. *Theoretical Population Biology*, **1999**, 55, 270-82	1.2	65
335	Intraspecific variation and species coexistence. *American Naturalist*, **2007**, 170, 807-18	3.7	64
334	Economic Pathways to Ecological Sustainability. *BioScience*, **2000**, 50, 339	5.7	64
333	Diversity in current ecological thinking: implications for environmental management. *Environmental Management*, **2009**, 43, 17-27	3.1	63
332	A global movement toward an ecosystem approach to management of marine resources. *Marine Ecology - Progress Series*, **2005**, 300, 275-279	2.6	63
331	Merging economics and epidemiology to improve the prediction and management of infectious disease. *EcoHealth*, **2014**, 11, 464-75	3.1	62
330	Cooperation among microorganisms. *PLoS Biology*, **2006**, 4, e299	9.7	62
329	The effects of population heterogeneity on disease invasion. *Mathematical Biosciences*, **1995**, 128, 25-40	3.9	61
328	Toward a Dynamic Metacommunity Approach to Marine Reserve Theory. *BioScience*, **2004**, 54, 1003	5.7	60
327	Perspectives in Ecological Theory **1989**,		60

326	THEORETICAL PERSPECTIVES ON EVOLUTION OF LONG-DISTANCE DISPERSAL AND THE EXAMPLE OF SPECIALIZED PESTS. *Ecology*, **2003**, 84, 1957-1967	4.6	58
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322	Tree cover in sub-Saharan Africa: Rainfall and fire constrain forest and savanna as alternative stable states **2011**, 92, 1063		56
321	Slowing Down of Recovery as Generic Risk Marker for Acute Severity Transitions in Chronic Diseases. *Critical Care Medicine*, **2016**, 44, 601-6	1.4	56
320	Can stable social groups be maintained by homophilous imitation alone?. *Journal of Economic Behavior and Organization*, **2005**, 57, 267-286	1.6	55
319	Managing Ecosystem Resources*Environmental Science & Technology*, **2000**, 34, 1401-1406	10.3	55
318	Results on the dynamics for models for the sexual transmission of the human immunodeficiency virus. *Applied Mathematics Letters*, **1989**, 2, 327-331	3.5	55
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314	OSCILLATORY DYNAMICS AND SPATIAL SCALE: THE ROLE OF NOISE AND UNRESOLVED PATTERN. *Ecology*, **2001**, 82, 2357-2369	4.6	52
313	A collective navigation hypothesis for homeward migration in anadromous salmonids. *Fish and Fisheries*, **2016**, 17, 525-542	6	51
312	Building resilience and adaptation to manage Arctic change. *Ambio*, **2006**, 35, 198-202	6.5	51
311	A patch-based spatial modeling approach: conceptual framework and simulation scheme. *Ecological Modelling*, **1997**, 101, 325-346	3	50
310	"Critical slowing down" in time-to-extinction: an example of critical phenomena in ecology. *Journal of Theoretical Biology*, **1998**, 192, 363-76	2.3	49
309	The Role of Theoretical Ecology in the Description and Understanding of Populations in Heterogeneous Environments. *American Zoologist*, **1981**, 21, 865-875		49

308	Fitness tradeoffs between spores and nonaggregating cells can explain the coexistence of diverse genotypes in cellular slime molds. *Proceedings of the National Academy of Sciences of the United States of America*, **2015**, 112, 2776-81	11.5	48
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306	Human-environment interactions in population and ecosystem health. *Proceedings of the National Academy of Sciences of the United States of America*, **2016**, 113, 14502-14506	11.5	48
305	Decreased water limitation under elevated CO2 amplifies potential for forest carbon sinks. *Proceedings of the National Academy of Sciences of the United States of America*, **2015**, 112, 7213-8	11.5	47
304	Dynamics of Decision Making in Animal Group Motion. *Journal of Nonlinear Science*, **2009**, 19, 399-435	2.8	47
303	Economic Growth, Carrying Capacity, and the Environment **1996**, 6, 13-15		47
302	Urban ecology: advancing science and society. *Frontiers in Ecology and the Environment*, **2014**, 12, 574-58[illegible]	3.5	46
301	PHYSIOLOGICAL AND BEHAVIORAL ADAPTATION TO VARYING ENVIRONMENTS: A MATHEMATICAL MODEL. *Evolution; International Journal of Organic Evolution*, **1988**, 42, 986-994	3.8	45
300	Modeling tiger population and territory dynamics using an agent-based approach. *Ecological Modelling*, **2015**, 312, 347-362	3	44
299	Genetic diversity and interdependent crop choices in agriculture. *Resources and Energy Economics*, **2004**, 26, 175-184	3.2	44
298	ERROR PROPAGATION IN A FOREST SUCCESSION MODEL:THE ROLE OF FINE-SCALE HETEROGENEITY IN LIGHT. *Ecology*, **1999**, 80, 1927-1943	4.6	44
297	Spread of two linked social norms on complex interaction networks. *Journal of Theoretical Biology*, **2004**, 230, 57-64	2.3	43
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290	Evolution of a modular software network. *Proceedings of the National Academy of Sciences of the United States of America*, **2011**, 108, 19985-9	11.5	39
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288	Characterizing fisheries connectivity in marine social–ecological systems. *ICES Journal of Marine Science*, **2017**, 74, 2087-2096	2.7	38
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2 Quorum sensing via dynamic cytokine signaling comprehensively explains divergent patterns of effector choice among helper T cells **2020**, 16, e1008051

1 Quorum sensing via dynamic cytokine signaling comprehensively explains divergent patterns of effector choice among helper T cells **2020**, 16, e1008051