Volker Grimm

List of Publications by Year
in descending order

194 papers	18,903 citations	23500 58 h-index	14702 127 g-index
204 all docs	204 docs citations	204 times ranked	15691 citing authors

#	Article	IF	Citations
1	A standard protocol for describing individual-based and agent-based models. Ecological Modelling, 2006, 198, 115-126.	1.2	2,219
2	The ODD protocol: A review and first update. Ecological Modelling, 2010, 221, 2760-2768.	1.2	1,913
3	Pattern-Oriented Modeling of Agent-Based Complex Systems: Lessons from Ecology. Science, 2005, 310, 987-991.	6.0	1,685
4	Individual-based Modeling and Ecology. , 2005, , .		985
5	Ten years of individual-based modelling in ecology: what have we learned and what could we learn in the future?. Ecological Modelling, 1999, 115, 129-148.	1.2	794
6	Babel, or the ecological stability discussions: an inventory and analysis of terminology and a guide for avoiding confusion. Oecologia, 1997, 109, 323-334.	0.9	759
7	The ODD Protocol for Describing Agent-Based and Other Simulation Models: A Second Update to Improve Clarity, Replication, and Structural Realism. Jasss, 2020, 23, .	1.0	349
8	Ecological models supporting environmental decision making: a strategy for the future. Trends in Ecology and Evolution, 2010, 25, 479-486.	4.2	342
9	Pattern-oriented modelling: a â€˜multi-scopeâ€™ for predictive systems ecology. Philosophical Transactions of the Royal Society B: Biological Sciences, 2012, 367, 298-310.	1.8	322
10	Using pattern-oriented modeling for revealing hidden information: a key for reconciling ecological theory and application. Oikos, 2003, 100, 209-222.	1.2	289
11	Ecosystem oceanography for global change in fisheries. Trends in Ecology and Evolution, 2008, 23, 338-346.	4.2	259
12	The virtual ecologist approach: simulating data and observers. Oikos, 2010, 119, 622-635.	1.2	242
13	Ecological buffering mechanisms in savannas: A unifying theory of long-term tree-grass coexistence. Plant Ecology, 2000, 150, 161-171.	0.7	234
14	<scp>BEEHAVE</scp>: a systems model of honeybee colony dynamics and foraging to explore multifactorial causes of colony failure. Journal of Applied Ecology, 2014, 51, 470-482.	1.9	219
15	Individual-based models in ecology after four decades. F1000prime Reports, 2014, 6, 39.	5.9	216
16	Do simple models lead to generality in ecology?. Trends in Ecology and Evolution, 2013, 28, 578-583.	4.2	215
17	Facilitating Parameter Estimation and Sensitivity Analysis of Agent-Based Models: A Cookbook Using NetLogo and 'R'. Jasss, 2014, 17, .	1.0	198
18	Merging validation and evaluation of ecological models to â€˜evaludationâ€™: A review of terminology and a practical approach. Ecological Modelling, 2014, 280, 117-128.	1.2	193

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19	Towards better modelling and decision support: Documenting model development, testing, and analysis using TRACE. Ecological Modelling, 2014, 280, 129-139.	1.2	185
20	Pattern-oriented modelling in population ecology. Science of the Total Environment, 1996, 183, 151-166.	3.9	183
21	Individual-based modelling in ecology: what makes the difference?. Trends in Ecology and Evolution, 1996, 11, 437-441.	4.2	157
22	REVIEW: Towards a systems approach for understanding honeybee decline: a stocktaking and synthesis of existing models. Journal of Applied Ecology, 2013, 50, 868-880.	1.9	154
23	Competition among plants: Concepts, individual-based modelling approaches, and a proposal for a future research strategy. Perspectives in Plant Ecology, Evolution and Systematics, 2008, 9, 121-135.	1.1	150
24	Agent-Based Modelling of Social-Ecological Systems: Achievements, Challenges, and a Way Forward. Jasss, 2017, 20, .	1.0	139
25	Making Predictions in a Changing World: The Benefits of Individual-Based Ecology. BioScience, 2015, 65, 140-150.	2.2	136
26	The intrinsic mean time to extinction: a unifying approach to analysing persistence and viability of populations. Oikos, 2004, 105, 501-511.	1.2	130
27	Representing the acquisition and use of energy by individuals in agentâ€based models of animal populations. Methods in Ecology and Evolution, 2013, 4, 151-161.	2.2	126
28	Modelling Persistence in Dynamic Landscapes: Lessons from a Metapopulation of the Grasshopper Bryodema tuberculata. Journal of Animal Ecology, 1997, 66, 508.	1.3	123
29	Ecological-Economic Modeling for Biodiversity Management: Potential, Pitfalls, and Prospects. Conservation Biology, 2006, 20, 1034-1041.	2.4	123
30	Dynamic Energy Budget theory meets individualâ€based modelling: a generic and accessible implementation. Methods in Ecology and Evolution, 2012, 3, 445-449.	2.2	116
31	Predictive systems ecology. Proceedings of the Royal Society B: Biological Sciences, 2013, 280, 20131452.	1.2	114
32	When, Where, and How Nature Matters for Ecosystem Services: Challenges for the Next Generation of Ecosystem Service Models. BioScience, 2017, 67, 820-833.	2.2	114
33	Ecological models and pesticide risk assessment: Current modeling practice. Environmental Toxicology and Chemistry, 2010, 29, 1006-1012.	2.2	113
34	Reintroducing Environmental Change Drivers in Biodiversityâ€"Ecosystem Functioning Research. Trends in Ecology and Evolution, 2016, 31, 905-915.	4.2	110
35	Individual-based modelling and ecological theory: synthesis of a workshop. Ecological Modelling, 1999, 115, 275-282.	1.2	109
36	When things don't add up: quantifying impacts of multiple stressors from individual metabolism to ecosystem processing. Ecology Letters, 2018, 21, 568-577.	3.0	105

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37	Mathematical models and understanding in ecology. Ecological Modelling, 1994, 75-76, 641-651.	1.2	102
38	Ecological models in support of regulatory risk assessments of pesticides: developing a strategy for the future. Integrated Environmental Assessment and Management, 2009, 5, 167-172.	1.6	100
39	Bird sky networks: How do avian scavengers use social information to find carrion?. Ecology, 2014, 95, 1799-1808.	1.5	97
40	The winter pack-ice zone provides a sheltered but food-poor habitat for larval Antarctic krill. Nature Ecology and Evolution, 2017, 1, 1853-1861.	3.4	96
41	Home range dynamics and population regulation: An individual-based model of the common shrew Sorex araneus. Ecological Modelling, 2007, 205, 397-409.	1.2	95
42	Predicting Population Dynamics from the Properties of Individuals: A Cross-Level Test of Dynamic Energy Budget Theory. American Naturalist, 2013, 181, 506-519.	1.0	95
43	Reconstructing spatiotemporal dynamics of Central European natural beech forests: the rule-based forest model BEFORE. Forest Ecology and Management, 2004, 194, 349-368.	1.4	91
44	Different Modelling Purposes. Jasss, 2019, 22, .	1.0	91
45	Adding Value to Ecological Risk Assessment with Population Modeling. Human and Ecological Risk Assessment (HERA), 2011, 17, 287-299.	1.7	90
46	Extrapolating ecotoxicological effects from individuals to populations: a generic approach based on Dynamic Energy Budget theory and individual-based modeling. Ecotoxicology, 2013, 22, 574-583.	1.1	80
47	Predicting the impacts of anthropogenic disturbances on marine populations. Conservation Letters, 2018, 11, e12563.	2.8	79
48	Next-Generation Individual-Based Models Integrate Biodiversity and Ecosystems: Yes We Can, and Yes We Must. Ecosystems, 2017, 20, 229-236.	1.6	77
49	From pattern to practice: a scaling-down strategy for spatially explicit modelling illustrated by the spread and control of rabies. Ecological Modelling, 1999, 117, 179-202.	1.2	76
50	Structural realism, emergence, and predictions in next-generation ecological modelling: Synthesis from a special issue. Ecological Modelling, 2016, 326, 177-187.	1.2	73
51	Reversed effects of grazing on plant diversity: the role of belowâ€ground competition and size symmetry. Oikos, 2009, 118, 1830-1843.	1.2	72
52	Robustness analysis: Deconstructing computational models for ecological theory and applications. Ecological Modelling, 2016, 326, 162-167.	1.2	69
53	Pattern formation triggered by rare events: lessons from the spread of rabies. Proceedings of the Royal Society B: Biological Sciences, 1997, 264, 495-503.	1.2	68
54	Patterns for parameters in simulation models. Ecological Modelling, 2007, 204, 553-556.	1.2	68

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55	Unifying Wildfire Models from Ecology and Statistical Physics. American Naturalist, 2009, 174, E170-E185.	1.0	67
56	Chemical and natural stressors combined: from cryptic effects to population extinction. Scientific Reports, 2013, 3, 2036.	1.6	65
57	The dimensionality of stability depends on disturbance type. Ecology Letters, 2019, 22, 674-684.	3.0	65
58	Challenges, tasks, and opportunities in modeling agent-based complex systems. Ecological Modelling, 2021, 457, 109685.	1.2	65
59	Differences between symmetric and asymmetric facilitation matter: exploring the interplay between modes of positive and negative plant interactions. Journal of Ecology, 2012, 100, 1482-1491.	1.9	64
60	CREAM: a European project on mechanistic effect models for ecological risk assessment of chemicals. Environmental Science and Pollution Research, 2009, 16, 614-617.	2.7	63
61	Individual variations in infectiousness explain longâ€term disease persistence in wildlife populations. Oikos, 2009, 118, 199-208.	1.2	63
62	Movementâ€mediated community assembly and coexistence. Biological Reviews, 2020, 95, 1073-1096.	4.7	62
63	Integrating individual search and navigation behaviors in mechanistic movement models. Theoretical Ecology, 2011, 4, 341-355.	0.4	58
64	RNETLOGO: an R package for running and exploring individualâ€based models implemented in NETLOGO. Methods in Ecology and Evolution, 2012, 3, 480-483.	2.2	58
65	Uncertainty in predictions of range dynamics: black grouse climbing the Swiss Alps. Ecography, 2012, 35, 590-603.	2.1	57
66	Multiple stressors: using the honeybee model BEEHAVE to explore how spatial and temporal forage stress affects colony resilience. Oikos, 2016, 125, 1001-1016.	1.2	57
67	Modeling tiger population and territory dynamics using an agent-based approach. Ecological Modelling, 2015, 312, 347-362.	1.2	56
68	Mighty small: Observing and modeling individual microbes becomes big science. Proceedings of the National Academy of Sciences of the United States of America, 2013, 110, 18027-18028.	3.3	54
69	Minimum viable population size of capercaillieTetrao urogallus: results from a stochastic model. Wildlife Biology, 2000, 6, 219-225.	0.6	53
70	InSTREAM-Gen: Modelling eco-evolutionary dynamics of trout populations under anthropogenic environmental change. Ecological Modelling, 2016, 326, 36-53.	1.2	53
71	Modelling the role of social behavior in the persistence of the alpine marmot Marmota marmota. Oikos, 2003, 102, 124-136.	1.2	52
72	NetLogo meets R: Linking agent-based models with a toolbox for their analysis. Environmental Modelling and Software, 2010, 25, 972-974.	1.9	51

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73	Neutral communities may lead to decreasing diversity-disturbance relationships: insights from a generic simulation model. Ecology Letters, 2011, 14, 653-660.	3.0	49
74	Importance of Buffer Mechanisms for Population Viability Analysis. Conservation Biology, 2005, 19, 578-580.	2.4	48
75	BEESCOUT: A model of bee scouting behaviour and a software tool for characterizing nectar/pollen landscapes for BEEHAVE. Ecological Modelling, 2016, 340, 126-133.	1.2	48
76	VISUAL DEBUGGING: A WAY OF ANALYZING, UNDERSTANDING AND COMMUNICATING BOTTOMâ€UP SIMULATION MODELS IN ECOLOGY. Natural Resource Modelling, 2002, 15, 23-38.	0.8	46
77	Wildfire, landscape diversity and the Drosselâ€"Schwabl model. Ecological Modelling, 2010, 221, 98-105.	1.2	46
78	Integrating population modeling into ecological risk assessment. Integrated Environmental Assessment and Management, 2010, 6, 191-193.	1.6	46
79	Neutral mechanisms and niche differentiation in steadyâ€state insular microbial communities revealed by single cell analysis. Environmental Microbiology, 2019, 21, 164-181.	1.8	46
80	Proposing an information criterion for individual-based models developed in a pattern-oriented modelling framework. Ecological Modelling, 2009, 220, 1957-1967.	1.2	42
81	Dogs on the catwalk: Modelling re-introduction and translocation of endangered wild dogs in South Africa. Biological Conservation, 2009, 142, 2774-2781.	1.9	42
82	What you see is where you go? Modeling dispersal in mountainous landscapes. Landscape Ecology, 2007, 22, 853-866.	1.9	40
83	Simple or complex: Relative impact of data availability and model purpose on the choice of model types for population viability analyses. Ecological Modelling, 2016, 323, 87-95.	1.2	40
84	Predictive systems models can help elucidate bee declines driven by multiple combined stressors. Apidologie, 2017, 48, 328-339.	0.9	40
85	Three questions to ask before using model outputs for decision support. Nature Communications, 2020, 11, 4959.	5.8	40
86	Collecting ecoâ€evolutionary data in the dark: Impediments to subterranean research and how to overcome them. Ecology and Evolution, 2021, 11, 5911-5926.	0.8	40
87	Simulating cryptic movements of a mangrove crab: Recovery phenomena after small scale fishery. Ecological Modelling, 2007, 205, 110-122.	1.2	39
88	Population models in pesticide risk assessment: Lessons for assessing populationâ€level effects, recovery, and alternative exposure scenarios from modeling a small mammal. Environmental Toxicology and Chemistry, 2010, 29, 1292-1300.	2.2	39
89	Replicating and breaking models: good for you and good for ecology. Oikos, 2015, 124, 691-696.	1.2	38
90	Socio-technical scales in socio-environmental modeling: Managing a system-of-systems modeling approach. Environmental Modelling and Software, 2021, 135, 104885.	1.9	38

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91	The Independent and Interactive Effects of Treeâ€Tree Establishment Competition and Fire on Savanna Structure and Dynamics. American Naturalist, 2010, 175, E44-E65.	1.0	36
92	Limitations of extrapolating toxic effects on reproduction to the population level. Ecological Applications, 2014, 24, 1972-1983.	1.8	36
93	META-X: Generic Software for Metapopulation Viability Analysis. Biodiversity and Conservation, 2004, 13, 165-188.	1.2	35
94	Breeding synchrony in colonial birds: from local stress to global harmony. Proceedings of the Royal Society B: Biological Sciences, 2008, 275, 1557-1564.	1.2	35
95	How to use mechanistic effect models in environmental risk assessment of pesticides: Case studies and recommendations from the SETAC workshop MODELINK. Integrated Environmental Assessment and Management, 2016, 12, 21-31.	1.6	34
96	Alternaria and Fusarium Fungi: Differences in Distribution and Spore Deposition in a Topographically Heterogeneous Wheat Field. Journal of Fungi (Basel, Switzerland), 2018, 4, 63.	1.5	34
97	Linking pesticide exposure and spatial dynamics: An individual-based model of wood mouse (Apodemus) Tj ETQq1 1 0.784314 rgBT /Ove	1.2	33
98	Impaired ecosystem process despite little effects on populations: modeling combined effects of warming and toxicants. Global Change Biology, 2017, 23, 2973-2989.	4.2	33
99	Towards a bridging concept for undesirable resilience in social-ecological systems. Global Sustainability, 2020, 3, .	1.6	33
100	Resilience trinity: safeguarding ecosystem functioning and services across three different time horizons and decision contexts. Oikos, 2020, 129, 445-456.	1.2	33
101	Pattern-oriented modelling for estimating unknown pre-breeding survival rates: The case of the Lesser Spotted Woodpecker (Picoides minor). Biological Conservation, 2007, 135, 555-564.	1.9	32
102	Mechanistic effect models for ecological risk assessment of chemicals (MEMoRisk)â€"a new SETAC-Europe Advisory Group. Environmental Science and Pollution Research, 2009, 16, 250-252.	2.7	32
103	Behavioural flexibility in the mating system buffers population extinction: lessons from the lesser spotted woodpecker Picoides minor. Journal of Animal Ecology, 2006, 75, 540-548.	1.3	31
104	Mechanistic effect modeling for ecological risk assessment: Where to go from here?. Integrated Environmental Assessment and Management, 2013, 9, e58-63.	1.6	31
105	Assisting seed dispersers to restore oldfields: An individualâ€based model of the interactions among badgers, foxes and Iberian pear trees. Journal of Applied Ecology, 2018, 55, 600-611.	1.9	31
106	Exploring resilience with agent-based models: State of the art, knowledge gaps and recommendations for coping with multidimensionality. Ecological Complexity, 2019, 40, 100718.	1.4	31
107	Clumped versus scattered: how does the spatial correlation of disturbance events affect biodiversity?. Theoretical Ecology, 2008, 1, 231-240.	0.4	30
108	Post-Hoc Pattern-Oriented Testing and Tuning of an Existing Large Model: Lessons from the Field Vole. PLoS ONE, 2012, 7, e45872.	1.1	29

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109	Population-level consequences of spatially heterogeneous exposure to heavy metals in soil: An individual-based model of springtails. Ecological Modelling, 2013, 250, 338-351.	1.2	29
110	Coupling different mechanistic effect models for capturing individual- and population-level effects of chemicals: Lessons from a case where standard risk assessment failed. Ecological Modelling, 2014, 280, 18-29.	1.2	29
111	Agricultural landscape generators for simulation models: A review of existing solutions and an outline of future directions. Ecological Modelling, 2019, 393, 135-151.	1.2	27
112	Intraspecific trait variation increases species diversity in a traitâ€based grassland model. Oikos, 2019, 128, 441-455.	1.2	27
113	Diversity and Disturbances in the Antarctic Megabenthos: Feasible versus Theoretical Disturbance Ranges. Ecosystems, 2006, 9, 1145-1155.	1.6	26
114	Pattern-oriented parameterization of general models for ecological application: Towards realistic evaluations of management approaches. Ecological Modelling, 2014, 275, 78-88.	1.2	26
115	Transferability of Mechanistic Ecological Models Is About Emergence. Trends in Ecology and Evolution, 2019, 34, 487-488.	4.2	26
116	Plant Interactions Alter the Predictions of Metabolic Scaling Theory. PLoS ONE, 2013, 8, e57612.	1.1	26
117	The role of belowground competition and plastic biomass allocation in altering plant massâ€“density relationships. Oikos, 2014, 123, 248-256.	1.2	25
118	How biological clocks and changing environmental conditions determine local population growth and species distribution in Antarctic krill (Euphausia superba): a conceptual model. Ecological Modelling, 2015, 303, 78-86.	1.2	25
119	How can we bring together empiricists and modellers in functional biodiversity research?. Basic and Applied Ecology, 2013, 14, 93-101.	1.2	24
120	Community consequences of foraging under fear. Ecological Modelling, 2018, 383, 80-90.	1.2	24
121	Designing, Formulating, and Communicating Agent-Based Models. , 2012, , 361-377.		24
122	Per Aspera ad Astra: Through Complex Population Modeling to Predictive Theory. American Naturalist, 2015, 186, 669-674.	1.0	23
123	Ecoâ€evolutionary responses to recreational fishing under different harvest regulations. Ecology and Evolution, 2018, 8, 9600-9613.	0.8	22
124	Delayed Chemical Defense: Timely Expulsion of Herbivores Can Reduce Competition with Neighboring Plants. American Naturalist, 2019, 193, 125-139.	1.0	22
125	Movement and Seasonal Energetics Mediate Vulnerability to Disturbance in Marine Mammal Populations. American Naturalist, 2021, 197, 296-311.	1.0	22
126	What Is Resilience? A Short Introduction. Understanding Complex Systems, 2011, , 3-13.	0.3	21

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127	Two pairs of eyes are better than one: Combining individual-based and matrix models for ecological risk assessment of chemicals. Ecological Modelling, 2014, 280, 40-52.	1.2	21
128	Moving infections: individual movement decisions drive disease persistence in spatially structured landscapes. Oikos, 2020, 129, 651-667.	1.2	21
129	Agent-Based Models in Ecology: Patterns and Alternative Theories of Adaptive Behaviour. , 2006, , 139-152.		20
130	Modelling dead wood islands in European beech forests: how much and how reliably would they provide dead wood?. European Journal of Forest Research, 2010, 129, 659-668.	1.1	20
131	Understanding Shifts in Wildfire Regimes as Emergent Threshold Phenomena. American Naturalist, 2011, 178, E149-E161.	1.0	20
132	Pattern-oriented modelling as a novel way to verify and validate functionalâ€"structural plant models: a demonstration with the annual growth module of avocado. Annals of Botany, 2018, 121, 941-959.	1.4	20
133	Documenting Social Simulation Models: The ODD Protocol as a Standard. Understanding Complex Systems, 2013, , 117-133.	0.3	19
134	A Review of Key Features and Their Implementation in Unstructured, Structured, and Agentâ€Based Population Models for Ecological Risk Assessment. Integrated Environmental Assessment and Management, 2021, 17, 521-540.	1.6	19
135	Keeping modelling notebooks with TRACE: Good for you and good for environmental research and management support. Environmental Modelling and Software, 2021, 136, 104932.	1.9	19
136	Was charakterisiert BuchenurwÃlder? Untersuchungen der Altersstruktur des Kronendachs und der rÃumlichen Verteilung der Baumriesen in einem Modellwald mit Hilfe des Simulationsmodells BEFORE. European Journal of Forest Research, 2001, 120, 288-302.	0.3	18
137	Biodiversity and ecosystem functioning decoupled: invariant ecosystem functioning despite nonâ€random reductions in consumer diversity. Oikos, 2016, 125, 424-433.	1.2	18
138	Give chance a chance: from coexistence to coviability in biodiversity theory. Ecosphere, 2019, 10, e02700.	1.0	17
139	From cases to general principles: A call for theory development through agent-based modeling. Ecological Modelling, 2019, 393, 153-156.	1.2	17
140	Merging trait-based and individual-based modelling: An animal functional type approach to explore the responses of birds to climatic and land use changes in semi-arid African savannas. Ecological Modelling, 2016, 326, 75-89.	1.2	16
141	Documenting Social Simulation Models: The ODD Protocol as a Standard. Understanding Complex Systems, 2017, , 349-365.	0.3	16
142	Intertwined effects of defaunation, increased tree mortality and density compensation on seed dispersal. Ecography, 2020, 43, 1352-1363.	2.1	16
143	Asymmetric facilitation can reduce size inequality in plant populations resulting in delayed densityâ€dependent mortality. Oikos, 2016, 125, 1153-1161.	1.2	14
144	Modeling Population-Level Consequences of Polychlorinated Biphenyl Exposure in East Greenland Polar Bears. Archives of Environmental Contamination and Toxicology, 2016, 70, 143-154.	2.1	14

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145	A modelling approach to evaluating the effectiveness of Ecological Focus Areas: The case of the European brown hare. Land Use Policy, 2017, 61, 63-79.	2.5	14
146	Modeling the emergence of migratory corridors and foraging hot spots of the green sea turtle. Ecology and Evolution, 2019, 9, 10317-10342.	0.8	14
147	The distribution of mycotoxins in a heterogeneous wheat field in relation to microclimate, fungal and bacterial abundance. Journal of Applied Microbiology, 2019, 126, 177-190.	1.4	14
148	Intraspecific trait variation in personalityâ€related movement behavior promotes coexistence. Oikos, 2020, 129, 1441-1454.	1.2	14
149	How to detect and visualize extinction thresholds for structured PVA models. Ecological Modelling, 2006, 191, 545-550.	1.2	13
150	Behind the scenes of population viability modeling: Predicting butterfly metapopulation dynamics under climate change. Ecological Modelling, 2013, 259, 62-73.	1.2	13
151	The Potential for the Use of Agent-Based Models in Ecotoxicology. Emerging Topics in Ecotoxicology, 2009, , 205-235.	1.5	13
152	Mitigation of climate change impacts on raptors by behavioural adaptation: ecological buffering mechanisms. Global and Planetary Change, 2005, 47, 273-281.	1.6	12
153	Cross-disciplinary links in environmental systems science: Current state and claimed needs identified in a meta-review of process models. Science of the Total Environment, 2018, 622-623, 954-973.	3.9	12
154	Interacting effects of habitat destruction and changing disturbance rates on biodiversity: Who is going to survive?. Ecological Modelling, 2010, 221, 2776-2783.	1.2	11
155	Allee effect in polar bears: a potential consequence of polychlorinated biphenyl contamination. Proceedings of the Royal Society B: Biological Sciences, 2016, 283, 20161883.	1.2	11
156	Monodominance in tropical forests: modelling reveals emerging clusters and phase transitions. Journal of the Royal Society Interface, 2016, 13, 20160123.	1.5	11
157	Does Animal Personality Affect Movement in Habitat Corridors? Experiments with Common Voles (Microtus arvalis) Using Different Corridor Widths. Animals, 2019, 9, 291.	1.0	11
158	High-resolution PVA along large environmental gradients to model the combined effects of climate change and land use timing: lessons from the large marsh grasshopper. Ecological Modelling, 2021, 440, 109355.	1.2	11
159	Energyâ€mediated responses to changing prey size and distribution in marine top predator movements and population dynamics. Journal of Animal Ecology, 2022, 91, 241-254.	1.3	11
160	The hitchhiker's guide to generic ecological-economic modelling of land-use-based biodiversity conservation policies. Ecological Modelling, 2022, 465, 109861.	1.2	11
161	Appropriate resolution in time and model structure for population viability analysis: Insights from a butterfly metapopulation. Biological Conservation, 2014, 169, 345-354.	1.9	10
162	Effects of humanâ€induced prey depletion on large carnivores in protected areas: Lessons from modeling tiger populations in stylized spatial scenarios. Ecology and Evolution, 2019, 9, 11298-11313.	0.8	10

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163	Honey bee colony performance affected by crop diversity and farmland structure: a modeling framework. Ecological Applications, 2021, 31, e02216.	1.8	10
164	Seeing the Forest for the Trees, and Vice Versa. , 2003, , 411-428.		10
165	Modelling movements of Saimaa ringed seals using an individual-based approach. Ecological Modelling, 2018, 368, 321-335.	1.2	9
166	A plea for consistency, transparency, and reproducibility in risk assessment effect models. Environmental Toxicology and Chemistry, 2019, 38, 9-11.	2.2	9
167	The Evolutionary Consequences of Disrupted Male Mating Signals: An Agent-Based Modelling Exploration of Endocrine Disrupting Chemicals in the Guppy. PLoS ONE, 2014, 9, e103100.	1.1	9
168	Field Metabolic Rate and PCB Adipose Tissue Deposition Efficiency in East Greenland Polar Bears Derived from Contaminant Monitoring Data. PLoS ONE, 2014, 9, e104037.	1.1	9
169	Modeling implications of food resource aggregation on animal migration phenology. Ecology and Evolution, 2013, 3, 2535-2546.	0.8	8
170	Predicting the threats of chemicals to wildlife: What are the challenges?. Integrated Environmental Assessment and Management, 2011, 7, 499-501.	1.6	7
171	Modelling harvesting strategies for the lobster fishery in northern Europe: the importance of protecting eggâ€bearing females. Population Ecology, 2015, 57, 237-251.	0.7	6
172	The ODD protocol: An update with guidance to support wider and more consistent use. Ecological Modelling, 2020, 428, 109105.	1.2	6
173	Fluctuations in Density-Dependent Selection Drive the Evolution of a Pace-of-Life Syndrome Within and Between Populations. American Naturalist, 2022, 199, E124-E139.	1.0	5
174	Individual-Based Models. , 2008, , 1959-1968.		4
175	Ecological Models: Individual-Based Models. , 2019, , 65-73.		4
176	Resilience, Self-Organization, Complexity and Pattern Formation. , 2014, , 55-84.		4
177	Stabilizing microbial communities by looped mass transfer. Proceedings of the National Academy of Sciences of the United States of America, 2022, 119, e2117814119.	3.3	4
178	Scaleâ€dependent role of demography and dispersal on the distribution of populations in heterogeneous landscapes. Oikos, 2016, 125, 667-673.	1.2	3
179	Bridging Levels from Individuals to Communities and Ecosystems: Including Adaptive Behavior and Feedbacks in Ecological Theory and Models. Bulletin of the Ecological Society of America, 2020, 101, e01648.	0.2	3
180	Parameter estimation for functionalâ€"structural plant models when data are scarce: using multiple patterns for rejecting unsuitable parameter sets. Annals of Botany, 2020, 126, 559-570.	1.4	3

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181	While shoot herbivores reduce, root herbivores increase nutrient enrichmentâ€™s impact on diversity in a grassland model. Ecology, 2021, 102, e03333.	1.5	3
182	VISUAL DEBUGGING: A WAY OF ANALYZING, UNDERSTANDING AND COMMUNICATING BOTTOM-UP SIMULATION MODELS IN ECOLOGY. , 2002, 15, 23.		3
183	Largeâ€scale <scp>PVA</scp> modeling of insects in cultivated grasslands: The role of dispersal in mitigating the effects of management schedules under climate change. Ecology and Evolution, 2022, 12, .	0.8	3
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