

Volker Grimm

List of Publications by Citations

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The third column is the impact factor (IF) of the journal, and the fourth column is the number of citations of the article.

194
papers

14,725
citations

54
h-index

119
g-index

204
ext. papers

16,926
ext. citations

4.5
avg, IF

6.72
L-index

#	Paper	IF	Citations
194	A standard protocol for describing individual-based and agent-based models. <i>Ecological Modelling</i> , 2006 , 198, 115-126	3	1798
193	The ODD protocol: A review and first update. <i>Ecological Modelling</i> , 2010 , 221, 2760-2768	3	1549
192	Pattern-oriented modeling of agent-based complex systems: lessons from ecology. <i>Science</i> , 2005 , 310, 987-91	33.3	1406
191	Individual-based Modeling and Ecology 2005 ,		733
190	Ten years of individual-based modelling in ecology: what have we learned and what could we learn in the future?. <i>Ecological Modelling</i> , 1999 , 115, 129-148	3	689
189	Babel, or the ecological stability discussions: an inventory and analysis of terminology and a guide for avoiding confusion. <i>Oecologia</i> , 1997 , 109, 323-334	2.9	576
188	Ecological models supporting environmental decision making: a strategy for the future. <i>Trends in Ecology and Evolution</i> , 2010 , 25, 479-86	10.9	268
187	Using pattern-oriented modeling for revealing hidden information: a key for reconciling ecological theory and application. <i>Oikos</i> , 2003 , 100, 209-222	4	251
186	Pattern-oriented modelling: a 'multi-scope' for predictive systems ecology. <i>Philosophical Transactions of the Royal Society B: Biological Sciences</i> , 2012 , 367, 298-310	5.8	247
185	Ecosystem oceanography for global change in fisheries. <i>Trends in Ecology and Evolution</i> , 2008 , 23, 338-46	10.9	227
184	Ecological buffering mechanisms in savannas: A unifying theory of long-term tree-grass coexistence. <i>Plant Ecology</i> , 2000 , 150, 161-171	1.7	199
183	The virtual ecologist approach: simulating data and observers. <i>Oikos</i> , 2010 , 119, 622-635	4	193
182	Do simple models lead to generality in ecology?. <i>Trends in Ecology and Evolution</i> , 2013 , 28, 578-83	10.9	176
181	Pattern-oriented modelling in population ecology. <i>Science of the Total Environment</i> , 1996 , 183, 151-166	10.2	169
180	The ODD Protocol for Describing Agent-Based and Other Simulation Models: A Second Update to Improve Clarity, Replication, and Structural Realism. <i>Jasss</i> , 2020 , 23,	4.8	167
179	BEEHAVE: a systems model of honeybee colony dynamics and foraging to explore multifactorial causes of colony failure. <i>Journal of Applied Ecology</i> , 2014 , 51, 470-482	5.8	166
178	Facilitating Parameter Estimation and Sensitivity Analysis of Agent-Based Models: A Cookbook Using NetLogo and 'R'. <i>Jasss</i> , 2014 , 17,	4.8	155

177	Merging validation and evaluation of ecological models to evaluation – A review of terminology and a practical approach. <i>Ecological Modelling</i> , 2014 , 280, 117-128	3	144
176	Individual-based models in ecology after four decades. <i>F1000prime Reports</i> , 2014 , 6, 39		142
175	Towards better modelling and decision support: Documenting model development, testing, and analysis using TRACE. <i>Ecological Modelling</i> , 2014 , 280, 129-139	3	136
174	Individual-based modelling in ecology: what makes the difference?. <i>Trends in Ecology and Evolution</i> , 1996 , 11, 437-41	10.9	133
173	Towards a systems approach for understanding honeybee decline: a stocktaking and synthesis of existing models. <i>Journal of Applied Ecology</i> , 2013 , 50, 868-880	5.8	129
172	Competition among plants: Concepts, individual-based modelling approaches, and a proposal for a future research strategy. <i>Perspectives in Plant Ecology, Evolution and Systematics</i> , 2008 , 9, 121-135	3	123
171	Ecological-economic modeling for biodiversity management: potential, pitfalls, and prospects. <i>Conservation Biology</i> , 2006 , 20, 1034-41	6	110
170	Making Predictions in a Changing World: The Benefits of Individual-Based Ecology. <i>BioScience</i> , 2015 , 65, 140-150	5.7	108
169	The intrinsic mean time to extinction: a unifying approach to analysing persistence and viability of populations. <i>Oikos</i> , 2004 , 105, 501-511	4	105
168	Modelling Persistence in Dynamic Landscapes: Lessons from a Metapopulation of the Grasshopper <i>Bryodemta tuberculata</i> . <i>Journal of Animal Ecology</i> , 1997 , 66, 508	4.7	104
167	Representing the acquisition and use of energy by individuals in agent-based models of animal populations. <i>Methods in Ecology and Evolution</i> , 2013 , 4, 151-161	7.7	101
166	Predictive systems ecology. <i>Proceedings of the Royal Society B: Biological Sciences</i> , 2013 , 280, 20131452	4.4	101
165	Individual-based modelling and ecological theory: synthesis of a workshop. <i>Ecological Modelling</i> , 1999 , 115, 275-282	3	96
164	Dynamic Energy Budget theory meets individual-based modelling: a generic and accessible implementation. <i>Methods in Ecology and Evolution</i> , 2012 , 3, 445-449	7.7	92
163	Agent-Based Modelling of Social-Ecological Systems: Achievements, Challenges, and a Way Forward. <i>Jasss</i> , 2017 , 20,	4.8	88
162	Ecological models and pesticide risk assessment: current modeling practice. <i>Environmental Toxicology and Chemistry</i> , 2010 , 29, 1006-12	3.8	87
161	Ecological models in support of regulatory risk assessments of pesticides: developing a strategy for the future. <i>Integrated Environmental Assessment and Management</i> , 2009 , 5, 167-72	2.5	84
160	When, Where, and How Nature Matters for Ecosystem Services: Challenges for the Next Generation of Ecosystem Service Models. <i>BioScience</i> , 2017 , 67, 820-833	5.7	83

159	Home range dynamics and population regulation: An individual-based model of the common shrew <i>Sorex araneus</i> . <i>Ecological Modelling</i> , 2007 , 205, 397-409	3	78
158	Reconstructing spatiotemporal dynamics of Central European natural beech forests: the rule-based forest model BEFORE. <i>Forest Ecology and Management</i> , 2004 , 194, 349-368	3.9	78
157	Predicting population dynamics from the properties of individuals: a cross-level test of dynamic energy budget theory. <i>American Naturalist</i> , 2013 , 181, 506-19	3.7	77
156	Adding Value to Ecological Risk Assessment with Population Modeling. <i>Human and Ecological Risk Assessment (HERA)</i> , 2011 , 17, 287-299	4.9	77
155	Reintroducing Environmental Change Drivers in Biodiversity-Ecosystem Functioning Research. <i>Trends in Ecology and Evolution</i> , 2016 , 31, 905-915	10.9	71
154	Bird sky networks: how do avian scavengers use social information to find carrion?. <i>Ecology</i> , 2014 , 95, 1799-808	4.6	70
153	Extrapolating ecotoxicological effects from individuals to populations: a generic approach based on Dynamic Energy Budget theory and individual-based modeling. <i>Ecotoxicology</i> , 2013 , 22, 574-83	2.9	70
152	Mathematical models and understanding in ecology. <i>Ecological Modelling</i> , 1994 , 75-76, 641-651	3	70
151	When things don't add up: quantifying impacts of multiple stressors from individual metabolism to ecosystem processing. <i>Ecology Letters</i> , 2018 , 21, 568-577	10	65
150	Reversed effects of grazing on plant diversity: the role of below-ground competition and size symmetry. <i>Oikos</i> , 2009 , 118, 1830-1843	4	65
149	From pattern to practice: a scaling-down strategy for spatially explicit modelling illustrated by the spread and control of rabies. <i>Ecological Modelling</i> , 1999 , 117, 179-202	3	65
148	The winter pack-ice zone provides a sheltered but food-poor habitat for larval Antarctic krill. <i>Nature Ecology and Evolution</i> , 2017 , 1, 1853-1861	12.3	59
147	Next-Generation Individual-Based Models Integrate Biodiversity and Ecosystems: Yes We Can, and Yes We Must. <i>Ecosystems</i> , 2017 , 20, 229-236	3.9	59
146	Pattern formation triggered by rare events: lessons from the spread of rabies. <i>Proceedings of the Royal Society B: Biological Sciences</i> , 1997 , 264, 495-503	4.4	59
145	Chemical and natural stressors combined: from cryptic effects to population extinction. <i>Scientific Reports</i> , 2013 , 3, 2036	4.9	58
144	CREAM: a European project on mechanistic effect models for ecological risk assessment of chemicals. <i>Environmental Science and Pollution Research</i> , 2009 , 16, 614-7	5.1	58
143	Patterns for parameters in simulation models. <i>Ecological Modelling</i> , 2007 , 204, 553-556	3	56
142	Unifying wildfire models from ecology and statistical physics. <i>American Naturalist</i> , 2009 , 174, E170-85	3.7	55

141	Structural realism, emergence, and predictions in next-generation ecological modelling: Synthesis from a special issue. <i>Ecological Modelling</i> , 2016 , 326, 177-187	3	54
140	Individual variations in infectiousness explain long-term disease persistence in wildlife populations. <i>Oikos</i> , 2009 , 118, 199-208	4	53
139	Integrating individual search and navigation behaviors in mechanistic movement models. <i>Theoretical Ecology</i> , 2011 , 4, 341-355	1.6	51
138	Different Modelling Purposes. <i>Jasss</i> , 2019 , 22,	4.8	50
137	Uncertainty in predictions of range dynamics: black grouse climbing the Swiss Alps. <i>Ecography</i> , 2012 , 35, 590-603	6.5	48
136	Modelling the role of social behavior in the persistence of the alpine marmot <i>Marmota marmota</i> . <i>Oikos</i> , 2003 , 102, 124-136	4	48
135	Robustness analysis: Deconstructing computational models for ecological theory and applications. <i>Ecological Modelling</i> , 2016 , 326, 162-167	3	47
134	Predicting the impacts of anthropogenic disturbances on marine populations. <i>Conservation Letters</i> , 2018 , 11, e12563	6.9	47
133	RNETLOGO: an R package for running and exploring individual-based models implemented in NETLOGO. <i>Methods in Ecology and Evolution</i> , 2012 , 3, 480-483	7.7	47
132	Differences between symmetric and asymmetric facilitation matter: exploring the interplay between modes of positive and negative plant interactions. <i>Journal of Ecology</i> , 2012 , 100, 1482-1491	6	47
131	Minimum viable population size of capercaillie <i>Tetrao urogallus</i> : results from a stochastic model. <i>Wildlife Biology</i> , 2000 , 6, 219-225	1.7	47
130	InSTREAM-Gen: Modelling eco-evolutionary dynamics of trout populations under anthropogenic environmental change. <i>Ecological Modelling</i> , 2016 , 326, 36-53	3	45
129	Mighty small: Observing and modeling individual microbes becomes big science. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2013 , 110, 18027-8	11.5	45
128	Modeling tiger population and territory dynamics using an agent-based approach. <i>Ecological Modelling</i> , 2015 , 312, 347-362	3	44
127	Importance of Buffer Mechanisms for Population Viability Analysis. <i>Conservation Biology</i> , 2005 , 19, 578-580	4.8	42
126	Multiple stressors: using the honeybee model BEEHAVE to explore how spatial and temporal forage stress affects colony resilience. <i>Oikos</i> , 2016 , 125, 1001-1016	4	41
125	Neutral communities may lead to decreasing diversity-disturbance relationships: insights from a generic simulation model. <i>Ecology Letters</i> , 2011 , 14, 653-60	10	40
124	Integrating population modeling into ecological risk assessment. <i>Integrated Environmental Assessment and Management</i> , 2010 , 6, 191-3	2.5	40

123	NetLogo meets R: Linking agent-based models with a toolbox for their analysis. <i>Environmental Modelling and Software</i> , 2010 , 25, 972-974	5.2	40
122	Wildfire, landscape diversity and the DrosselSchwabl model. <i>Ecological Modelling</i> , 2010 , 221, 98-105	3	39
121	Dogs on the catwalk: Modelling re-introduction and translocation of endangered wild dogs in South Africa. <i>Biological Conservation</i> , 2009 , 142, 2774-2781	6.2	38
120	What you see is where you go? Modeling dispersal in mountainous landscapes. <i>Landscape Ecology</i> , 2007 , 22, 853-866	4.3	38
119	Proposing an information criterion for individual-based models developed in a pattern-oriented modelling framework. <i>Ecological Modelling</i> , 2009 , 220, 1957-1967	3	36
118	VISUAL DEBUGGING: A WAY OF ANALYZING, UNDERSTANDING AND COMMUNICATING BOTTOM-UP SIMULATION MODELS IN ECOLOGY. <i>Natural Resource Modelling</i> , 2008 , 15, 23-38	1.2	36
117	The independent and interactive effects of tree-tree establishment competition and fire on savanna structure and dynamics. <i>American Naturalist</i> , 2010 , 175, E44-65	3.7	35
116	Simulating cryptic movements of a mangrove crab: Recovery phenomena after small scale fishery. <i>Ecological Modelling</i> , 2007 , 205, 110-122	3	35
115	Simple or complex: Relative impact of data availability and model purpose on the choice of model types for population viability analyses. <i>Ecological Modelling</i> , 2016 , 323, 87-95	3	32
114	META-X: Generic Software for Metapopulation Viability Analysis. <i>Biodiversity and Conservation</i> , 2004 , 13, 165-188	3.4	32
113	Limitations of extrapolating toxic effects on reproduction to the population level 2014 , 24, 1972-83		31
112	Population models in pesticide risk assessment: lessons for assessing population-level effects, recovery, and alternative exposure scenarios from modeling a small mammal. <i>Environmental Toxicology and Chemistry</i> , 2010 , 29, 1292-300	3.8	31
111	Breeding synchrony in colonial birds: from local stress to global harmony. <i>Proceedings of the Royal Society B: Biological Sciences</i> , 2008 , 275, 1557-63	4.4	31
110	The dimensionality of stability depends on disturbance type. <i>Ecology Letters</i> , 2019 , 22, 674-684	10	30
109	BEESCOUT: A model of bee scouting behaviour and a software tool for characterizing nectar/pollen landscapes for BEEHAVE. <i>Ecological Modelling</i> , 2016 , 340, 126-133	3	30
108	Mechanistic effect modeling for ecological risk assessment: where to go from here?. <i>Integrated Environmental Assessment and Management</i> , 2013 , 9, e58-63	2.5	28
107	Pattern-oriented modelling for estimating unknown pre-breeding survival rates: The case of the Lesser Spotted Woodpecker (<i>Picoides minor</i>). <i>Biological Conservation</i> , 2007 , 135, 555-564	6.2	28
106	Impaired ecosystem process despite little effects on populations: modeling combined effects of warming and toxicants. <i>Global Change Biology</i> , 2017 , 23, 2973-2989	11.4	27

105	Coupling different mechanistic effect models for capturing individual- and population-level effects of chemicals: Lessons from a case where standard risk assessment failed. <i>Ecological Modelling</i> , 2014 , 280, 18-29	3	27
104	Linking pesticide exposure and spatial dynamics: An individual-based model of wood mouse (<i>Apodemus sylvaticus</i>) populations in agricultural landscapes. <i>Ecological Modelling</i> , 2013 , 248, 92-102	3	27
103	Mechanistic effect models for ecological risk assessment of chemicals (MEMoRisk)-a new SETAC-Europe Advisory Group. <i>Environmental Science and Pollution Research</i> , 2009 , 16, 250-2	5.1	27
102	Clumped versus scattered: how does the spatial correlation of disturbance events affect biodiversity?. <i>Theoretical Ecology</i> , 2008 , 1, 231-240	1.6	27
101	Neutral mechanisms and niche differentiation in steady-state insular microbial communities revealed by single cell analysis. <i>Environmental Microbiology</i> , 2019 , 21, 164-181	5.2	27
100	Behavioural flexibility in the mating system buffers population extinction: lessons from the lesser spotted woodpecker <i>Picoides minor</i> . <i>Journal of Animal Ecology</i> , 2006 , 75, 540-8	4.7	26
99	How to use mechanistic effect models in environmental risk assessment of pesticides: Case studies and recommendations from the SETAC workshop MODELINK. <i>Integrated Environmental Assessment and Management</i> , 2016 , 12, 21-31	2.5	26
98	Replicating and breaking models: good for you and good for ecology. <i>Oikos</i> , 2015 , 124, 691-696	4	25
97	Predictive systems models can help elucidate bee declines driven by multiple combined stressors. <i>Apidologie</i> , 2017 , 48, 328-339	2.3	24
96	Diversity and Disturbances in the Antarctic Megabenthos: Feasible versus Theoretical Disturbance Ranges. <i>Ecosystems</i> , 2006 , 9, 1145-1155	3.9	24
95	Socio-technical scales in socio-environmental modeling: Managing a system-of-systems modeling approach. <i>Environmental Modelling and Software</i> , 2021 , 135, 104885	5.2	24
94	Pattern-oriented parameterization of general models for ecological application: Towards realistic evaluations of management approaches. <i>Ecological Modelling</i> , 2014 , 275, 78-88	3	23
93	Post-hoc pattern-oriented testing and tuning of an existing large model: lessons from the field vole. <i>PLoS ONE</i> , 2012 , 7, e45872	3.7	23
92	Population-level consequences of spatially heterogeneous exposure to heavy metals in soil: An individual-based model of springtails. <i>Ecological Modelling</i> , 2013 , 250, 338-351	3	22
91	The role of belowground competition and plastic biomass allocation in altering plant mass-density relationships. <i>Oikos</i> , 2014 , 123, 248-256	4	22
90	Plant interactions alter the predictions of metabolic scaling theory. <i>PLoS ONE</i> , 2013 , 8, e57612	3.7	22
89	How biological clocks and changing environmental conditions determine local population growth and species distribution in Antarctic krill (<i>Euphausia superba</i>): a conceptual model. <i>Ecological Modelling</i> , 2015 , 303, 78-86	3	20
88	Assisting seed dispersers to restore oldfields: An individual-based model of the interactions among badgers, foxes and Iberian pear trees. <i>Journal of Applied Ecology</i> , 2018 , 55, 600-611	5.8	20

87	Collecting eco-evolutionary data in the dark: Impediments to subterranean research and how to overcome them. <i>Ecology and Evolution</i> , 2021 , 11, 5911-5926	2.8	19
86	Challenges, tasks, and opportunities in modeling agent-based complex systems. <i>Ecological Modelling</i> , 2021 , 457, 109685	3	19
85	How can we bring together empiricists and modellers in functional biodiversity research?. <i>Basic and Applied Ecology</i> , 2013 , 14, 93-101	3.2	18
84	Designing, Formulating, and Communicating Agent-Based Models 2012 , 361-377		18
83	Exploring resilience with agent-based models: State of the art, knowledge gaps and recommendations for coping with multidimensionality. <i>Ecological Complexity</i> , 2019 , 40, 100718	2.6	17
82	What Is Resilience? A Short Introduction. <i>Understanding Complex Systems</i> , 2011 , 3-13	0.4	17
81	Agricultural landscape generators for simulation models: A review of existing solutions and an outline of future directions. <i>Ecological Modelling</i> , 2019 , 393, 135-151	3	17
80	Intraspecific trait variation increases species diversity in a trait-based grassland model. <i>Oikos</i> , 2019 , 128, 441-455	4	17
79	Movement-mediated community assembly and coexistence. <i>Biological Reviews</i> , 2020 , 95, 1073-1096	13.5	16
78	and Fungi: Differences in Distribution and Spore Deposition in a Topographically Heterogeneous Wheat Field. <i>Journal of Fungi (Basel, Switzerland)</i> , 2018 , 4,	5.6	16
77	Two pairs of eyes are better than one: Combining individual-based and matrix models for ecological risk assessment of chemicals. <i>Ecological Modelling</i> , 2014 , 280, 40-52	3	16
76	Three questions to ask before using model outputs for decision support. <i>Nature Communications</i> , 2020 , 11, 4959	17.4	16
75	Biodiversity and ecosystem functioning decoupled: invariant ecosystem functioning despite non-random reductions in consumer diversity. <i>Oikos</i> , 2016 , 125, 424-433	4	15
74	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. <i>Ecological Modelling</i> , 2016 , 326, 75-89	3	15
73	Agent-Based Models in Ecology: Patterns and Alternative Theories of Adaptive Behaviour 2006 , 139-152		15
72	Towards a bridging concept for undesirable resilience in social-ecological systems. <i>Global Sustainability</i> , 2020 , 3,	5.4	15
71	Community consequences of foraging under fear. <i>Ecological Modelling</i> , 2018 , 383, 80-90	3	15
70	Per Aspera ad Astra: Through Complex Population Modeling to Predictive Theory. <i>American Naturalist</i> , 2015 , 186, 669-74	3.7	14

69	Pattern-oriented modelling as a novel way to verify and validate functional-structural plant models: a demonstration with the annual growth module of avocado. <i>Annals of Botany</i> , 2018 , 121, 941-959	4.1	14
68	Understanding shifts in wildfire regimes as emergent threshold phenomena. <i>American Naturalist</i> , 2011 , 178, E149-61	3.7	14
67	Modelling dead wood islands in European beech forests: how much and how reliably would they provide dead wood?. <i>European Journal of Forest Research</i> , 2010 , 129, 659-668	2.7	14
66	Was charakterisiert Buchenurwälder? Untersuchungen der Altersstruktur des Kronendachs und der räumlichen Verteilung der Baumriesen in einem Modellwald mit Hilfe des Simulationsmodells BEFORE. <i>European Journal of Forest Research</i> , 2001 , 120, 288-302		13
65	Resilience trinity: safeguarding ecosystem functioning and services across three different time horizons and decision contexts. <i>Oikos</i> , 2020 , 129, 445-456	4	12
64	Behind the scenes of population viability modeling: Predicting butterfly metapopulation dynamics under climate change. <i>Ecological Modelling</i> , 2013 , 259, 62-73	3	12
63	Documenting Social Simulation Models: The ODD Protocol as a Standard. <i>Understanding Complex Systems</i> , 2017 , 349-365	0.4	12
62	Documenting Social Simulation Models: The ODD Protocol as a Standard. <i>Understanding Complex Systems</i> , 2013 , 117-133	0.4	12
61	Transferability of Mechanistic Ecological Models Is About Emergence. <i>Trends in Ecology and Evolution</i> , 2019 , 34, 487-488	10.9	12
60	Eco-evolutionary responses to recreational fishing under different harvest regulations. <i>Ecology and Evolution</i> , 2018 , 8, 9600-9613	2.8	12
59	Modeling Population-Level Consequences of Polychlorinated Biphenyl Exposure in East Greenland Polar Bears. <i>Archives of Environmental Contamination and Toxicology</i> , 2016 , 70, 143-54	3.2	11
58	How to detect and visualize extinction thresholds for structured PVA models. <i>Ecological Modelling</i> , 2006 , 191, 545-550	3	11
57	Delayed Chemical Defense: Timely Expulsion of Herbivores Can Reduce Competition with Neighboring Plants. <i>American Naturalist</i> , 2019 , 193, 125-139	3.7	11
56	From cases to general principles: A call for theory development through agent-based modeling. <i>Ecological Modelling</i> , 2019 , 393, 153-156	3	11
55	A modelling approach to evaluating the effectiveness of Ecological Focus Areas: The case of the European brown hare. <i>Land Use Policy</i> , 2017 , 61, 63-79	5.6	10
54	Give chance a chance: from coexistence to coviability in biodiversity theory. <i>Ecosphere</i> , 2019 , 10, e027003.1		10
53	Asymmetric facilitation can reduce size inequality in plant populations resulting in delayed density-dependent mortality. <i>Oikos</i> , 2016 , 125, 1153-1161	4	10
52	Mitigation of climate change impacts on raptors by behavioural adaptation: ecological buffering mechanisms. <i>Global and Planetary Change</i> , 2005 , 47, 273-281	4.2	10

51	The Potential for the Use of Agent-Based Models in Ecotoxicology. <i>Emerging Topics in Ecotoxicology</i> , 2009 , 205-235		10
50	Appropriate resolution in time and model structure for population viability analysis: Insights from a butterfly metapopulation. <i>Biological Conservation</i> , 2014 , 169, 345-354	6.2	9
49	Field metabolic rate and PCB adipose tissue deposition efficiency in East Greenland polar bears derived from contaminant monitoring data. <i>PLoS ONE</i> , 2014 , 9, e104037	3.7	9
48	Allee effect in polar bears: a potential consequence of polychlorinated biphenyl contamination. <i>Proceedings of the Royal Society B: Biological Sciences</i> , 2016 , 283,	4.4	9
47	Monodominance in tropical forests: modelling reveals emerging clusters and phase transitions. <i>Journal of the Royal Society Interface</i> , 2016 , 13,	4.1	9
46	Modelling movements of Saimaa ringed seals using an individual-based approach. <i>Ecological Modelling</i> , 2018 , 368, 321-335	3	9
45	Cross-disciplinary links in environmental systems science: Current state and claimed needs identified in a meta-review of process models. <i>Science of the Total Environment</i> , 2018 , 622-623, 954-973	10.2	8
44	Modeling the emergence of migratory corridors and foraging hot spots of the green sea turtle. <i>Ecology and Evolution</i> , 2019 , 9, 10317-10342	2.8	8
43	Interacting effects of habitat destruction and changing disturbance rates on biodiversity: Who is going to survive?. <i>Ecological Modelling</i> , 2010 , 221, 2776-2783	3	8
42	Seeing the Forest for the Trees, and Vice Versa 2003 , 411-428		8
41	The evolutionary consequences of disrupted male mating signals: an agent-based modelling exploration of endocrine disrupting chemicals in the guppy. <i>PLoS ONE</i> , 2014 , 9, e103100	3.7	8
40	Movement and Seasonal Energetics Mediate Vulnerability to Disturbance in Marine Mammal Populations. <i>American Naturalist</i> , 2021 , 197, 296-311	3.7	8
39	Effects of human-induced prey depletion on large carnivores in protected areas: Lessons from modeling tiger populations in stylized spatial scenarios. <i>Ecology and Evolution</i> , 2019 , 9, 11298-11313	2.8	7
38	Modeling implications of food resource aggregation on animal migration phenology. <i>Ecology and Evolution</i> , 2013 , 3, 2535-2546	2.8	7
37	A Review of Key Features and Their Implementation in Unstructured, Structured, and Agent-Based Population Models for Ecological Risk Assessment. <i>Integrated Environmental Assessment and Management</i> , 2021 , 17, 521-540	2.5	7
36	Predicting the threats of chemicals to wildlife: what are the challenges?. <i>Integrated Environmental Assessment and Management</i> , 2011 , 7, 499-501	2.5	6
35	The distribution of mycotoxins in a heterogeneous wheat field in relation to microclimate, fungal and bacterial abundance. <i>Journal of Applied Microbiology</i> , 2019 , 126, 177-190	4.7	6
34	Keeping modelling notebooks with TRACE: Good for you and good for environmental research and management support. <i>Environmental Modelling and Software</i> , 2021 , 136, 104932	5.2	6

33	A plea for consistency, transparency, and reproducibility in risk assessment effect models. <i>Environmental Toxicology and Chemistry</i> , 2019 , 38, 9-11	3.8	5
32	Intertwined effects of defaunation, increased tree mortality and density compensation on seed dispersal. <i>Ecography</i> , 2020 , 43, 1352-1363	6.5	5
31	Moving infections: individual movement decisions drive disease persistence in spatially structured landscapes. <i>Oikos</i> , 2020 , 129, 651-667	4	5
30	Does Animal Personality Affect Movement in Habitat Corridors? Experiments with Common Voles () using Different Corridor Widths. <i>Animals</i> , 2019 , 9,	3.1	4
29	Modelling harvesting strategies for the lobster fishery in northern Europe: the importance of protecting egg-bearing females. <i>Population Ecology</i> , 2015 , 57, 237-251	2.1	4
28	Resilience, Self-Organization, Complexity and Pattern Formation 2014 , 55-84		4
27	The ODD protocol: An update with guidance to support wider and more consistent use. <i>Ecological Modelling</i> , 2020 , 428, 109105	3	4
26	Intraspecific trait variation in personality-related movement behavior promotes coexistence. <i>Oikos</i> , 2020 , 129, 1441-1454	4	3
25	Parameter estimation for functional-structural plant models when data are scarce: using multiple patterns for rejecting unsuitable parameter sets. <i>Annals of Botany</i> , 2020 , 126, 559-570	4.1	3
24	Scale-dependent role of demography and dispersal on the distribution of populations in heterogeneous landscapes. <i>Oikos</i> , 2016 , 125, 667-673	4	3
23	VISUAL DEBUGGING: A WAY OF ANALYZING, UNDERSTANDING AND COMMUNICATING BOTTOM-UP SIMULATION MODELS IN ECOLOGY 2002 , 15, 23		3
22	Energy-mediated responses to changing prey size and distribution in marine top predator movements and population dynamics. <i>Journal of Animal Ecology</i> , 2021 ,	4.7	3
21	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. <i>Ecological Modelling</i> , 2021 , 440, 109355	3	3
20	Honey bee colony performance affected by crop diversity and farmland structure: a modeling framework. <i>Ecological Applications</i> , 2021 , 31, e02216	4.9	3
19	Establishment probability in newly founded populations. <i>BMC Research Notes</i> , 2012 , 5, 313	2.3	2
18	Honeybee colony performance affected by crop diversity and farmland structure: a modelling framework		2
17	Modeling Adaptive Behavior in Event-Driven Environments 2007 , 59-77		2
16	Ecological Models: Individual-Based Models 2019 , 65-73		1

15	Ecological Modeling for Pesticide Risk Assessment for Honey Bees and Other Pollinators 2014 , 149-162		1
14	Individual-Based Models 2008 , 1959-1968		1
13	Mitigating bioenergy-driven biodiversity decline: A modelling approach with the European brown hare. <i>Ecological Modelling</i> , 2020 , 416, 108914	3	1
12	Fluctuations in Density-Dependent Selection Drive the Evolution of a Pace-of-Life Syndrome Within and Between Populations.. <i>American Naturalist</i> , 2022 , 199, E124-E139	3.7	1
11	Forecasting effects of transport infrastructure on endangered tigers: a tool for conservation planning. <i>PeerJ</i> , 2020 , 10, e13472	3.1	1
10	The hitchhiker's guide to generic ecological-economic modelling of land-use-based biodiversity conservation policies. <i>Ecological Modelling</i> , 2022 , 465, 109861	3	0
9	Bridging Levels from Individuals to Communities and Ecosystems: Including Adaptive Behavior and Feedbacks in Ecological Theory and Models. <i>Bulletin of the Ecological Society of America</i> , 2020 , 101, e01648	0.7	0
8	While shoot herbivores reduce, root herbivores increase nutrient enrichment's impact on diversity in a grassland model. <i>Ecology</i> , 2021 , 102, e03333	4.6	0
7	Stabilizing microbial communities by looped mass transfer.. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2022 , 119, e2117814119	11.5	0
6	Bridging the Gap Between Computational Models and Viability Based Resilience in Savanna Ecosystems. <i>Understanding Complex Systems</i> , 2011 , 107-130	0.4	
5	Model the Real, Artificial, or Stylized Iguana? Artificial Life and Adaptive Behavior Can Be Linked Through Pattern-Oriented Modeling. <i>Adaptive Behavior</i> , 2009 , 17, 309-312	1.1	
4	Porównawcza ocena programów analizy żywotności populacji (PVA) w rankingu scenariuszy przekształceń krajobrazu = A comparative assessment of PVA software packages applied to rank the landscape management scenarios. <i>Przegląd Geograficzny</i> , 2021 , 93, 365-385	0.7	
3	Code Reusability and Transparency of Agent-Based Modeling: A Review from a Cyberinfrastructure Perspective. <i>Geotechnologies and the Environment</i> , 2020 , 115-134	0.2	
2	Assessment of Patterns in Ecogeomorphic Systems 2014 , 247-264		
1	MASTIFF: A mechanistic model for cross-scale analyses of the functioning of multiple stressed riverine ecosystems. <i>Ecological Modelling</i> , 2022 , 470, 110007	3	