

Uta Berger

List of Publications by Year in descending order

Source: <https://exaly.com/author-pdf/918898/publications.pdf>

Version: 2024-02-01

90
papers

7,338
citations

186265

28
h-index

58581

82
g-index

97
all docs

97
docs citations

97
times ranked

8031
citing authors

#	ARTICLE	IF	CITATIONS
1	A standard protocol for describing individual-based and agent-based models. <i>Ecological Modelling</i> , 2006, 198, 115-126.	2.5	2,219
2	The ODD protocol: A review and first update. <i>Ecological Modelling</i> , 2010, 221, 2760-2768.	2.5	1,913
3	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, .	1.8	349
4	The virtual ecologist approach: simulating data and observers. <i>Oikos</i> , 2010, 119, 622-635.	2.7	242
5	A new approach to spatially explicit modelling of forest dynamics: spacing, ageing and neighbourhood competition of mangrove trees. <i>Ecological Modelling</i> , 2000, 132, 287-302.	2.5	221
6	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.	2.7	150
7	Mangrove vegetation in Amazonia: a review of studies from the coast of Pará and Maranhão States, north Brazil. <i>Acta Amazonica</i> , 2008, 38, 403-420.	0.7	141
8	Making Predictions in a Changing World: The Benefits of Individual-Based Ecology. <i>BioScience</i> , 2015, 65, 140-150.	4.9	136
9	Advances and limitations of individual-based models to analyze and predict dynamics of mangrove forests: A review. <i>Aquatic Botany</i> , 2008, 89, 260-274.	1.6	124
10	Reintroducing Environmental Change Drivers in Biodiversityâ€Ecosystem Functioning Research. <i>Trends in Ecology and Evolution</i> , 2016, 31, 905-915.	8.7	110
11	Zonation Patterns of Belizean Offshore Mangrove Forests 41 Years After a Catastrophic Hurricane1. <i>Biotropica</i> , 2006, 38, 365-374.	1.6	95
12	Growth Strategies of Tropical Tree Species: Disentangling Light and Size Effects. <i>PLoS ONE</i> , 2011, 6, e25330.	2.5	91
13	Citree: A database supporting tree selection for urban areas in temperate climate. <i>Landscape and Urban Planning</i> , 2017, 157, 14-25.	7.5	90
14	Structural realism, emergence, and predictions in next-generation ecological modelling: Synthesis from a special issue. <i>Ecological Modelling</i> , 2016, 326, 177-187.	2.5	73
15	Key ecological research questions for Central European forests. <i>Basic and Applied Ecology</i> , 2018, 32, 3-25.	2.7	71
16	Robustness analysis: Deconstructing computational models for ecological theory and applications. <i>Ecological Modelling</i> , 2016, 326, 162-167.	2.5	69
17	Closing a gap in tropical forest biomass estimation: taking crown mass variation into account in pantropical allometries. <i>Biogeosciences</i> , 2016, 13, 1571-1585.	3.3	66
18	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.	4.0	64

#	ARTICLE	IF	CITATIONS
19	Using expert knowledge and modeling to define mangrove composition, functioning, and threats and estimate time frame for recovery. <i>Ecology and Evolution</i> , 2014, 4, 2247-2262.	1.9	54
20	Low relative growth rates predict future mortality of common beech (<i>Fagus sylvatica</i> L.). <i>Forest Ecology and Management</i> , 2013, 302, 372-378.	3.2	52
21	TOWARDS A STANDARD FOR THE INDIVIDUAL-BASED MODELING OF PLANT POPULATIONS: SELF-THINNING AND THE FIELD-NEIGHBORHOOD APPROACH. <i>Natural Resource Modelling</i> , 2002, 15, 39-54.	2.0	48
22	Proposing an information criterion for individual-based models developed in a pattern-oriented modelling framework. <i>Ecological Modelling</i> , 2009, 220, 1957-1967.	2.5	42
23	Morphological plasticity in mangrove trees: salinity-related changes in the allometry of <i>Avicennia germinans</i> . <i>Trees - Structure and Function</i> , 2014, 28, 1413-1425.	1.9	41
24	Extended biomass allometric equations for large mangrove trees from terrestrial LiDAR data. <i>Trees - Structure and Function</i> , 2016, 30, 935-947.	1.9	39
25	Changes in allometric relations of mangrove trees due to resource availability – A new mechanistic modelling approach. <i>Ecological Modelling</i> , 2014, 283, 53-61.	2.5	35
26	Mobile Compensatory Mutations Promote Plasmid Survival. <i>MSystems</i> , 2019, 4, .	3.8	34
27	From theory to practice in pattern-oriented modelling: identifying and using empirical patterns in predictive models. <i>Biological Reviews</i> , 2021, 96, 1868-1888.	10.4	33
28	Improving Execution Speed of Models Implemented in NetLogo. <i>Jasss</i> , 2017, 20, .	1.8	31
29	Investigating the role of impoundment and forest structure on the resistance and resilience of mangrove forests to hurricanes. <i>Aquatic Botany</i> , 2012, 97, 24-29.	1.6	30
30	“One Size Does Not Fit All”: A Roadmap of Purpose-Driven Mixed-Method Pathways for Sensitivity Analysis of Agent-Based Models. <i>Jasss</i> , 2020, 23, .	1.8	30
31	Pantropical variability in tree crown allometry. <i>Global Ecology and Biogeography</i> , 2021, 30, 459-475.	5.8	27
32	Plant Interactions Alter the Predictions of Metabolic Scaling Theory. <i>PLoS ONE</i> , 2013, 8, e57612.	2.5	26
33	The role of belowground competition and plastic biomass allocation in altering plant mass-density relationships. <i>Oikos</i> , 2014, 123, 248-256.	2.7	25
34	The interplay between vegetation and water in mangroves: new perspectives for mangrove stand modelling and ecological research. <i>Wetlands Ecology and Management</i> , 2020, 28, 697-712.	1.5	24
35	Spatial structure of a leaf-removing crab population in a mangrove of North-Brazil. <i>Wetlands Ecology and Management</i> , 2009, 17, 93-106.	1.5	23
36	Blooms of a key grazer in the Southern Ocean – An individual-based model of <i>Salpa thompsoni</i> . <i>Progress in Oceanography</i> , 2020, 185, 102339.	3.2	23

#	ARTICLE	IF	CITATIONS
37	The Influence of Agroforestry and Other Land-Use Types on the Persistence of a Sumatran Tiger (<i>Panthera tigris sumatrae</i>) Population: An Individual-Based Model Approach. <i>Environmental Management</i> , 2011, 48, 276-288.	2.7	21
38	The importance of conspecific facilitation during recruitment and regeneration: A case study in degraded mangroves. <i>Basic and Applied Ecology</i> , 2014, 15, 651-660.	2.7	21
39	Archetypes of Climate Vulnerability: a Mixed-method Approach Applied in the Peruvian Andes. <i>Climate and Development</i> , 2019, 11, 418-434.	3.9	21
40	Change in drivers of mangrove crown displacement along a salinity stress gradient. <i>Functional Ecology</i> , 2018, 32, 2753-2765.	3.6	20
41	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.	4.5	19
42	Linking landscape futures with biodiversity conservation strategies in northwest Iberia – A simulation study combining surrogates with a spatio-temporal modelling approach. <i>Ecological Informatics</i> , 2016, 33, 85-100.	5.2	18
43	Conjugative plasmids enable the maintenance of low cost non-transmissible plasmids. <i>Plasmid</i> , 2017, 91, 96-104.	1.4	18
44	Testing the intermediate disturbance hypothesis in species-poor systems: A simulation experiment for mangrove forests. <i>Journal of Vegetation Science</i> , 2008, 19, 417-424.	2.2	17
45	Desynchronizing effects of lightning strike disturbances on cyclic forest dynamics in mangrove plantations. <i>Aquatic Botany</i> , 2011, 95, 173-181.	1.6	16
46	Do canopy disturbances drive forest plantations into more natural conditions? – A case study from Can Gio Biosphere Reserve, Viet Nam. <i>Global and Planetary Change</i> , 2013, 110, 249-258.	3.5	15
47	Density-dependent shift from facilitation to competition in a dwarf <i>Avicennia germinans</i> forest. <i>Wetlands Ecology and Management</i> , 2018, 26, 139-150.	1.5	15
48	A new mechanistic theory of self-thinning: Adaptive behaviour of plants explains the shape and slope of self-thinning trajectories. <i>Ecological Modelling</i> , 2018, 390, 1-9.	2.5	15
49	The MANGrove – Groundwater feedback model (MANGA) – Describing belowground competition based on first principles. <i>Ecological Modelling</i> , 2020, 420, 108973.	2.5	15
50	Asymmetric facilitation can reduce size inequality in plant populations resulting in delayed density-dependent mortality. <i>Oikos</i> , 2016, 125, 1153-1161.	2.7	14
51	An Evaluation of the Plant Density Estimator the Point-Centred Quarter Method (PCQM) Using Monte Carlo Simulation. <i>PLoS ONE</i> , 2016, 11, e0157985.	2.5	14
52	Dynamics in space use of American mink (<i>Neovison vison</i>) in a fishpond area in Northern Germany. <i>European Journal of Wildlife Research</i> , 2012, 58, 955-968.	1.4	13
53	Well-intentioned, but poorly implemented: Debris from coastal bamboo fences triggered mangrove decline in Thailand. <i>Marine Pollution Bulletin</i> , 2019, 146, 900-907.	5.0	13
54	Comparing the influence of large- and small-scale disturbances on forest heterogeneity: A simulation study for mangroves. <i>Ecological Complexity</i> , 2014, 20, 107-115.	2.9	12

#	ARTICLE	IF	CITATIONS
55	Management Effects on Woody Species Diversity and Vegetation Structure of Coffee-based Agroforestry Systems in Ethiopia. <i>Small-Scale Forestry</i> , 2015, 14, 531-551.	1.7	12
56	A history of the rehabilitation of mangroves and an assessment of their diversity and structure using Landsat annual composites (1987–2019) and transect plot inventories. <i>Forest Ecology and Management</i> , 2020, 462, 118007.	3.2	12
57	Structure and sensitivity analysis of individual-based predator–prey models. <i>Reliability Engineering and System Safety</i> , 2012, 107, 71-81.	8.9	11
58	Self-organized spatial structures of locust groups emerging from local interaction. <i>Ecological Modelling</i> , 2017, 361, 26-40.	2.5	11
59	Metamodels for Evaluating, Calibrating and Applying Agent-Based Models: A Review. <i>Jasss</i> , 2020, 23, .	1.8	11
60	A Multiscale Simulation Approach for Linking Mangrove Dynamics to Coastal Processes using Remote Sensing Observations. <i>Journal of Coastal Research</i> , 2016, 75, 810-814.	0.3	10
61	Modelling mangrove forest structure and species composition over tidal inundation gradients: The feedback between plant water use and porewater salinity in an arid mangrove ecosystem. <i>Agricultural and Forest Meteorology</i> , 2021, 308-309, 108547.	4.8	10
62	Machine learning meets individual-based modelling: Self-organising feature maps for the analysis of below-ground competition among plants. <i>Ecological Modelling</i> , 2016, 326, 142-151.	2.5	9
63	Partitioning Stakeholders for the Economic Valuation of Ecosystem Services: Examples of a Mangrove System. <i>Natural Resources Research</i> , 2016, 25, 331-345.	4.7	8
64	Drivers of Household Decision-Making on Land-Use Transformation: An Example of Woodlot Establishment in Masindi District, Uganda. <i>Forests</i> , 2019, 10, 619.	2.1	8
65	Partial canopy loss of mangrove trees: Mitigating water scarcity by physical adaptation and feedback on porewater salinity. <i>Estuarine, Coastal and Shelf Science</i> , 2021, 248, 106797.	2.1	8
66	PeatFire: an agent-based model to simulate fire ignition and spreading in a tropical peatland ecosystem. <i>International Journal of Wildland Fire</i> , 2021, 30, 71.	2.4	8
67	The impact of seasonal regulation of metabolism on the life history of Antarctic krill. <i>Ecological Modelling</i> , 2021, 442, 109427.	2.5	8
68	Plant–soil feedbacks in mangrove ecosystems: establishing links between empirical and modelling studies. <i>Trees - Structure and Function</i> , 2021, 35, 1423-1438.	1.9	7
69	The Effect of Sanitation Felling on the Spread of the European Spruce Bark Beetle—An Individual-Based Modeling Approach. <i>Frontiers in Forests and Global Change</i> , 2021, 4, .	2.3	7
70	Regeneration of <i>Rhizophora mucronata</i> (Lamk.) in degraded mangrove forest: Lessons from point pattern analyses of local tree interactions. <i>Acta Oecologica</i> , 2013, 50, 1-9.	1.1	6
71	Predicting the Potential Distribution of Plant Diversity in the YukarÄ±gÄ±kdere Forest District of the Mediterranean Region. <i>Polish Journal of Ecology</i> , 2014, 62, 441-454.	0.2	5
72	A simple and cost-effective method for cable root detection and extension measurement in estuary wetland forests. <i>Estuarine, Coastal and Shelf Science</i> , 2016, 183, 117-122.	2.1	5

#	ARTICLE	IF	CITATIONS
73	Plastic tree crowns contribute to small-scale heterogeneity in virgin beech forests—An individual-based modeling approach. <i>Ecological Modelling</i> , 2018, 376, 28-39.	2.5	5
74	Spatial explicit distribution of individual fine root biomass of <i>Rhizophora mangle</i> L. (Red Mangrove) in South Florida. <i>Wetlands Ecology and Management</i> , 2018, 26, 775-788.	1.5	5
75	Primary Steps in Analyzing Data: Tasks and Tools for a Systematic Data Exploration. <i>Ecological Studies</i> , 2020, , 147-174.	1.2	4
76	Root grafts matter for inter-tree water exchange — a quantification of water translocation between root grafted mangrove trees using field data and model-based indications. <i>Annals of Botany</i> , 2022, 130, 317-330.	2.9	4
77	17. Anticipating Invasions and Managing Impacts: A Review of Recent Spatiotemporal Modelling Approaches. , 2015, , 389-410.		3
78	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.	0.2	3
79	Silvicultural options for the transformation of even-aged <i>Rhizophora apiculata</i> stands to irregular and diverse mangroves — A simulation experiment. <i>Estuarine, Coastal and Shelf Science</i> , 2021, 248, 106886.	2.1	3
80	Deforestation is the turning point for the spreading of a weedy epiphyte: an IBM approach. <i>Scientific Reports</i> , 2021, 11, 20397.	3.3	3
81	Assessing mangrove species diversity, zonation and functional indicators in response to natural, regenerated, and rehabilitated succession. <i>Journal of Environmental Management</i> , 2022, 318, 115507.	7.8	3
82	Cooperative root graft networks benefit mangrove trees under stress. <i>Communications Biology</i> , 2021, 4, 513.	4.4	2
83	Saltmarsh vegetation and secured woody debris facilitate the re-colonization of <i>Avicennia germinans</i> . <i>Journal of Vegetation Science</i> , 2021, 32, e13091.	2.2	2
84	Equatorial Forests Display Distinct Trends in Phenological Variation: A Time-Series Analysis of Vegetation Index Data from Three Continents. <i>IEEE Journal of Selected Topics in Applied Earth Observations and Remote Sensing</i> , 2016, 9, 3505-3511.	4.9	1
85	Morphological plasticity and survival thresholds of mangrove plants growing in active sedimentary environments. , 2021, , 121-140.		1
86	Individual-based models. , 2021, , 213-228.		1
87	What do tigers and backswimmers have in common? an analysis of structure and sensitivity in individual-based models. <i>Procedia, Social and Behavioral Sciences</i> , 2010, 2, 7680-7681.	0.5	0
88	Integrated Forest Biometrics for Landscape-Responsive Coastal Urbanism. , 2015, , 433-443.		0
89	The Andean Farmers of Peru: Farm-Household System Vulnerability to Climate-Related Hazards. <i>Climate Change Management</i> , 2020, , 1029-1044.	0.8	0
90	Aerial surveys reveal biotic drivers of mangrove expansion along a Thai salt flat ecotone. <i>Restoration Ecology</i> , 0, , .	2.9	0