Uta Berger

List of Publications by Year in descending order

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	Root grafts matter for inter-tree water exchange â€“ a quantification of water translocation between root grafted mangrove trees using field data and model-based indications. Annals of Botany, 2022, 130, 317-330.	2.9	4
2	Assessing mangrove species diversity, zonation and functional indicators in response to natural, regenerated, and rehabilitated succession. Journal of Environmental Management, 2022, 318, 115507.	7.8	3
3	Partial canopy loss of mangrove trees: Mitigating water scarcity by physical adaptation and feedback on porewater salinity. Estuarine, Coastal and Shelf Science, 2021, 248, 106797.	2.1	8
4	Silvicultural options for the transformation of even-aged Rhizophora apiculata stands to irregular and diverse mangroves â€“ A simulation experiment. Estuarine, Coastal and Shelf Science, 2021, 248, 106886.	2.1	3
5	Keeping modelling notebooks with TRACE: Good for you and good for environmental research and management support. Environmental Modelling and Software, 2021, 136, 104932.	4.5	19
6	Pantropical variability in tree crown allometry. Global Ecology and Biogeography, 2021, 30, 459-475.	5.8	27
7	PeatFire: an agent-based model to simulate fire ignition and spreading in a tropical peatland ecosystem. International Journal of Wildland Fire, 2021, 30, 71.	2.4	8
8	Morphological plasticity and survival thresholds of mangrove plants growing in active sedimentary environments. , 2021, , 121-140.		1
9	The impact of seasonal regulation of metabolism on the life history of Antarctic krill. Ecological Modelling, 2021, 442, 109427.	2.5	8
10	Cooperative root graft networks benefit mangrove trees under stress. Communications Biology, 2021, 4, 513.	4.4	2
11	From theory to practice in patternâ€oriented modelling: identifying and using empirical patterns in predictive models. Biological Reviews, 2021, 96, 1868-1888.	10.4	33
12	Plantâ€“soil feedbacks in mangrove ecosystems: establishing links between empirical and modelling studies. Trees - Structure and Function, 2021, 35, 1423-1438.	1.9	7
13	The Effect of Sanitation Felling on the Spread of the European Spruce Bark Beetleâ€”An Individual-Based Modeling Approach. Frontiers in Forests and Global Change, 2021, 4, .	2.3	7
14	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. Agricultural and Forest Meteorology, 2021, 308-309, 108547.	4.8	10
15	Deforestation is the turning point for the spreading of a weedy epiphyte: an IBM approach. Scientific Reports, 2021, 11, 20397.	3.3	3
16	Saltmarsh vegetation and secured woody debris facilitate the reâ€colonization of Avicennia germinans. Journal of Vegetation Science, 2021, 32, e13091.	2.2	2
17	Individual-based models. , 2021, , 213-228.		1
18	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

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19	The interplay between vegetation and water in mangroves: new perspectives for mangrove stand modelling and ecological research. Wetlands Ecology and Management, 2020, 28, 697-712.	1.5	24
20	Blooms of a key grazer in the Southern Ocean â€“ An individual-based model of Salpa thompsoni. Progress in Oceanography, 2020, 185, 102339.	3.2	23
21	The MANgroveâ€“GroundwAter feedback model (MANGA) â€“ Describing belowground competition based on first principles. Ecological Modelling, 2020, 420, 108973.	2.5	15
22	A history of the rehabilitation of mangroves and an assessment of their diversity and structure using Landsat annual composites (1987â€“2019) and transect plot inventories. Forest Ecology and Management, 2020, 462, 118007.	3.2	12
23	Primary Steps in Analyzing Data: Tasks and Tools for a Systematic Data Exploration. Ecological Studies, 2020, , 147-174.	1.2	4
24	â€˜One Size Does Not Fit Allâ€™: A Roadmap of Purpose-Driven Mixed-Method Pathways for Sensitivity Analysis of Agent-Based Models. Jasss, 2020, 23, .	1.8	30
25	The ODD Protocol for Describing Agent-Based and Other Simulation Models: A Second Update to Improve Clarity, Replication, and Structural Realism. Jasss, 2020, 23, .	1.8	349
26	Metamodels for Evaluating, Calibrating and Applying Agent-Based Models: A Review. Jasss, 2020, 23, .	1.8	11
27	The Andean Farmers of Peru: Farm-Household System Vulnerability to Climate-Related Hazards. Climate Change Management, 2020, , 1029-1044.	0.8	0
28	Drivers of Household Decision-Making on Land-Use Transformation: An Example of Woodlot Establishment in Masindi District, Uganda. Forests, 2019, 10, 619.	2.1	8
29	Well-intentioned, but poorly implemented: Debris from coastal bamboo fences triggered mangrove decline in Thailand. Marine Pollution Bulletin, 2019, 146, 900-907.	5.0	13
30	Mobile Compensatory Mutations Promote Plasmid Survival. MSystems, 2019, 4, .	3.8	34
31	Archetypes of Climate Vulnerability: a Mixed-method Approach Applied in the Peruvian Andes. Climate and Development, 2019, 11, 418-434.	3.9	21
32	Plastic tree crowns contribute to small-scale heterogeneity in virgin beech forestsâ€”An individual-based modeling approach. Ecological Modelling, 2018, 376, 28-39.	2.5	5
33	Density-dependent shift from facilitation to competition in a dwarf Avicennia germinans forest. Wetlands Ecology and Management, 2018, 26, 139-150.	1.5	15
34	Change in drivers of mangrove crown displacement along a salinity stress gradient. Functional Ecology, 2018, 32, 2753-2765.	3.6	20
35	A new mechanistic theory of self-thinning: Adaptive behaviour of plants explains the shape and slope of self-thinning trajectories. Ecological Modelling, 2018, 390, 1-9.	2.5	15
36	Spatial explicit distribution of individual fine root biomass of Rhizophora mangle L. (Red Mangrove) in South Florida. Wetlands Ecology and Management, 2018, 26, 775-788.	1.5	5

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37	Key ecological research questions for Central European forests. Basic and Applied Ecology, 2018, 32, 3-25.	2.7	71
38	Citree: A database supporting tree selection for urban areas in temperate climate. Landscape and Urban Planning, 2017, 157, 14-25.	7.5	90
39	Conjugative plasmids enable the maintenance of low cost non-transmissible plasmids. Plasmid, 2017, 91, 96-104.	1.4	18
40	Self-organized spatial structures of locust groups emerging from local interaction. Ecological Modelling, 2017, 361, 26-40.	2.5	11
41	Improving Execution Speed of Models Implemented in NetLogo. Jasss, 2017, 20, .	1.8	31
42	Closing a gap in tropical forest biomass estimation: taking crown mass variation into account in pantropical allometries. Biogeosciences, 2016, 13, 1571-1585.	3.3	66
43	Equatorial Forests Display Distinct Trends in Phenological Variation: A Time-Series Analysis of Vegetation Index Data from Three Continents. IEEE Journal of Selected Topics in Applied Earth Observations and Remote Sensing, 2016, 9, 3505-3511.	4.9	1
44	A Multiscale Simulation Approach for Linking Mangrove Dynamics to Coastal Processes using Remote Sensing Observations. Journal of Coastal Research, 2016, 75, 810-814.	0.3	10
45	Structural realism, emergence, and predictions in next-generation ecological modelling: Synthesis from a special issue. Ecological Modelling, 2016, 326, 177-187.	2.5	73
46	Linking landscape futures with biodiversity conservation strategies in northwest Iberia â€" A simulation study combining surrogates with a spatio-temporal modelling approach. Ecological Informatics, 2016, 33, 85-100.	5.2	18
47	Reintroducing Environmental Change Drivers in Biodiversityâ€"Ecosystem Functioning Research. Trends in Ecology and Evolution, 2016, 31, 905-915.	8.7	110
48	A simple and cost-effective method for cable root detection and extension measurement in estuary wetland forests. Estuarine, Coastal and Shelf Science, 2016, 183, 117-122.	2.1	5
49	Asymmetric facilitation can reduce size inequality in plant populations resulting in delayed densityâ€dependent mortality. Oikos, 2016, 125, 1153-1161.	2.7	14
50	Machine learning meets individual-based modelling: Self-organising feature maps for the analysis of below-ground competition among plants. Ecological Modelling, 2016, 326, 142-151.	2.5	9
51	Extended biomass allometric equations for large mangrove trees from terrestrial LiDAR data. Trees - Structure and Function, 2016, 30, 935-947.	1.9	39
52	Robustness analysis: Deconstructing computational models for ecological theory and applications. Ecological Modelling, 2016, 326, 162-167.	2.5	69
53	Partitioning Stakeholders for the Economic Valuation of Ecosystem Services: Examples of a Mangrove System. Natural Resources Research, 2016, 25, 331-345.	4.7	8
54	An Evaluation of the Plant Density Estimator the Point-Centred Quarter Method (PCQM) Using Monte Carlo Simulation. PLoS ONE, 2016, 11, e0157985.	2.5	14

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55	17. Anticipating Invasions and Managing Impacts: A Review of Recent Spatiotemporal Modelling Approaches. , 2015, , 389-410.		3
56	Management Effects on Woody Species Diversity and Vegetation Structure of Coffee-based Agroforestry Systems in Ethiopia. Small-Scale Forestry, 2015, 14, 531-551.	1.7	12
57	Making Predictions in a Changing World: The Benefits of Individual-Based Ecology. BioScience, 2015, 65, 140-150.	4.9	136
58	Integrated Forest Biometrics for Landscape-Responsive Coastal Urbanism. , 2015, , 433-443.		0
59	Morphological plasticity in mangrove trees: salinity-related changes in the allometry of Avicennia germinans. Trees - Structure and Function, 2014, 28, 1413-1425.	1.9	41
60	The importance of conspecific facilitation during recruitment and regeneration: A case study in degraded mangroves. Basic and Applied Ecology, 2014, 15, 651-660.	2.7	21
61	The role of belowground competition and plastic biomass allocation in altering plant massâ€“density relationships. Oikos, 2014, 123, 248-256.	2.7	25
62	Using expert knowledge and modeling to define mangrove composition, functioning, and threats and estimate time frame for recovery. Ecology and Evolution, 2014, 4, 2247-2262.	1.9	54
63	Comparing the influence of large- and small-scale disturbances on forest heterogeneity: A simulation study for mangroves. Ecological Complexity, 2014, 20, 107-115.	2.9	12
64	Changes in allometric relations of mangrove trees due to resource availability â€“ A new mechanistic modelling approach. Ecological Modelling, 2014, 283, 53-61.	2.5	35
65	Predicting the Potential Distribution of Plant Diversity in the YukarÄ±gÃ¶kdere Forest District of the Mediterranean Region. Polish Journal of Ecology, 2014, 62, 441-454.	0.2	5
66	Low relative growth rates predict future mortality of common beech (Fagus sylvatica L.). Forest Ecology and Management, 2013, 302, 372-378.	3.2	52
67	Do canopy disturbances drive forest plantations into more natural conditions? â€” A case study from Can Gio Biosphere Reserve, Viet Nam. Global and Planetary Change, 2013, 110, 249-258.	3.5	15
68	Regeneration of Rhizophora mucronata (Lamk.) in degraded mangrove forest: Lessons from point pattern analyses of local tree interactions. Acta Oecologica, 2013, 50, 1-9.	1.1	6
69	Plant Interactions Alter the Predictions of Metabolic Scaling Theory. PLoS ONE, 2013, 8, e57612.	2.5	26
70	Dynamics in space use of American mink (Neovison vison) in a fishpond area in Northern Germany. European Journal of Wildlife Research, 2012, 58, 955-968.	1.4	13
71	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.	4.0	64
72	Structure and sensitivity analysis of individual-based predatorâ€“prey models. Reliability Engineering and System Safety, 2012, 107, 71-81.	8.9	11

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73	Investigating the role of impoundment and forest structure on the resistance and resilience of mangrove forests to hurricanes. Aquatic Botany, 2012, 97, 24-29.	1.6	30
74	Growth Strategies of Tropical Tree Species: Disentangling Light and Size Effects. PLoS ONE, 2011, 6, e25330.	2.5	91
75	Desynchronizing effects of lightning strike disturbances on cyclic forest dynamics in mangrove plantations. Aquatic Botany, 2011, 95, 173-181.	1.6	16
76	The Influence of Agroforestry and Other Land-Use Types on the Persistence of a Sumatran Tiger (Panthera tigris sumatrae) Population: An Individual-Based Model Approach. Environmental Management, 2011, 48, 276-288.	2.7	21
77	What do tigers and backswimmers have in common? an analysis of structure and sensitivity in individual-based models. Procedia, Social and Behavioral Sciences, 2010, 2, 7680-7681.	0.5	0
78	The ODD protocol: A review and first update. Ecological Modelling, 2010, 221, 2760-2768.	2.5	1,913
79	The virtual ecologist approach: simulating data and observers. Oikos, 2010, 119, 622-635.	2.7	242
80	Proposing an information criterion for individual-based models developed in a pattern-oriented modelling framework. Ecological Modelling, 2009, 220, 1957-1967.	2.5	42
81	Spatial structure of a leaf-removing crab population in a mangrove of North-Brazil. Wetlands Ecology and Management, 2009, 17, 93-106.	1.5	23
82	Testing the intermediate disturbance hypothesis in speciesâ€poor systems: A simulation experiment for mangrove forests. Journal of Vegetation Science, 2008, 19, 417-424.	2.2	17
83	Advances and limitations of individual-based models to analyze and predict dynamics of mangrove forests: A review. Aquatic Botany, 2008, 89, 260-274.	1.6	124
84	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.	2.7	150
85	Mangrove vegetation in Amazonia: a review of studies from the coast of ParÃ¡ and MaranhÃ£o States, north Brazil. Acta Amazonica, 2008, 38, 403-420.	0.7	141
86	Zonation Patterns of Belizean Offshore Mangrove Forests 41 Years After a Catastrophic Hurricane1. Biotropica, 2006, 38, 365-374.	1.6	95
87	A standard protocol for describing individual-based and agent-based models. Ecological Modelling, 2006, 198, 115-126.	2.5	2,219
88	TOWARDS A STANDARD FOR THE INDIVIDUALâ€BASED MODELING OF PLANT POPULATIONS: SELFâ€THINNING AND THE FIELDâ€OFâ€NEIGHBORHOOD APPROACH. Natural Resource Modelling, 2002, 15, 39-54.	2.0	48
89	A new approach to spatially explicit modelling of forest dynamics: spacing, ageing and neighbourhood competition of mangrove trees. Ecological Modelling, 2000, 132, 287-302.	2.5	221
90	Aerial surveys reveal biotic drivers of mangrove expansion along a Thai salt flat ecotone. Restoration Ecology, 0, , .	2.9	0