Carsten F Dormann

List of Publications by Year
in descending order

144 papers	27,979 citations	25034 57 h-index	11939 134 g-index
164 all docs	164 docs citations	164 times ranked	32461 citing authors

#	Article	IF	Citations
1	Quantitative Prediction of Interactions in Bipartite Networks Based on Traits, Abundances, and Phylogeny. American Naturalist, 2022, 199, 841-854.	2.1	8
2	Population density estimates for terrestrial mammal species. Global Ecology and Biogeography, 2022, 31, 978-994.	5.8	23
3	Reply to: â€œResearch on agroforestry systems and biodiversity conservation: what can we conclude so far and what should we improve?â€•by Boinot et al. 2022. Bmc Ecology and Evolution, 2022, 22, 65.	1.6	0
4	Spatially autocorrelated training and validation samples inflate performance assessment of convolutional neural networks. ISPRS Open Journal of Photogrammetry and Remote Sensing, 2022, 5, 100018.	3.1	19
5	Seeing through the static: the temporal dimension of plantâ€“animal mutualistic interactions. Ecology Letters, 2021, 24, 149-161.	6.4	66
6	Tree diversity reduces the risk of bark beetle infestation for preferred conifer species, but increases the risk for less preferred hosts. Journal of Ecology, 2021, 109, 2649-2661.	4.0	20
7	Curvature of Logsâ€”Development of and Comparison between Different Calculation Approaches. Forests, 2021, 12, 857.	2.1	2
8	Within-day dynamics of plantâ€“pollinator networks are dominated by early flower closure: an experimental test of network plasticity. Oecologia, 2021, 196, 781-794.	2.0	9
9	Increasing connectivity enhances habitat specialists but simplifies plantâ€“insect food webs. Oecologia, 2021, 195, 539-546.	2.0	9
10	European agroforestry has no unequivocal effect on biodiversity: a time-cumulative meta-analysis. Bmc Ecology and Evolution, 2021, 21, 193.	1.6	18
11	Evidence Ranking Needs to Reflect Causality. Trends in Ecology and Evolution, 2020, 35, 94-95.	8.7	2
12	Humpback whales extend their stay in a breeding ground in the Tropical Eastern Pacific. ICES Journal of Marine Science, 2020, 77, 109-118.	2.5	22
13	Insect abundance in managed forests benefits from multi-layered vegetation. Basic and Applied Ecology, 2020, 48, 124-135.	2.7	34
14	Plant species richness increases with light availability, but not variability, in temperate forests understorey. BMC Ecology, 2020, 20, 43.	3.0	53
15	Exploration of Concerns about the Evidence-Based Guideline Approach in Conservation Management: Hints from Medical Practice. Environmental Management, 2020, 66, 435-449.	2.7	9
16	Spatial validation reveals poor predictive performance of large-scale ecological mapping models. Nature Communications, 2020, 11, 4540.	12.8	232
17	Temporal scaleâ€dependence of plantâ€“pollinator networks. Oikos, 2020, 129, 1289-1302.	2.7	66
18	A standard protocol for reporting species distribution models. Ecography, 2020, 43, 1261-1277.	4.5	397

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19	Spatial conservation prioritisation in data-poor countries: a quantitative sensitivity analysis using multiple taxa. BMC Ecology, 2020, 20, 35.	3.0	7
20	Co-occurrence patterns and the large-scale spatial structure of benthic communities in seagrass meadows and bare sand. BMC Ecology, 2020, 20, 37.	3.0	7
21	The influence of camera trap flash type on the behavioural reactions and trapping rates of red deer and roe deer. Remote Sensing in Ecology and Conservation, 2020, 6, 399-410.	4.3	11
22	Evaluating the effectiveness of retention forestry to enhance biodiversity in production forests of Central Europe using an interdisciplinary, multiâ€scale approach. Ecology and Evolution, 2020, 10, 1489-1509.	1.9	56
23	Calibration of probability predictions from machineâ€learning and statistical models. Global Ecology and Biogeography, 2020, 29, 760-765.	5.8	18
24	Multiple Regression in R. , 2020, , 227-255.		0
25	Correlation and Association. , 2020, , 65-70.		0
26	Multiple Regression: Regression with Multiple Predictors. , 2020, , 207-226.		0
27	Samples, RandomÂVariablesâ€”Histograms, Density Distribution. , 2020, , 1-12.		0
28	Breaking the ecosystem services glass ceiling: realising impact. Regional Environmental Change, 2019, 19, 2261-2274.	2.9	5
29	Spatial behavior in rehabilitated orangutans in Sumatra: Where do they go?. PLoS ONE, 2019, 14, e0215284.	2.5	2
30	A new model explaining the origin of different topologies in interaction networks. Ecology, 2019, 100, e02796.	3.2	32
31	African elephant poaching rates correlate with local poverty, national corruption and global ivory price. Nature Communications, 2019, 10, 2242.	12.8	63
32	Refuges from fire maintain pollinatorâ€“plant interaction networks. Ecology and Evolution, 2019, 9, 5777-5786.	1.9	21
33	Better Model Transfers Require Knowledge of Mechanisms. Trends in Ecology and Evolution, 2019, 34, 489-490.	8.7	10
34	The interplay of landscape composition and configuration: new pathways to manage functional biodiversity and agroecosystem services across Europe. Ecology Letters, 2019, 22, 1083-1094.	6.4	364
35	Does Public Participation Shift German National Park Priorities Away from Nature Conservation?. Environmental Conservation, 2019, 46, 84-91.	1.3	14
36	Blind spots in ecosystem services research and challenges for implementation. Regional Environmental Change, 2019, 19, 2151-2172.	2.9	77

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37	Standards for distribution models in biodiversity assessments. Science Advances, 2019, 5, eaat4858.	10.3	605
38	Forest-edge associated bees benefit from the proportion of tropical forest regardless of its edge length. Biological Conservation, 2018, 220, 149-160.	4.1	29
39	Current global risks to marine mammals: Taking stock of the threats. Biological Conservation, 2018, 221, 44-58.	4.1	177
40	Consistent set of additive biomass functions for eight tree species in Germany fit by nonlinear seemingly unrelated regression. Annals of Forest Science, 2018, 75, 1.	2.0	21
41	Disturbance intensity is a stronger driver of biomass recovery than remaining treeâ€community attributes in a managed Amazonian forest. Journal of Applied Ecology, 2018, 55, 1647-1657.	4.0	33
42	Wrong, but useful: regional species distribution models may not be improved by rangeâ€wide data under biased sampling. Ecology and Evolution, 2018, 8, 2196-2206.	1.9	61
43	Modelling the variation of bark thickness within and between European silver fir (Abies alba Mill.) trees in southwest Germany. Forestry, 2018, 91, 283-294.	2.3	18
44	Model averaging in ecology: a review of Bayesian, informationâ€theoretic, and tactical approaches for predictive inference. Ecological Monographs, 2018, 88, 485-504.	5.4	209
45	Computing AIC for black-box models using generalized degrees of freedom: A comparison with cross-validation. Communications in Statistics Part B: Simulation and Computation, 2018, 47, 1382-1396.	1.2	13
46	An efficient method to exploit Li<scp>DAR</scp> data in animal ecology. Methods in Ecology and Evolution, 2018, 9, 893-904.	5.2	23
47	Quantifying forest structural diversity based on large-scale inventory data: a new approach to support biodiversity monitoring. Forest Ecosystems, 2018, 5, .	3.1	50
48	Improved speciesâ€occurrence predictions in dataâ€poor regions: using largeâ€scale data and bias correction with downâ€weighted Poisson regression and Maxent. Ecography, 2018, 41, 1161-1172.	4.5	53
49	Crop pests and predators exhibit inconsistent responses to surrounding landscape composition. Proceedings of the National Academy of Sciences of the United States of America, 2018, 115, E7863-E7870.	7.1	401
50	Biotic interactions in species distribution modelling: 10 questions to guide interpretation and avoid false conclusions. Global Ecology and Biogeography, 2018, 27, 1004-1016.	5.8	211
51	Decaying trees improve nesting opportunities for cavityâ€nesting birds in temperate and boreal forests: A metaâ€analysis and implications for retention forestry. Ecology and Evolution, 2018, 8, 8616-8626.	1.9	41
52	Outstanding Challenges in the Transferability of Ecological Models. Trends in Ecology and Evolution, 2018, 33, 790-802.	8.7	403
53	Wrong, but useful: regional species distribution models may not be improved by range-wide data under biased sampling. , 2018, 8, 2196.		1
54	Fragmentation of nest and foraging habitat affects time budgets of solitary bees, their fitness and pollination services, depending on traits: Results from an individual-based model. PLoS ONE, 2018, 13, e0188269.	2.5	43

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55	Comparison of models for estimating bark thickness of Picea abies in southwest Germany: the role of tree, stand, and environmental factors. Annals of Forest Science, 2017, 74, 1.	2.0	23
56	Crossâ€validation strategies for data with temporal, spatial, hierarchical, or phylogenetic structure. Ecography, 2017, 40, 913-929.	4.5	1,092
57	Recruitment, growth and recovery of commercial tree species over 30 years following logging and thinning in a tropical rain forest. Forest Ecology and Management, 2017, 385, 225-235.	3.2	64
58	Parametrische Statistik. , 2017, , .		6
59	Identifying Causes of Patterns in Ecological Networks: Opportunities and Limitations. Annual Review of Ecology, Evolution, and Systematics, 2017, 48, 559-584.	8.3	152
60	No consistent effect of plant species richness on resistance to simulated climate change for above- or below-ground processes in managed grasslands. BMC Ecology, 2017, 17, 23.	3.0	7
61	Influence of Forest Harvest on Nitrate Concentration in Temperate Streamsâ€"A Meta-Analysis. Forests, 2017, 8, 5.	2.1	17
62	The former Iron Curtain still drives biodiversityâ€"profit trade-offs in German agriculture. Nature Ecology and Evolution, 2017, 1, 1279-1284.	7.8	114
63	An evidence assessment tool for ecosystem services and conservation studies. Ecological Applications, 2016, 26, 1295-1301.	3.8	54
64	Ecological networks are more sensitive to plant than to animal extinction under climate change. Nature Communications, 2016, 7, 13965.	12.8	180
65	Detection probabilities for sessile organisms. Ecosphere, 2016, 7, e01546.	2.2	15
66	Squares of different sizes: effect of geographical projection on model parameter estimates in species distribution modeling. Ecology and Evolution, 2016, 6, 202-211.	1.9	16
67	The influence of floral traits on specialization and modularity of plantâ€"pollinator networks in a biodiversity hotspot in the Peruvian Andes. Annals of Botany, 2016, 118, 415-429.	2.9	73
68	Effectiveness of light-reflecting devices: A systematic reanalysis of animal-vehicle collision data. Accident Analysis and Prevention, 2016, 97, 242-260.	5.7	21
69	Synthesize evidence to steer decisions. Nature, 2016, 529, 466-466.	27.8	5
70	Measurement and prediction of bark thickness in Picea abies: assessment of accuracy, precision, and sample size requirements. Canadian Journal of Forest Research, 2016, 46, 39-47.	1.7	25
71	Dispersal Ecology Informs Design of Large-Scale Wildlife Corridors. PLoS ONE, 2016, 11, e0162989.	2.5	24
72	Medium-term dynamics of tree species composition in response to silvicultural intervention intensities in a tropical rain forest. Biological Conservation, 2015, 191, 577-586.	4.1	54

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73	Effects of warming and drought on potential N₂O emissions and denitrifying bacteria abundance in grasslands with different land-use. FEMS Microbiology Ecology, 2015, 91, fiv066.	2.7	41
74	Community structure and ecological specialization in plantâ€“ant interactions. Journal of Tropical Ecology, 2015, 31, 325-334.	1.1	4
75	Cross-Scale Variation in Biodiversity-Environment Links Illustrated by Coastal Sandflat Communities. PLoS ONE, 2015, 10, e0142411.	2.5	14
76	Interannual variation in land-use intensity enhances grassland multidiversity. Proceedings of the National Academy of Sciences of the United States of America, 2014, 111, 308-313.	7.1	243
77	The potential for indirect effects between coâ€flowering plants via shared pollinators depends on resource abundance, accessibility and relatedness. Ecology Letters, 2014, 17, 1389-1399.	6.4	172
78	The <scp>PREDICTS</scp> database: a global database of how local terrestrial biodiversity responds to human impacts. Ecology and Evolution, 2014, 4, 4701-4735.	1.9	178
79	Stacking species distribution models and adjusting bias by linking them to macroecological models. Global Ecology and Biogeography, 2014, 23, 99-112.	5.8	270
80	Ecological, historical and evolutionary determinants of modularity in weighted seedâ€dispersal networks. Ecology Letters, 2014, 17, 454-463.	6.4	150
81	Choices of abundance currency, community definition and diversity metric control the predictive power of macroecological models of biodiversity. Global Ecology and Biogeography, 2014, 23, 468-478.	5.8	8
82	Accounting for geographical variation in speciesâ€“area relationships improves the prediction of plant species richness at the global scale. Journal of Biogeography, 2014, 41, 261-273.	3.0	45
83	EDITOR'S CHOICE: REVIEW: Effects of land use on plant diversity â€“ A global metaâ€analysis. Journal of Applied Ecology, 2014, 51, 1690-1700.	4.0	88
84	A method for detecting modules in quantitative bipartite networks. Methods in Ecology and Evolution, 2014, 5, 90-98.	5.2	397
85	Mass-flowering crops enhance wild bee abundance. Oecologia, 2013, 172, 477-484.	2.0	179
86	Collinearity: a review of methods to deal with it and a simulation study evaluating their performance. Ecography, 2013, 36, 27-46.	4.5	6,250
87	Temporal variability of ecological niches: a study on intertidal macrobenthic fauna. Oikos, 2013, 122, 754-760.	2.7	12
88	Bee diversity effects on pollination depend on functional complementarity and niche shifts. Ecology, 2013, 94, 2042-2054.	3.2	232
89	The role of biotic interactions in shaping distributions and realised assemblages of species: implications for species distribution modelling. Biological Reviews, 2013, 88, 15-30.	10.4	1,224
90	Process, correlation and parameter fitting in species distribution models: a response to Kriticos etÂal. Journal of Biogeography, 2013, 40, 612-613.	3.0	8

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91	Does model-free forecasting really outperform the true model?. Proceedings of the National Academy of Sciences of the United States of America, 2013, 110, E3975.	7.1	16
92	Organic Farming Favours Insect-Pollinated over Non-Insect Pollinated Forbs in Meadows and Wheat Fields. PLoS ONE, 2013, 8, e54818.	2.5	30
93	Parametrische Statistik. , 2013, , .		11
94	Predator richness increases the effect of prey diversity on prey yield. Nature Communications, 2012, 3, 1305.	12.8	116
95	Landscape moderation of biodiversity patterns and processes â€•eight hypotheses. Biological Reviews, 2012, 87, 661-685.	10.4	1,443
96	Mapping water quality-related ecosystem services: concepts and applications for nitrogen retention and pesticide risk reduction. International Journal of Biodiversity Science, Ecosystem Services & Management, 2012, 8, 35-49.	2.9	21
97	Climatic niche evolution and species diversification in the <scp>C</scp>ape flora, <scp>S</scp>outh <scp>A</scp>frica. Journal of Biogeography, 2012, 39, 2201-2211.	3.0	65
98	Specialization of Mutualistic Interaction Networks Decreases toward Tropical Latitudes. Current Biology, 2012, 22, 1925-1931.	3.9	290
99	Spatial and Temporal Trends of Global Pollination Benefit. PLoS ONE, 2012, 7, e35954.	2.5	275
100	Spillover of functionally important organisms between managed and natural habitats. Agriculture, Ecosystems and Environment, 2012, 146, 34-43.	5.3	413
101	The responses of grassland plants to experimentally simulated climate change depend on land use and region. Global Change Biology, 2012, 18, 127-137.	9.5	43
102	A quantitative index of land-use intensity in grasslands: Integrating mowing, grazing and fertilization. Basic and Applied Ecology, 2012, 13, 207-220.	2.7	325
103	Correlation and process in species distribution models: bridging a dichotomy. Journal of Biogeography, 2012, 39, 2119-2131.	3.0	526
104	Towards novel approaches to modelling biotic interactions in multispecies assemblages at large spatial extents. Journal of Biogeography, 2012, 39, 2163-2178.	3.0	340
105	Less than eight (and a half) misconceptions of spatial analysis. Journal of Biogeography, 2012, 39, 995-998.	3.0	72
106	What's on the horizon for macroecology?. Ecography, 2012, 35, 673-683.	4.5	166
107	Landscape elements as potential barriers and corridors for bees, wasps and parasitoids. Biological Conservation, 2011, 144, 1816-1825.	4.1	107
108	Microsite conditions dominate habitat selection of the red mason bee (Osmia bicornis, Hymenoptera:) Tj ETQq0 0 0 rgBT /Overlock 10 T Planning, 2011, 103, 15-23.	7.5	48

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109	LinnÃ©â€™s floral clock is slow without pollinators â€“ flower closure and plantâ€pollinator interaction webs. Ecology Letters, 2011, 14, 896-904.	6.4	53
110	A quantitative review of ecosystem service studies: approaches, shortcomings and the road ahead. Journal of Applied Ecology, 2011, 48, 630-636.	4.0	779
111	Species abundance distributions and richness estimations in fungal metagenomics - lessons learned from community ecology. Molecular Ecology, 2011, 20, 275-285.	3.9	158
112	Set-aside management: How do succession, sowing patterns and landscape context affect biodiversity?. Agriculture, Ecosystems and Environment, 2011, 143, 37-44.	5.3	105
113	Cropâ€“noncrop spillover: arable fields affect trophic interactions on wild plants in surrounding habitats. Oecologia, 2011, 166, 433-441.	2.0	31
114	On managing the red mason bee (Osmia bicornis) in apple orchards. Apidologie, 2011, 42, 564.	2.0	67
115	Food web structure and biocontrol in a four-trophic level system across a landscape complexity gradient. Proceedings of the Royal Society B: Biological Sciences, 2011, 278, 2946-2953.	2.6	119
116	Expansion of mass-flowering crops leads to transient pollinator dilution and reduced wild plant pollination. Proceedings of the Royal Society B: Biological Sciences, 2011, 278, 3444-3451.	2.6	199
117	Reassessing Neotropical angiosperm distribution patterns based on monographic data: a geometric interpolation approach. Biodiversity and Conservation, 2010, 19, 1523-1546.	2.6	16
118	TaqMan Real-Time PCR Assays To Assess Arbuscular Mycorrhizal Responses to Field Manipulation of Grassland Biodiversity: Effects of Soil Characteristics, Plant Species Richness, and Functional Traits. Applied and Environmental Microbiology, 2010, 76, 3765-3775.	3.1	72
119	Evolution of climate niches in European mammals?. Biology Letters, 2010, 6, 229-232.	2.3	54
120	Review: Ecological networks â€“ beyond food webs. Journal of Animal Ecology, 2009, 78, 253-269.	2.8	765
121	Static species distribution models in dynamically changing systems: how good can predictions really be?. Ecography, 2009, 32, 733-744.	4.5	121
122	Response to Comment on â€œMethods to account for spatial autocorrelation in the analysis of species distributional data: a reviewâ€•. Ecography, 2009, 32, 379-381.	4.5	28
123	Indices, Graphs and Null Models: Analyzing Bipartite Ecological Networks. Open Ecology Journal, 2009, 2, 7-24.	2.0	1,201
124	Application of species richness estimators for the assessment of fungal diversity. FEMS Microbiology Letters, 2008, 282, 205-213.	1.8	64
125	Prediction uncertainty of environmental change effects on temperate European biodiversity. Ecology Letters, 2008, 11, 235-244.	6.4	79
126	COMPONENTS OF UNCERTAINTY IN SPECIES DISTRIBUTION ANALYSIS: A CASE STUDY OF THE GREAT GREY SHRIKE. Ecology, 2008, 89, 3371-3386.	3.2	178

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127	Methods to account for spatial autocorrelation in the analysis of species distributional data: a review. Ecography, 2007, 30, 609-628.	4.5	2,522
128	Effects of incorporating spatial autocorrelation into the analysis of species distribution data. Global Ecology and Biogeography, 2007, 16, 129-138.	5.8	498
129	Effects of landscape structure and landâ€use intensity on similarity of plant and animal communities. Global Ecology and Biogeography, 2007, 16, 774-787.	5.8	151
130	Promising the future? Global change projections of species distributions. Basic and Applied Ecology, 2007, 8, 387-397.	2.7	391
131	Assessing the validity of autologistic regression. Ecological Modelling, 2007, 207, 234-242.	2.5	104
132	Competition hierarchy, transitivity and additivity: investigating the effect of fertilisation on plantâ€“plant interactions using three common bryophytes. Plant Ecology, 2007, 191, 171-184.	1.6	13
133	Occurrence pattern of Pararge aegeria (Lepidoptera: Nymphalidae) with respect to local habitat suitability, climate and landscape structure. Landscape Ecology, 2006, 21, 989-1001.	4.2	19
134	Experimental evidence rejects pairwise modelling approach to coexistence in plant communities. Proceedings of the Royal Society B: Biological Sciences, 2005, 272, 1279-1285.	2.6	56
135	Neighbour identity modifies effects of elevated temperature on plant performance in the High Arctic. Global Change Biology, 2004, 10, 1587-1598.	9.5	36
136	Consequences of manipulations in carbon and nitrogen supply for concentration of anti-herbivore defence compounds inSalix polaris. Ecoscience, 2003, 10, 312-318.	1.4	28
137	Facilitation and competition in the high Arctic: the importance of the experimental approach. Acta Oecologica, 2002, 23, 297-301.	1.1	50
138	No evidence for adaptation of two Polygonum viviparum morphotypes of different bulbil characteristics to length of growing season: abundance, biomass and germination. Polar Biology, 2002, 25, 884-890.	1.2	14
139	Flowering, growth and defence in the two sexes: consequences of herbivore exclusion for Salix polaris. Functional Ecology, 2002, 16, 649-656.	3.6	26
140	Optimal anti-herbivore defence allocation in Salix polaris: doing it the arctic way?. Phytocoenologia, 2002, 32, 517-529.	0.5	1
141	Competition and herbivory during salt marsh succession: the importance of forb growth strategy. Journal of Ecology, 2000, 88, 571-583.	4.0	52
142	â€œMind the gap!â€•â€“ How well does Natura 2000 cover species of European interest?. Nature Conservation, 0, 3, 45-62.	0.0	63
143	Food Webs versus Interaction Networks: Principles, Pitfalls, and Perspectives. , 0, , 9-18.		5
144	A systematic map of demographic data from elephant populations throughout Africa: implications for poaching and population analyses. Mammal Review, 0, , .	4.8	0