Matthias Schleuning

List of Publications by Year
in descending order

123 papers	8,130 citations	61984 43 h-index	56724 83 g-index
130 all docs	130 docs citations	130 times ranked	9976 citing authors

#	Article	IF	Citations
1	TRY plant trait database â€“ enhanced coverage and open access. Global Change Biology, 2020, 26, 119-188.	9.5	1,038
2	A global synthesis reveals biodiversity-mediated benefits for crop production. Science Advances, 2019, 5, eaax0121.	10.3	524
3	Climateâ€“land-use interactions shape tropical mountain biodiversity and ecosystem functions. Nature, 2019, 568, 88-92.	27.8	313
4	Specialization of Mutualistic Interaction Networks Decreases toward Tropical Latitudes. Current Biology, 2012, 22, 1925-1931.	3.9	290
5	AVONET: morphological, ecological and geographical data for all birds. Ecology Letters, 2022, 25, 581-597.	6.4	280
6	Predicting ecosystem functions from biodiversity and mutualistic networks: an extension of traitâ€based concepts to plantâ€“animal interactions. Ecography, 2015, 38, 380-392.	4.5	235
7	Predictors of elevational biodiversity gradients change from single taxa to the multi-taxa community level. Nature Communications, 2016, 7, 13736.	12.8	229
8	Metaâ€Analysis of the Effects of Human Disturbance on Seed Dispersal by Animals. Conservation Biology, 2012, 26, 1072-1081.	4.7	213
9	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
10	Ecological networks are more sensitive to plant than to animal extinction under climate change. Nature Communications, 2016, 7, 13965.	12.8	180
11	Morphology predicts species' functional roles and their degree of specialization in plantâ€“frugivore interactions. Proceedings of the Royal Society B: Biological Sciences, 2016, 283, 20152444.	2.6	164
12	Morphological traits determine specialization and resource use in plantâ€“hummingbird networks in the neotropics. Ecology, 2014, 95, 3325-3334.	3.2	151
13	Ecological, historical and evolutionary determinants of modularity in weighted seedâ€dispersal networks. Ecology Letters, 2014, 17, 454-463.	6.4	150
14	Specialization and interaction strength in a tropical plantâ€“frugivore network differ among forest strata. Ecology, 2011, 92, 26-36.	3.2	144
15	Food resources and vegetation structure mediate climatic effects on species richness of birds. Global Ecology and Biogeography, 2014, 23, 541-549.	5.8	143
16	Functional relationships beyond species richness patterns: trait matching in plantâ€“bird mutualisms across scales. Global Ecology and Biogeography, 2014, 23, 1085-1093.	5.8	129
17	Functional and phylogenetic diversity and assemblage structure of frugivorous birds along an elevational gradient in the tropical Andes. Ecography, 2014, 37, 1047-1055.	4.5	124
18	Historical climateâ€change influences modularity and nestedness of pollination networks. Ecography, 2013, 36, 1331-1340.	4.5	116

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19	Opposed latitudinal patterns of networkâ€derived and dietary specialization in avian plantâ€“frugivore interaction systems. Ecography, 2017, 40, 1395-1401.	4.5	111
20	Environment and host identity structure communities of green algal symbionts in lichens. New Phytologist, 2018, 217, 277-289.	7.3	106
21	Trait-Based Assessments of Climate-Change Impacts on Interacting Species. Trends in Ecology and Evolution, 2020, 35, 319-328.	8.7	106
22	The macroecology of phylogenetically structured hummingbirdâ€“plant networks. Global Ecology and Biogeography, 2015, 24, 1212-1224.	5.8	100
23	Pollination and seed dispersal are the most threatened processes of plant regeneration. Scientific Reports, 2016, 6, 29839.	3.3	98
24	Complementary ecosystem services provided by pest predators and pollinators increase quantity and quality of coffee yields. Proceedings of the Royal Society B: Biological Sciences, 2014, 281, 20133148.	2.6	93
25	Plantâ€“frugivore networks are less specialized and more robust at forestâ€“farmland edges than in the interior of a tropical forest. Oikos, 2012, 121, 1553-1566.	2.7	85
26	Machine learning algorithms to infer traitâ€matching and predict species interactions in ecological networks. Methods in Ecology and Evolution, 2020, 11, 281-293.	5.2	82
27	Functional structure and specialization in three tropical plantâ€“hummingbird interaction networks across an elevational gradient in Costa Rica. Ecography, 2015, 38, 1119-1128.	4.5	71
28	Morphological trait matching shapes plantâ€“frugivore networks across the Andes. Ecography, 2018, 41, 1910-1919.	4.5	71
29	Global patterns of interaction specialization in birdâ€“flower networks. Journal of Biogeography, 2017, 44, 1891-1910.	3.0	68
30	Multispecies interactions across trophic levels at macroscales: retrospective and future directions. Ecography, 2015, 38, 346-357.	4.5	65
31	Forest Fragmentation and Selective Logging Have Inconsistent Effects on Multiple Animal-Mediated Ecosystem Processes in a Tropical Forest. PLoS ONE, 2011, 6, e27785.	2.5	64
32	Plant and animal functional diversity drive mutualistic network assembly across an elevational gradient. Nature Communications, 2018, 9, 3177.	12.8	63
33	High Bird Species Diversity in Structurally Heterogeneous Farmland in Western Kenya. Biotropica, 2012, 44, 801-809.	1.6	62
34	Constant properties of plantâ€“frugivore networks despite fluctuations in fruit and bird communities in space and time. Ecology, 2013, 94, 1296-1306.	3.2	60
35	Importance of animal and plant traits for fruit removal and seedling recruitment in a tropical forest. Oikos, 2017, 126, 823-832.	2.7	59
36	How colorful are fruits? Limited color diversity in fleshy fruits on local and global scales. New Phytologist, 2013, 198, 617-629.	7.3	57

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37	Effects of hummingbird morphology on specialization in pollination networks vary with resource availability. Oikos, 2017, 126, 52-60.	2.7	56
38	Functional and phylogenetic diversity of bird assemblages are filtered by different biotic factors on tropical mountains. Journal of Biogeography, 2019, 46, 291-303.	3.0	56
39	Different foraging preferences of hummingbirds on artificial and natural flowers reveal mechanisms structuring plantâ€“pollinator interactions. Journal of Animal Ecology, 2015, 84, 655-664.	2.8	55
40	At a loss for birds: insularity increases asymmetry in seedâ€dispersal networks. Global Ecology and Biogeography, 2014, 23, 385-394.	5.8	52
41	Direct and indirect effects of climate, human disturbance and plant traits on avian functional diversity. Global Ecology and Biogeography, 2017, 26, 963-972.	5.8	50
42	Topography and edge effects are more important than elevation as drivers of vegetation patterns in a neotropical montane forest. Journal of Vegetation Science, 2014, 25, 724-733.	2.2	48
43	Functional importance of avian seed dispersers changes in response to human-induced forest edges in tropical seed-dispersal networks. Oecologia, 2014, 176, 837-848.	2.0	48
44	The integration of alien plants in mutualistic plantâ€“hummingbird networks across the Americas: the importance of species traits and insularity. Diversity and Distributions, 2016, 22, 672-681.	4.1	47
45	Seasonal fluctuations of resource abundance and avian feeding guilds across forestâ€“farmland boundaries in tropical Africa. Oikos, 2013, 122, 524-532.	2.7	46
46	Defaunation effects on plant recruitment depend on size matching and size trade-offs in seed-dispersal networks. Proceedings of the Royal Society B: Biological Sciences, 2017, 284, 20162664.	2.6	46
47	Secondary dispersal by ants promotes forest regeneration after deforestation. Journal of Ecology, 2014, 102, 659-666.	4.0	45
48	Seedâ€dispersal networks are more specialized in the Neotropics than in the Afrotropics. Global Ecology and Biogeography, 2019, 28, 248-261.	5.8	45
49	Negative effects of habitat degradation and fragmentation on the declining grassland plant Trifolium montanum. Basic and Applied Ecology, 2009, 10, 61-69.	2.7	44
50	Ecological mechanisms explaining interactions within plantâ€“hummingbird networks: morphological matching increases towards lower latitudes. Proceedings of the Royal Society B: Biological Sciences, 2020, 287, 20192873.	2.6	44
51	Functional diversity mediates macroecological variation in plantâ€“hummingbird interaction networks. Global Ecology and Biogeography, 2018, 27, 1186-1199.	5.8	43
52	Biodiversity, scenery and infrastructure: Factors driving wildlife tourism in an African savannah national park. Biological Conservation, 2016, 201, 60-68.	4.1	42
53	Functionally specialised birds respond flexibly to seasonal changes in fruit availability. Journal of Animal Ecology, 2017, 86, 800-811.	2.8	42
54	Sugar landscapes and pollinatorâ€mediated interactions in plant communities. Ecography, 2017, 40, 1129-1138.	4.5	41

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55	Responses of nectarâ€feeding birds to floral resources at multiple spatial scales. Ecography, 2016, 39, 619-629.	4.5	39
56	Influence of habitat complexity and landscape configuration on pollination and seed-dispersal interactions of wild cherry trees. Oecologia, 2012, 168, 425-437.	2.0	37
57	Spatio-temporal variation in bird assemblages is associated with fluctuations in temperature and precipitation along a tropical elevational gradient. PLoS ONE, 2018, 13, e0196179.	2.5	37
58	Species richness is more important for ecosystem functioning than species turnover along an elevational gradient. Nature Ecology and Evolution, 2021, 5, 1582-1593.	7.8	35
59	Birds protected by national legislation show improved population trends in Eastern Europe. Biological Conservation, 2014, 172, 109-116.	4.1	34
60	Projected impacts of climate change on functional diversity of frugivorous birds along a tropical elevational gradient. Scientific Reports, 2019, 9, 17708.	3.3	34
61	Flooding and canopy dynamics shape the demography of a clonal Amazon understorey herb. Journal of Ecology, 2008, 96, 1045-1055.	4.0	33
62	Changes in abundances of forest understorey birds on Africa's highest mountain suggest subtle effects of climate change. Diversity and Distributions, 2016, 22, 288-299.	4.1	33
63	Forest recovery of areas deforested by fire increases with elevation in the tropical Andes. Forest Ecology and Management, 2013, 295, 69-76.	3.2	32
64	High proportion of smaller ranged hummingbird species coincides with ecological specialization across the Americas. Proceedings of the Royal Society B: Biological Sciences, 2016, 283, 20152512.	2.6	32
65	Downsizing of animal communities triggers stronger functional than structural decay in seed-dispersal networks. Nature Communications, 2020, 11, 1582.	12.8	32
66	Short seedâ€dispersal distances and low seedling recruitment in farmland populations of birdâ€dispersed cherry trees. Journal of Ecology, 2012, 100, 1349-1358.	4.0	31
67	Mismatches between supply and demand in wildlife tourism: Insights for assessing cultural ecosystem services. Ecological Indicators, 2017, 78, 282-291.	6.3	31
68	The influence of biogeographical and evolutionary histories on morphological traitâ€matching and resource specialization in mutualistic hummingbirdâ€"plant networks. Functional Ecology, 2021, 35, 1120-1133.	3.6	31
69	Habitat Change and Plant Demography: Assessing the Extinction Risk of a Formerly Common Grassland Perennial. Conservation Biology, 2009, 23, 174-183.	4.7	29
70	Large mammal diversity matters for wildlife tourism in Southern African Protected Areas: Insights for management. Ecosystem Services, 2018, 31, 481-490.	5.4	28
71	Synergistic effects of climate and land use on avian betaâ€diversity. Diversity and Distributions, 2017, 23, 1246-1255.	4.1	27
72	Reward quality predicts effects of bird-pollinators on the reproduction of African Protea shrubs. Perspectives in Plant Ecology, Evolution and Systematics, 2015, 17, 209-217.	2.7	26

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73	Bracken fern facilitates tree seedling recruitment in tropical fire-degraded habitats. Forest Ecology and Management, 2015, 337, 135-143.	3.2	26
74	Elevationâ€dependent effects of forest fragmentation on plantâ€“bird interaction networks in the tropical Andes. Ecography, 2018, 41, 1497-1506.	4.5	25
75	Global plantâ€frugivore trait matching is shaped by climate and biogeographic history. Ecology Letters, 2022, 25, 686-696.	6.4	24
76	Distinct carbon sources indicate strong differentiation between tropical forest and farmland bird communities. Oecologia, 2013, 171, 473-486.	2.0	23
77	Elevation, Topography, and Edge Effects Drive Functional Composition of Woody Plant Species in Tropical Montane Forests. Biotropica, 2015, 47, 449-458.	1.6	23
78	Temporal variation of fungal diversity in a mosaic landscape in Germany. Studies in Mycology, 2018, 89, 95-104.	7.2	23
79	Similar composition of functional roles in Andean seedâ€dispersal networks, despite high species and interaction turnover. Ecology, 2020, 101, e03028.	3.2	22
80	Direct and indirect effects of elevation, climate and vegetation structure on bird communities on a tropical mountain. Acta Oecologica, 2020, 102, 103500.	1.1	21
81	Bioclimatic regions influence genetic structure of four Jordanian <i>Stipa</i> species. Plant Biology, 2013, 15, 882-891.	3.8	19
82	Coexistence of plant species in a biodiversity hotspot is stabilized by competition but not by seed predation. Oikos, 2017, 126, .	2.7	19
83	Sex ratio rather than population size affects genetic diversity in <i>Antennaria dioica</i>. Plant Biology, 2018, 20, 789-796.	3.8	18
84	Biogeography and anthropogenic impact shape the success of invasive wasps on New Zealand's offshore islands. Diversity and Distributions, 2020, 26, 441-452.	4.1	18
85	Human-Induced Disturbance Alters Pollinator Communities in Tropical Mountain Forests. Diversity, 2013, 5, 1-14.	1.7	17
86	Different responses of taxonomic and functional bird diversity to forest fragmentation across an elevational gradient. Oecologia, 2019, 189, 863-873.	2.0	16
87	Specialists and generalists fulfil important and complementary functional roles in ecological processes. Functional Ecology, 2021, 35, 1810-1821.	3.6	16
88	Direct and indirect effects of plant and frugivore diversity on structural and functional components of fruit removal by birds. Oecologia, 2019, 189, 435-445.	2.0	15
89	Forest fragmentation and edge effects on the genetic structure ofClusia sphaerocarpaandC. lechleri(Clusiaceae) in tropical montane forests. Journal of Tropical Ecology, 2013, 29, 321-329.	1.1	14
90	Functional responses of avian frugivores to variation in fruit resources between natural and fragmented forests. Functional Ecology, 2019, 33, 399-410.	3.6	14

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91	Deforested habitats lack seeds of lateâ€successional and largeâ€seeded plant species in tropical montane forests. Applied Vegetation Science, 2015, 18, 603-612.	1.9	13
92	A bird pollinator shows positive frequency dependence and constancy of species choice in natural plant communities. Ecology, 2016, 97, 3110-3118.	3.2	13
93	Positive relationship between fruit removal by animals and seedling recruitment in a tropical forest. Basic and Applied Ecology, 2017, 20, 31-39.	2.7	13
94	The importance of vegetation density for touristsâ€™ wildlife viewing experience and satisfaction in African savannah ecosystems. PLoS ONE, 2017, 12, e0185793.	2.5	13
95	High levels of phenological asynchrony between specialized pollinators and plants with short flowering phases. Ecology, 2020, 101, e03162.	3.2	13
96	Biodiversity components mediate the response to forest loss and the effect on ecological processes of plantâ€"frugivore assemblages. Functional Ecology, 2020, 34, 1257-1267.	3.6	13
97	Abiotic and biotic drivers of functional diversity and functional composition of bird and bat assemblages along a tropical elevation gradient. Diversity and Distributions, 2021, 27, 2344-2356.	4.1	13
98	River dynamics shape clonal diversity and genetic structure of an Amazonian understorey herb. Journal of Ecology, 2011, 99, 373-382.	4.0	12
99	Effects of disturbance and altitude on soil seed banks of tropical montane forests. Journal of Tropical Ecology, 2013, 29, 523-529.	1.1	12
100	Factors limiting montane forest regeneration in bracken-dominated habitats in the tropics. Forest Ecology and Management, 2016, 381, 168-176.	3.2	12
101	Projecting consequences of global warming for the functional diversity of fleshyâ€fruited plants and frugivorous birds along a tropical elevational gradient. Diversity and Distributions, 2019, 25, 1362-1374.	4.1	12
102	A research framework for projecting ecosystem change in highly diverse tropical mountain ecosystems. Oecologia, 2021, 195, 589-600.	2.0	12
103	Biodiversity and ecosystem functions depend on environmental conditions and resources rather than the geodiversity of a tropical biodiversity hotspot. Scientific Reports, 2021, 11, 24530.	3.3	12
104	The indirect effects of habitat disturbance on the bird communities in a tropical African forest. Biodiversity and Conservation, 2015, 24, 3083-3107.	2.6	11
105	Seedâ€dispersal networks respond differently to resource effects in open and forest habitats. Oikos, 2018, 127, 847-854.	2.7	11
106	Effects of Inbreeding, Outbreeding, and Supplemental Pollen on the Reproduction of a Hummingbird-pollinated Clonal Amazonian Herb. Biotropica, 2011, 43, 183-191.	1.6	9
107	Communityâ€wide seed dispersal distances peak at low levels of specialisation in sizeâ€structured networks. Oikos, 2020, 129, 1727-1738.	2.7	9
108	Traitâ€based inference of ecological network assembly: A conceptual framework and methodological toolbox. Ecological Monographs, 2022, 92, .	5.4	9

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109	Towards an animal economics spectrum for ecosystem research. Functional Ecology, 2023, 37, 57-72.	3.6	7
110	Experimental Assessment of Factors Limiting Seedling Recruitment of an Amazonian Understory Herb. Biotropica, 2009, 41, 57-65.	1.6	6
111	Behavioural and morphological traits influence sexâ€specific floral resource use by hummingbirds. Journal of Animal Ecology, 2022, 91, 2171-2180.	2.8	6
112	Frugivore diversity increases frugivory rates along a large elevational gradient. Oikos, 2016, 125, 245-253.	2.7	5
113	Phylogenetic and Functional Diversity of Fleshy-Fruited Plants Are Positively Associated with Seedling Diversity in a Tropical Montane Forest. Frontiers in Ecology and Evolution, 2017, 5, .	2.2	5
114	Direct and plantâ€mediated effects of climate on bird diversity in tropical mountains. Ecology and Evolution, 2020, 10, 14196-14208.	1.9	5
115	Avian seed dispersal may be insufficient for plants to track future temperature change on tropical mountains. Global Ecology and Biogeography, 2022, 31, 848-860.	5.8	5
116	Seed-deposition and recruitment patterns of Clusia species in a disturbed tropical montane forest in Bolivia. Acta Oecologica, 2017, 85, 85-92.	1.1	3
117	Negative Effects of Conspecific Floral Density on Fruit Set of Two Neotropical Understory Plants. Biotropica, 2013, 45, 325-332.	1.6	2
118	Associations of bird and bat species richness with temperature and remote sensingâ€based vegetation structure on a tropical mountain. Biotropica, 2022, 54, 135-145.	1.6	2
119	Variable relationships between trait diversity and avian ecological functions in agroecosystems. Functional Ecology, 2023, 37, 87-98.	3.6	2
120	Potential of Airborne LiDAR Derived Vegetation Structure for the Prediction of Animal Species Richness at Mount Kilimanjaro. Remote Sensing, 2022, 14, 786.	4.0	1
121	Independent variation of avian sensitivity to climate change and traitâ€based adaptive capacity along a tropical elevational gradient. Diversity and Distributions, 0, , .	4.1	1
122	Speciation and population divergence in a mutualistic seed dispersing bird. Communications Biology, 2022, 5, 429.	4.4	1
123	Cover Image: Volume 25 Number 3, March 2022. Ecology Letters, 2022, 25, .	6.4	0