

Xugao Wang

List of Publications by Year in descending order

Source: <https://exaly.com/author-pdf/7759128/publications.pdf>

Version: 2024-02-01

92
papers

4,731
citations

101543

36
h-index

106344

65
g-index

96
all docs

96
docs citations

96
times ranked

6028
citing authors

#	ARTICLE	IF	CITATIONS
1	Rate of tree carbon accumulation increases continuously with tree size. <i>Nature</i> , 2014, 507, 90-93.	27.8	663
2	<scp>CTFS</scp>â€œForest<scp>GEO</scp>: a worldwide network monitoring forests in an era of global change. <i>Global Change Biology</i> , 2015, 21, 528-549.	9.5	473
3	Global importance of largeâ€œdiameter trees. <i>Global Ecology and Biogeography</i> , 2018, 27, 849-864.	5.8	330
4	Temperature sensitivity of SOM decomposition is linked with a Kâ€œselected microbial community. <i>Global Change Biology</i> , 2021, 27, 2763-2779.	9.5	155
5	Microbial Taxa Distribution Is Associated with Ecological Trophic Cascades along an Elevation Gradient. <i>Frontiers in Microbiology</i> , 2017, 8, 2071.	3.5	144
6	ForestGEO: Understanding forest diversity and dynamics through a global observatory network. <i>Biological Conservation</i> , 2021, 253, 108907.	4.1	122
7	Integrating the underlying structure of stochasticity into community ecology. <i>Ecology</i> , 2020, 101, e02922.	3.2	113
8	Species associations in an oldâ€œgrowth temperate forest in northâ€œeastern China. <i>Journal of Ecology</i> , 2010, 98, 674-686.	4.0	108
9	An integrated UAV-borne lidar system for 3D habitat mapping in three forest ecosystems across China. <i>International Journal of Remote Sensing</i> , 2017, 38, 2954-2972.	2.9	106
10	Direct and indirect effects of climate on richness drive the latitudinal diversity gradient in forest trees. <i>Ecology Letters</i> , 2019, 22, 245-255.	6.4	92
11	Global signal of top-down control of terrestrial plant communities by herbivores. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2018, 115, 6237-6242.	7.1	90
12	Maxent modeling for predicting the potential distribution of Sanghuang, an important group of medicinal fungi in China. <i>Fungal Ecology</i> , 2015, 17, 140-145.	1.6	87
13	Soil bacterial communities of different natural forest types in Northeast China. <i>Plant and Soil</i> , 2014, 383, 203-216.	3.7	82
14	Tree species traits affect which natural enemies drive the Janzen-Connell effect in a temperate forest. <i>Nature Communications</i> , 2020, 11, 286.	12.8	78
15	Effects of local biotic neighbors and habitat heterogeneity on tree and shrub seedling survival in an old-growth temperate forest. <i>Oecologia</i> , 2012, 170, 755-765.	2.0	75
16	Aboveâ€œand belowâ€œground biodiversity jointly regulate temperate forest multifunctionality along a localâ€œscale environmental gradient. <i>Journal of Ecology</i> , 2020, 108, 2012-2024.	4.0	74
17	Testing the independent speciesâ€œ arrangement assertion made by theories of stochastic geometry of biodiversity. <i>Proceedings of the Royal Society B: Biological Sciences</i> , 2012, 279, 3312-3320.	2.6	72
18	Aboveground carbon storage is driven by functional trait composition and stand structural attributes rather than biodiversity in temperate mixed forests recovering from disturbances. <i>Annals of Forest Science</i> , 2018, 75, 1.	2.0	72

#	ARTICLE	IF	CITATIONS
19	Spatial patterns of tree species richness in two temperate forests. <i>Journal of Ecology</i> , 2011, 99, 1382-1393.	4.0	68
20	Multiple abiotic and biotic pathways shape biomass demographic processes in temperate forests. <i>Ecology</i> , 2019, 100, e02650.	3.2	66
21	Predicting the distributions of suitable habitat for three larch species under climate warming in Northeastern China. <i>Forest Ecology and Management</i> , 2008, 254, 420-428.	3.2	65
22	Spatial distributions of species in an old-growth temperate forest, northeastern China. <i>Canadian Journal of Forest Research</i> , 2010, 40, 1011-1019.	1.7	63
23	Phylogenetic and functional diversity area relationships in two temperate forests. <i>Ecography</i> , 2013, 36, 883-893.	4.5	59
24	Tree size distributions in an old-growth temperate forest. <i>Oikos</i> , 2009, 118, 25-36.	2.7	57
25	Local-Scale Drivers of Tree Survival in a Temperate Forest. <i>PLoS ONE</i> , 2012, 7, e29469.	2.5	52
26	Spatially Explicit Metrics of Species Diversity, Functional Diversity, and Phylogenetic Diversity: Insights into Plant Community Assembly Processes. <i>Annual Review of Ecology, Evolution, and Systematics</i> , 2017, 48, 329-351.	8.3	51
27	Abiotic and biotic determinants of coarse woody productivity in temperate mixed forests. <i>Science of the Total Environment</i> , 2018, 630, 422-431.	8.0	49
28	Multiple metrics of diversity have different effects on temperate forest functioning over succession. <i>Oecologia</i> , 2016, 182, 1175-1185.	2.0	48
29	Ecological drivers of spatial community dissimilarity, species replacement and species nestedness across temperate forests. <i>Global Ecology and Biogeography</i> , 2018, 27, 581-592.	5.8	48
30	The contribution of understory light availability and biotic neighborhood to seedling survival in secondary versus old-growth temperate forest. <i>Plant Ecology</i> , 2014, 215, 795-807.	1.6	43
31	Mechanisms underlying local functional and phylogenetic beta diversity in two temperate forests. <i>Ecology</i> , 2015, 96, 1062-1073.	3.2	42
32	Stochastic dilution effects weaken deterministic effects of niche-based processes in species rich forests. <i>Ecology</i> , 2016, 97, 347-360.	3.2	42
33	Soil organic carbon in an old-growth temperate forest: Spatial pattern, determinants and bias in its quantification. <i>Geoderma</i> , 2013, 195-196, 48-55.	5.1	40
34	Spatial patterns and associations of six congeneric species in an old-growth temperate forest. <i>Acta Oecologica</i> , 2010, 36, 29-38.	1.1	39
35	What happens below the canopy? Direct and indirect influences of the dominant species on forest vertical layers. <i>Oikos</i> , 2012, 121, 1145-1153.	2.7	39
36	Tree mycorrhizal associations mediate soil fertility effects on forest community structure in a temperate forest. <i>New Phytologist</i> , 2019, 223, 475-486.	7.3	39

#	ARTICLE	IF	CITATIONS
37	Evaluating the effectiveness of neutral landscape models to represent a real landscape. <i>Landscape and Urban Planning</i> , 2004, 69, 137-148.	7.5	37
38	Scale specific determinants of tree diversity in an old growth temperate forest in China. <i>Basic and Applied Ecology</i> , 2011, 12, 488-495.	2.7	37
39	The long-term effects of fire suppression and reforestation on a forest landscape in Northeastern China after a catastrophic wildfire. <i>Landscape and Urban Planning</i> , 2007, 79, 84-95.	7.5	35
40	Spatial pattern of diversity in an old-growth temperate forest in Northeastern China. <i>Acta Oecologica</i> , 2008, 33, 345-354.	1.1	34
41	The role of functional uniqueness and spatial aggregation in explaining rarity in trees. <i>Global Ecology and Biogeography</i> , 2017, 26, 777-786.	5.8	33
42	Fine-scale species co-occurrence patterns in an old-growth temperate forest. <i>Forest Ecology and Management</i> , 2009, 257, 2115-2120.	3.2	31
43	La survie des arbres d�pend de la densit� dans une ancienne for�t temp�r�e du nord-est de la Chine. <i>Annals of Forest Science</i> , 2009, 66, 204-204.	2.0	30
44	Divergent above- and below-ground biodiversity pathways mediate disturbance impacts on temperate forest multifunctionality. <i>Global Change Biology</i> , 2021, 27, 2883-2894.	9.5	30
45	Linkages between the temperature sensitivity of soil respiration and microbial life strategy are dependent on sampling season. <i>Soil Biology and Biochemistry</i> , 2022, 172, 108758.	8.8	30
46	Simulating the effects of reforestation on a large catastrophic fire burned landscape in Northeastern China. <i>Forest Ecology and Management</i> , 2006, 225, 82-93.	3.2	29
47	Few large trees, rather than plant diversity and composition, drive the above-ground biomass stock and dynamics of temperate forests in northeast China. <i>Forest Ecology and Management</i> , 2021, 481, 118698.	3.2	28
48	Arbuscular mycorrhizal trees influence the latitudinal beta-diversity gradient of tree communities in forests worldwide. <i>Nature Communications</i> , 2021, 12, 3137.	12.8	28
49	Forest tree neighborhoods are structured more by negative conspecific density dependence than by interactions among closely related species. <i>Ecography</i> , 2018, 41, 1114-1123.	4.5	27
50	Consequences of spatial patterns for coexistence in species-rich plant communities. <i>Nature Ecology and Evolution</i> , 2021, 5, 965-973.	7.8	24
51	Temporal stability of aboveground biomass is governed by species asynchrony in temperate forests. <i>Ecological Indicators</i> , 2019, 107, 105661.	6.3	23
52	A general combined model to describe tree-diameter distributions within subtropical and temperate forest communities. <i>Oikos</i> , 2013, 122, 1636-1642.	2.7	22
53	Aboveground-belowground biodiversity linkages differ in early and late successional temperate forests. <i>Scientific Reports</i> , 2015, 5, 12234.	3.3	20
54	Conspecific density dependence and community structure: Insights from 11 years of monitoring in an old-growth temperate forest in Northeast China. <i>Ecology and Evolution</i> , 2017, 7, 5191-5200.	1.9	20

#	ARTICLE	IF	CITATIONS
55	Mycorrhizal type influences plant density dependence and species richness across 15 temperate forests. <i>Ecology</i> , 2021, 102, e03259.	3.2	20
56	Latitudinal pattern of soil lignin/cellulose content and the activity of their degrading enzymes across a temperate forest ecosystem. <i>Ecological Indicators</i> , 2019, 102, 557-568.	6.3	19
57	Context-dependency of tree species diversity, trait composition and stand structural attributes regulate temperate forest multifunctionality. <i>Science of the Total Environment</i> , 2021, 757, 143724.	8.0	19
58	The effect of tree size, neighborhood competition and environment on tree growth in an old-growth temperate forest. <i>Journal of Plant Ecology</i> , 2016, , rtw126.	2.3	18
59	Drivers of bacterial beta diversity in two temperate forests. <i>Ecological Research</i> , 2016, 31, 57-64.	1.5	17
60	Spatial variation of species diversity across scales in an old-growth temperate forest of China. <i>Ecological Research</i> , 2008, 23, 709-717.	1.5	16
61	Variation and synchrony of tree species mast seeding in an old-growth temperate forest. <i>Journal of Vegetation Science</i> , 2017, 28, 413-423.	2.2	16
62	Pattern and dynamics of biomass stock in old growth forests: The role of habitat and tree size. <i>Acta Oecologica</i> , 2016, 75, 15-23.	1.1	15
63	Mycorrhizal associations of tree species influence soil nitrogen dynamics via effects on soil acid-base chemistry. <i>Global Ecology and Biogeography</i> , 2022, 31, 168-182.	5.8	15
64	Assessing the cumulative effects of postfire management on forest landscape dynamics in northeastern China. <i>Canadian Journal of Forest Research</i> , 2006, 36, 1992-2002.	1.7	13
65	Ectomycorrhizal fungus-associated determinants jointly reflect ecological processes in a temperature broad-leaved mixed forest. <i>Science of the Total Environment</i> , 2020, 703, 135475.	8.0	12
66	Soil Stoichiometry Mediates Links Between Tree Functional Diversity and Soil Microbial Diversity in a Temperate Forest. <i>Ecosystems</i> , 2022, 25, 291-307.	3.4	12
67	Human intervened post-fire forest restoration in the Northern Great Hing'an Mountains: a review. <i>Landscape and Ecological Engineering</i> , 2006, 2, 129-137.	1.5	11
68	Local-scale determinants of elemental stoichiometry of soil in an old-growth temperate forest. <i>Plant and Soil</i> , 2016, 408, 401-414.	3.7	11
69	Temporal population variability in local forest communities has mixed effects on tree species richness across a latitudinal gradient. <i>Ecology Letters</i> , 2020, 23, 160-171.	6.4	11
70	<i>allodb</i> : An R package for biomass estimation at globally distributed extratropical forest plots. <i>Methods in Ecology and Evolution</i> , 2022, 13, 330-338.	5.2	11
71	Dominant tree mycorrhizal associations affect soil nitrogen transformation rates by mediating microbial abundances in a temperate forest. <i>Biogeochemistry</i> , 2022, 158, 405-421.	3.5	11
72	Intra-annual variations in abundance and species composition of carabid beetles in a temperate forest in Northeast China. <i>Journal of Insect Conservation</i> , 2014, 18, 85-98.	1.4	10

#	ARTICLE	IF	CITATIONS
73	Deterministic processes drive functional and phylogenetic temporal changes of woody species in temperate forests in Northeast China. <i>Annals of Forest Science</i> , 2019, 76, 1.	2.0	10
74	Foundation species across a latitudinal gradient in China. <i>Ecology</i> , 2021, 102, e03234.	3.2	10
75	Tree species diversity enhances plant-soil interactions in a temperate forest in northeast China. <i>Forest Ecology and Management</i> , 2021, 491, 119160.	3.2	10
76	Local-scale drivers of multi-stemmed tree formation in <i>Acer</i> , in a temperate forest of Northeast China. <i>Science Bulletin</i> , 2014, 59, 320-325.	1.7	9
77	Spatial patterns and ecological drivers of soil nematode diversity in natural grasslands vary among vegetation types and trophic position. <i>Journal of Animal Ecology</i> , 2021, 90, 1367-1378.	2.8	9
78	Intraspecific trait variation improves the detection of deterministic community assembly processes in early successional forests, but not in late successional forests. <i>Journal of Plant Ecology</i> , 2019, 12, 593-602.	2.3	8
79	Interannual climate variability has predominant effects on seedling survival in a temperate forest. <i>Ecology</i> , 2022, 103, e3643.	3.2	7
80	Scale-dependent effect of biotic interactions and environmental conditions in community assembly: insight from a large temperate forest plot. <i>Plant Ecology</i> , 2016, 217, 1003-1014.	1.6	5
81	The role of breeding system in community dynamics: Growth and mortality in forests of different successional stages. <i>Ecology and Evolution</i> , 2018, 8, 7285-7296.	1.9	5
82	Similarity between seed rain and neighbouring mature tree communities in an old-growth temperate forest. <i>Journal of Forestry Research</i> , 2020, 31, 2435-2444.	3.6	5
83	Tree growth response to soil nutrients and neighborhood crowding varies between mycorrhizal types in an old-growth temperate forest. <i>Oecologia</i> , 2021, 197, 523-535.	2.0	5
84	Reproductive traits and their correlation among woody plants in a broadleaf-Korean pine (<i>Pinus koraiensis</i>) mixed forest in Northeast China. <i>Chinese Science Bulletin</i> , 2014, 59, 2407-2415.	0.7	5
85	Ecological restoration: Our hope for the future?. <i>Chinese Geographical Science</i> , 2004, 14, 361-367.	3.0	4
86	Dynamics of Two Multi-Stemmed Understory Shrubs in Two Temperate Forests. <i>PLoS ONE</i> , 2014, 9, e98200.	2.5	4
87	Tree planting: How fast can it accelerate post-fire forest restoration? â€” A case study in Northern Da Hinggan Mountains, China. <i>Chinese Geographical Science</i> , 2010, 20, 481-490.	3.0	3
88	Long-term effect of different planting proportions on forest landscape in Great Xing'an Mountains, Northeast China after the catastrophic fire in 1987. <i>Frontiers of Forestry in China: Selected Publications From Chinese Universities</i> , 2007, 2, 382-389.	0.2	2
89	Testing mechanisms of compensatory fitness of dioecy in a cosexual world. <i>Journal of Vegetation Science</i> , 2019, 30, 413-426.	2.2	2
90	Interactions between all pairs of neighboring trees in 16 forests worldwide reveal details of unique ecological processes in each forest, and provide windows into their evolutionary histories. <i>PLoS Computational Biology</i> , 2021, 17, e1008853.	3.2	1

#	ARTICLE	IF	CITATIONS
91	Anthropogenic Disturbances Shape Soil Capillary and Saturated Water Retention Indirectly via Plant Functional Traits and Soil Organic Carbon in Temperate Forests. <i>Forests</i> , 2021, 12, 1588.	2.1	1
92	The Shift from Energy to Water Limitation in Local Canopy Height from Temperate to Tropical Forests in China. <i>Forests</i> , 2022, 13, 639.	2.1	1