Zhiheng Wang

List of Publications by Year
in descending order

95 papers	6,767 citations	87888 38 h-index	66911 78 g-index
96 all docs	96 docs citations	96 times ranked	9321 citing authors

#	Article	IF	Citations
1	Relationships Between Soil Microbial Diversities Across an Aridity Gradient in Temperate Grasslands. Microbial Ecology, 2023, 85, 1013-1027.	2.8	7
2	Global patterns of species richness of the holarctic alpine herbSaxifraga: the role of temperature and habitat heterogeneity. Journal of Plant Ecology, 2022, 15, 237-252.	2.3	3
3	Conservation of woody species in China under future climate and landâ€cover changes. Journal of Applied Ecology, 2022, 59, 141-152.	4.0	22
4	Soil pH and aridity influence distributions of branched tetraether lipids in grassland soils along an aridity transect. Organic Geochemistry, 2022, 164, 104347.	1.8	12
5	Spatial patterns and determinants of Moraceae richness in China. Journal of Plant Ecology, 2022, 15, 1142-1153.	2.3	4
6	An integrated highâ€resolution mapping shows congruent biodiversity patterns of Fagales and Pinales. New Phytologist, 2022, 235, 759-772.	7.3	7
7	Drivers of foliar <scp>¹⁵N</scp> trends in southern China over the last century. Global Change Biology, 2022, 28, 5441-5452.	9.5	7
8	Humanâ€Climate Coupled Changes in Vegetation Community Complexity of China Since 1980s. Earth's Future, 2022, 10, .	6.3	4
9	Geographical patterns in phylogenetic diversity of Chinese woody plants and its application for conservation planning. Diversity and Distributions, 2021, 27, 179-194.	4.1	21
10	Effects of Climate, Plant Height, and Evolutionary Age on Geographical Patterns of Fruit Type. Frontiers in Plant Science, 2021, 12, 604272.	3.6	4
11	Vulnerabilities of protected lands in the face of climate and human footprint changes. Nature Communications, 2021, 12, 1632.	12.8	47
12	Global distribution and evolutionary transitions of angiosperm sexual systems. Ecology Letters, 2021, 24, 1835-1847.	6.4	22
13	Phytogeographic History of the Tea Family Inferred Through High-Resolution Phylogeny and Fossils. Systematic Biology, 2021, 70, 1256-1271.	5.6	18
14	Upward shift and elevational range contractions of subtropical mountain plants in response to climate change. Science of the Total Environment, 2021, 783, 146896.	8.0	60
15	Relative Importance of Deterministic and Stochastic Processes on Soil Microbial Community Assembly in Temperate Grasslands. Microorganisms, 2021, 9, 1929.	3.6	22
16	Plant and microbial pathways driving plant diversity effects on soil carbon accumulation in subtropical forest. Soil Biology and Biochemistry, 2021, 161, 108375.	8.8	42
17	Variance in tree growth rates provides a key link for completing the theory of forest size structure formation. Journal of Theoretical Biology, 2021, 529, 110857.	1.7	1
18	Phylogenetic niche conservatism and variations in species diversityâ€“climate relationships. Ecography, 2021, 44, 1856-1868.	4.5	8

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19	Distribution of alpine endemic plants of northern Asia: a dataset. Biodiversity Data Journal, 2021, 9, e75348.	0.8	4
20	Towards an understanding of the latitudinal patterns in thermal tolerance and vulnerability of woody plants under climate warming. Ecography, 2021, 44, 1797-1807.	4.5	6
21	Model complexity affects species distribution projections under climate change. Journal of Biogeography, 2020, 47, 130-142.	3.0	106
22	Spatiotemporal variation in leaf size and shape in response to climate. Journal of Plant Ecology, 2020, 13, 87-96.	2.3	42
23	Drivers of largeâ€scale geographical variation in sexual systems of woody plants. Global Ecology and Biogeography, 2020, 29, 546-557.	5.8	16
24	Links between microbial biomass and necromass components in the top- and subsoils of temperate grasslands along an aridity gradient. Geoderma, 2020, 379, 114623.	5.1	18
25	Spatial Patterns and Drivers of Angiosperm Sexual Systems in China Differ Between Woody and Herbaceous Species. Frontiers in Plant Science, 2020, 11, 1222.	3.6	4
26	Leaf size of woody dicots predicts ecosystem primary productivity. Ecology Letters, 2020, 23, 1003-1013.	6.4	41
27	Phylogenetic conservatism and biogeographic affinity influence woody plant species richnessâ€“climate relationships in eastern Eurasia. Ecography, 2020, 43, 1027-1040.	4.5	13
28	Effects of contemporary environment and Quaternary climate change on drylands plant diversity differ between growth forms. Ecography, 2019, 42, 334-345.	4.5	36
29	Biodiversity hotspots are insufficient in capturing rangeâ€restricted species. Conservation Science and Practice, 2019, 1, e103.	2.0	10
30	Altitudinal biodiversity patterns of seed plants along Gongga Mountain in the southeastern Qinghaiâ€“Tibetan Plateau. Ecology and Evolution, 2019, 9, 9586-9596.	1.9	26
31	Contrasting Biogeographic Patterns of Bacterial and Archaeal Diversity in the Top- and Subsoils of Temperate Grasslands. MSystems, 2019, 4, .	3.8	24
32	Main ecological drivers of woody plant species richness recovery in secondary forests in China. Scientific Reports, 2019, 9, 250.	3.3	5
33	Distinct Biogeography of Different Fungal Guilds and Their Associations With Plant Species Richness in Forest Ecosystems. Frontiers in Ecology and Evolution, 2019, 7, .	2.2	22
34	Patterns and ecological determinants of woody plant height in eastern Eurasia and its relation to primary productivity. Journal of Plant Ecology, 2019, 12, 791-803.	2.3	15
35	A consistent species richnessâ€“climate relationship for oaks across the Northern Hemisphere. Global Ecology and Biogeography, 2019, 28, 1051-1066.	5.8	43
36	Responses of four dominant dryland plant species to climate change in the Junggar Basin, northwest China. Ecology and Evolution, 2019, 9, 13596-13607.	1.9	23

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37	Plant diversity enhances productivity and soil carbon storage. Proceedings of the National Academy of Sciences of the United States of America, 2018, 115, 4027-4032.	7.1	368
38	The drivers of high Rhododendron diversity in southâ€west China: Does seasonality matter?. Journal of Biogeography, 2018, 45, 438-447.	3.0	50
39	Niche conservatism and elevated diversification shape species diversity in drylands: evidence from Zygophyllaceae. Proceedings of the Royal Society B: Biological Sciences, 2018, 285, 20181742.	2.6	24
40	Selecting priority areas for systematic conservation of Chinese Rhododendron: hotspot versus complementarity approaches. Biodiversity and Conservation, 2018, 27, 3759-3775.	2.6	20
41	Global patterns of Rhododendron diversity: The role of evolutionary time and diversification rates. Global Ecology and Biogeography, 2018, 27, 913-924.	5.8	84
42	Divergent accumulation of microbial necromass and plant lignin components in grassland soils. Nature Communications, 2018, 9, 3480.	12.8	192
43	Spatial distance and climate determine modularity in a crossâ€biomes plantâ€“hummingbird interaction network in Brazil. Journal of Biogeography, 2018, 45, 1846-1858.	3.0	35
44	Historical factors shaped species diversity and composition of Salix in eastern Asia. Scientific Reports, 2017, 7, 42038.	3.3	18
45	Global patterns of interaction specialization in birdâ€“flower networks. Journal of Biogeography, 2017, 44, 1891-1910.	3.0	68
46	Determinants of richness patterns differ between rare and common species: implications for Gesneriaceae conservation in China. Diversity and Distributions, 2017, 23, 235-246.	4.1	50
47	Hotspot analyses indicate significant conservation gaps for evergreen broadleaved woody plants in China. Scientific Reports, 2017, 7, 1859.	3.3	37
48	A guide to analyzing biodiversity experiments. Journal of Plant Ecology, 2017, 10, 91-110.	2.3	84
49	Response of spatial vegetation distribution in China to climate changes since the Last Glacial Maximum (LGM). PLoS ONE, 2017, 12, e0175742.	2.5	34
50	An Anthropocene map of genetic diversity. Science, 2016, 353, 1532-1535.	12.6	251
51	Leaf margin analysis of Chinese woody plants and the constraints on its application to palaeoclimatic reconstruction. Global Ecology and Biogeography, 2016, 25, 1401-1415.	5.8	19
52	Introduction history, climatic suitability, native range size, species traits and their interactions explain establishment of Chinese woody species in Europe. Global Ecology and Biogeography, 2016, 25, 1356-1366.	5.8	32
53	Global patterns and determinants of forest canopy height. Ecology, 2016, 97, 3265-3270.	3.2	81
54	Medicinal plant diversity and traditional healing practices in eastern Nepal. Journal of Ethnopharmacology, 2016, 192, 292-301.	4.1	39

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55	A zoogeographical boundary between the Palaearctic and Sinoâ€Japanese realms documented by consistent north/south phylogeographical divergences in three woodland birds in eastern China. Journal of Biogeography, 2016, 43, 2099-2112.	3.0	12
56	Geographical variation in the importance of water and energy for oak diversity. Journal of Biogeography, 2016, 43, 279-288.	3.0	54
57	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
58	The macroecology of phylogenetically structured hummingbirdâ€“plant networks. Global Ecology and Biogeography, 2015, 24, 1212-1224.	5.8	100
59	Rapid loss of lakes on the Mongolian Plateau. Proceedings of the National Academy of Sciences of the United States of America, 2015, 112, 2281-2286.	7.1	408
60	NCBIminer: sequences harvest from Genbank. Ecography, 2015, 38, 426-430.	4.5	9
61	Into and out of the tropics: the generation of the latitudinal gradient among New World passerine birds. Journal of Biogeography, 2014, 41, 1746-1757.	3.0	53
62	Determinants of bird species richness, endemism, and island network roles in Wallacea and the West Indies: is geography sufficient or does current and historical climate matter?. Ecology and Evolution, 2014, 4, 4019-4031.	1.9	20
63	Natural variation of Câ€repeatâ€binding factor (<scp>CBF</scp>s) genes is a major cause of divergence in freezing tolerance among a group of Arabidopsis thaliana populations along the Yangtze River in China. New Phytologist, 2013, 199, 1069-1080.	7.3	60
64	An Update of Wallaceâ€™s Zoogeographic Regions of the World. Science, 2013, 339, 74-78.	12.6	1,037
65	Evolutionary history influences the effects of waterâ€“energy dynamics on oak diversity in Asia. Journal of Biogeography, 2013, 40, 2146-2155.	3.0	47
66	Historical climateâ€change influences modularity and nestedness of pollination networks. Ecography, 2013, 36, 1331-1340.	4.5	116
67	Response to Comment on â€œAn Update of Wallaceâ€™s Zoogeographic Regions of the Worldâ€. Science, 2013, 341, 343-343.	12.6	15
68	Differential mobilization of terrestrial carbon pools in Eurasian Arctic river basins. Proceedings of the National Academy of Sciences of the United States of America, 2013, 110, 14168-14173.	7.1	180
69	Species Richness Patterns and Water-Energy Dynamics in the Drylands of Northwest China. PLoS ONE, 2013, 8, e66450.	2.5	51
70	Geographical patterns in the beta diversity of China's woody plants: the influence of space, environment and range size. Ecography, 2012, 35, 1092-1102.	4.5	36
71	Effects of geographical extent on the determinants of woody plant diversity. Ecography, 2012, 35, 1160-1167.	4.5	30
72	Patterns of plant betaâ€diversity along elevational and latitudinal gradients in mountain forests of China. Ecography, 2012, 35, 1083-1091.	4.5	63

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73	Modelling chestnut biogeography for American chestnut restoration. Diversity and Distributions, 2012, 18, 754-768.	4.1	33
74	Forest community survey and the structural characteristics of forests in China. Ecography, 2012, 35, 1059-1071.	4.5	96
75	Relative role of contemporary environment versus history in shaping diversity patterns of China's woody plants. Ecography, 2012, 35, 1124-1133.	4.5	47
76	Largeâ€scale patterns of tree species richness and the metabolic theory of ecology. Global Ecology and Biogeography, 2012, 21, 508-512.	5.8	6
77	Effect of geographical range size on plant functional traits and the relationships between plant, soil and climate in Chinese grasslands. Global Ecology and Biogeography, 2012, 21, 416-427.	5.8	32
78	Species Distribution and Climates. , 2011, , 1-1902.		14
79	Biogeography and variability of eleven mineral elements in plant leaves across gradients of climate, soil and plant functional type in China. Ecology Letters, 2011, 14, 788-796.	6.4	406
80	Patterns, determinants and models of woody plant diversity in China. Proceedings of the Royal Society B: Biological Sciences, 2011, 278, 2122-2132.	2.6	174
81	Climate change alters interannual variation of grassland aboveground productivity: evidence from a 22-year measurement series in the Inner Mongolian grassland. Journal of Plant Research, 2010, 123, 509-517.	2.4	87
82	Regional differences in the timing of recent air warming during the past four decades in China. Science Bulletin, 2010, 55, 1968-1973.	1.7	53
83	Temperature dependence, spatial scale, and tree species diversity in eastern Asia and North America. Proceedings of the National Academy of Sciences of the United States of America, 2009, 106, 13388-13392.	7.1	185
84	Integrating highly diverse invertebrates into broadâ€scale analyses of crossâ€taxon congruence across the Palaearctic. Ecography, 2009, 32, 1019-1030.	4.5	25
85	Altitudinal patterns of seed plant richness in the Gaoligong Mountains, southâ€east Tibet, China. Diversity and Distributions, 2007, 13, 845-854.	4.1	101
86	A test of the generality of leaf trait relationships on the Tibetan Plateau. New Phytologist, 2006, 170, 835-848.	7.3	159
87	Stoichiometry and large-scale patterns of leaf carbon and nitrogen in the grassland biomes of China. Oecologia, 2006, 149, 115-122.	2.0	210
88	Biodiversity in China's mountains. Frontiers in Ecology and the Environment, 2006, 4, 347-352.	4.0	236
89	Biodiversity changes in the lakes of the Central Yangtze. Frontiers in Ecology and the Environment, 2006, 4, 369-377.	4.0	210
90	Biodiversity in China's mountains. , 2006, 4, 347.		1

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91	Biodiversity changes in the lakes of the Central Yangtze. , 2006, 4, 369.		1
92	Biodiversity changes in the lakes of the Central Yangtze. , 2006, 4, 369.		1
93	Biomass carbon accumulation by Japan's forests from 1947 to 1995. Global Biogeochemical Cycles, 2005, 19, n/a-n/a.	4.9	84
94	Mountain ranges and peaks in China. Biodiversity Science, 2004, 12, 206-212.	0.6	22
95	Effects of topography on structuring species assemblages in a subtropical forest. Journal of Plant Ecology, 0, , rtw047.	2.3	8