Yongfei Bai

List of Publications by Year
in descending order

114 papers	9,423 citations	53660 45 h-index	40881 93 g-index
115 all docs	115 docs citations	115 times ranked	7121 citing authors

#	Article	IF	Citations
1	Ecosystem stability and compensatory effects in the Inner Mongolia grassland. Nature, 2004, 431, 181-184.	13.7	1,011
2	Tradeoffs and thresholds in the effects of nitrogen addition on biodiversity and ecosystem functioning: evidence from inner Mongolia Grasslands. Global Change Biology, 2010, 16, 358-372.	4.2	680
3	PRIMARY PRODUCTION AND RAIN USE EFFICIENCY ACROSS A PRECIPITATION GRADIENT ON THE MONGOLIA PLATEAU. Ecology, 2008, 89, 2140-2153.	1.5	593
4	Effects of national ecological restoration projects on carbon sequestration in China from 2001 to 2010. Proceedings of the National Academy of Sciences of the United States of America, 2018, 115, 4039-4044.	3.3	486
5	Carbon pools in Chinaâ€™s terrestrial ecosystems: New estimates based on an intensive field survey. Proceedings of the National Academy of Sciences of the United States of America, 2018, 115, 4021-4026.	3.3	466
6	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.	3.3	368
7	Grassland responses to grazing: effects of grazing intensity and management system in an Inner Mongolian steppe ecosystem. Plant and Soil, 2011, 340, 103-115.	1.8	272
8	Grazing alters ecosystem functioning and <scp>C</scp>:<scp>N</scp>:<scp>P</scp> stoichiometry of grasslands along a regional precipitation gradient. Journal of Applied Ecology, 2012, 49, 1204-1215.	1.9	271
9	The Future of Complementarity: Disentangling Causes from Consequences. Trends in Ecology and Evolution, 2019, 34, 167-180.	4.2	246
10	Patterns of plant carbon, nitrogen, and phosphorus concentration in relation to productivity in Chinaâ€™s terrestrial ecosystems. Proceedings of the National Academy of Sciences of the United States of America, 2018, 115, 4033-4038.	3.3	227
11	Positive linear relationship between productivity and diversity: evidence from the Eurasian Steppe. Journal of Applied Ecology, 2007, 44, 1023-1034.	1.9	217
12	Evidence that acidificationâ€induced declines in plant diversity and productivity are mediated by changes in belowâ€ground communities and soil properties in a semiâ€arid steppe. Journal of Ecology, 2013, 101, 1322-1334.	1.9	201
13	Divergent accumulation of microbial necromass and plant lignin components in grassland soils. Nature Communications, 2018, 9, 3480.	5.8	192
14	Effects of nitrogen enrichment on belowground communities in grassland: Relative role of soil nitrogen availability vs. soil acidification. Soil Biology and Biochemistry, 2015, 89, 99-108.	4.2	188
15	Differential responses of soil bacterial communities to long-term N and P inputs in a semi-arid steppe. Geoderma, 2017, 292, 25-33.	2.3	174
16	Soil acidification exerts a greater control on soil respiration than soil nitrogen availability in grasslands subjected to longâ€term nitrogen enrichment. Functional Ecology, 2016, 30, 658-669.	1.7	156
17	Reconciling multiple impacts of nitrogen enrichment on soil carbon: plant, microbial and geochemical controls. Ecology Letters, 2018, 21, 1162-1173.	3.0	154
18	Direct and indirect effects of nitrogen enrichment on soil organisms and carbon and nitrogen mineralization in a semiâ€arid grassland. Functional Ecology, 2019, 33, 175-187.	1.7	115

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19	Patterns and drivers of soil microbial communities along a precipitation gradient on the Mongolian Plateau. Landscape Ecology, 2015, 30, 1669-1682.	1.9	108
20	Strategies to alleviate poverty and grassland degradation in Inner Mongolia: Intensification vs production efficiency of livestock systems. Journal of Environmental Management, 2015, 152, 177-182.	3.8	106
21	Altered trends in carbon uptake in China's terrestrial ecosystems under the enhanced summer monsoon and warming hiatus. National Science Review, 2019, 6, 505-514.	4.6	93
22	Seasonally dependent impacts of grazing on soil nitrogen mineralization and linkages to ecosystem functioning in Inner Mongolia grassland. Soil Biology and Biochemistry, 2011, 43, 1943-1954.	4.2	92
23	Differential responses of plant functional trait to grazing between two contrasting dominant C3 and C4 species in a typical steppe of Inner Mongolia, China. Plant and Soil, 2011, 340, 141-155.	1.8	89
24	Changes in the abundance of C3/C4 species of Inner Mongolia grassland: evidence from isotopic composition of soil and vegetation. Global Change Biology, 2010, 16, 605-616.	4.2	88
25	Plants alter their vertical root distribution rather than biomass allocation in response to changing precipitation. Ecology, 2019, 100, e02828.	1.5	86
26	Complementarity in water sources among dominant species in typical steppe ecosystems of Inner Mongolia, China. Plant and Soil, 2011, 340, 303-313.	1.8	84
27	Asymmetric sensitivity of ecosystem carbon and water processes in response to precipitation change in a semiâ€arid steppe. Functional Ecology, 2017, 31, 1301-1311.	1.7	84
28	Testing mechanisms of N-enrichment-induced species loss in a semiarid Inner Mongolia grassland: critical thresholds and implications for long-term ecosystem responses. Philosophical Transactions of the Royal Society B: Biological Sciences, 2012, 367, 3125-3134.	1.8	83
29	Functional correlations between specific leaf area and specific root length along a regional environmental gradient in Inner Mongolia grasslands. Functional Ecology, 2016, 30, 985-997.	1.7	83
30	Ecological analysis of an emerging urban landscape patternâ€"desakota: a case study in Suzhou, China. Landscape Ecology, 2006, 21, 1297-1309.	1.9	81
31	Patterns and thresholds of grazingâ€induced changes in community structure and ecosystem functioning: speciesâ€level responses and the critical role of species traits. Journal of Applied Ecology, 2017, 54, 963-975.	1.9	81
32	Nonlinear responses of ecosystem carbon fluxes and waterâ€use efficiency to nitrogen addition in Inner Mongolia grassland. Functional Ecology, 2016, 30, 490-499.	1.7	75
33	Vertebrate herbivoreâ€induced changes in plants and soils: linkages to ecosystem functioning in a semiâ€arid steppe. Functional Ecology, 2013, 27, 273-281.	1.7	74
34	Climate variability decreases species richness and community stability in a temperate grassland. Oecologia, 2018, 188, 183-192.	0.9	74
35	Climate and native grassland vegetation as drivers of the community structures of shrub-encroached grasslands in Inner Mongolia, China. Landscape Ecology, 2015, 30, 1627-1641.	1.9	71
36	Grazing simplifies soil microâ€food webs and decouples their relationships with ecosystem functions in grasslands. Global Change Biology, 2020, 26, 960-970.	4.2	70

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37	Regionalâ€scale patterns of soil microbes and nematodes across grasslands on the Mongolian plateau: relationships with climate, soil, and plants. Ecography, 2015, 38, 622-631.	2.1	68
38	The global carbon sink potential of terrestrial vegetation can be increased substantially by optimal land management. Communications Earth & Environment, 2022, 3, .	2.6	65
39	Nitrogenâ€induced acidification, not Nâ€nutrient, dominates suppressive N effects on arbuscular mycorrhizal fungi. Global Change Biology, 2020, 26, 6568-6580.	4.2	64
40	Livestock grazing regulates ecosystem multifunctionality in semiâ€arid grassland. Functional Ecology, 2018, 32, 2790-2800.	1.7	62
41	Effects of grazing management system on plant community structure and functioning in a semiarid steppe: scaling from species to community. Plant and Soil, 2011, 340, 215-226.	1.8	60
42	Effects of plant functional group loss on soil biota and net ecosystem exchange: a plant removal experiment in the Mongolian grassland. Journal of Ecology, 2016, 104, 734-743.	1.9	58
43	Selective grazing and seasonal precipitation play key roles in shaping plant community structure of semi-arid grasslands. Landscape Ecology, 2015, 30, 1767-1782.	1.9	56
44	Effects of functional diversity loss on ecosystem functions are influenced by compensation. Ecology, 2016, 97, 2293-2302.	1.5	56
45	Effects of grazing and climate variability on grassland ecosystem functions in Inner Mongolia: Synthesis of a 6-year grazing experiment. Journal of Arid Environments, 2016, 135, 50-63.	1.2	56
46	Species asynchrony and response diversity determine multifunctional stability of natural grasslands. Journal of Ecology, 2019, 107, 1862-1875.	1.9	51
47	Effects of aridity on soil microbial communities and functions across soil depths on the Mongolian Plateau. Functional Ecology, 2019, 33, 1561-1571.	1.7	49
48	Effects of grazing on spatiotemporal variations in community structure and ecosystem function on the grasslands of Inner Mongolia, China. Scientific Reports, 2017, 7, 40.	1.6	44
49	Soil acidification reduces the effects of shortâ€term nutrient enrichment on plant and soil biota and their interactions in grasslands. Global Change Biology, 2020, 26, 4626-4637.	4.2	43
50	Plant responses following grazing removal at different stocking rates in an Inner Mongolia grassland ecosystem. Plant and Soil, 2011, 340, 199-213.	1.8	40
51	Limited evidence for spatial resource partitioning across temperate grassland biodiversity experiments. Ecology, 2020, 101, e02905.	1.5	40
52	Deepened winter snow cover enhances net ecosystem exchange and stabilizes plant community composition and productivity in a temperate grassland. Global Change Biology, 2020, 26, 3015-3027.	4.2	40
53	Variations in life-form composition and foliar carbon isotope discrimination among eight plant communities under different soil moisture conditions in the Xilin River Basin, Inner Mongolia, China. Ecological Research, 2005, 20, 167-176.	0.7	39
54	Towards a better understanding of landscape patterns and ecosystem processes of the Mongolian Plateau. Landscape Ecology, 2015, 30, 1573-1578.	1.9	39

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55	Spatiotemporal dynamic simulation of grassland carbon storage in China. Science China Earth Sciences, 2016, 59, 1946-1958.	2.3	35
56	Effects of extreme drought on plant nutrient uptake and resorption in rhizomatous vs bunchgrass-dominated grasslands. Oecologia, 2018, 188, 633-643.	0.9	35
57	Can plant litter affect net primary production of a typical steppe in Inner Mongolia?. Journal of Vegetation Science, 2011, 22, 367-376.	1.1	34
58	Wind erosion enhanced by land use changes significantly reduces ecosystem carbon storage and carbon sequestration potentials in semiarid grasslands. Land Degradation and Development, 2018, 29, 3469-3478.	1.8	34
59	Responses of growingâ€season soil respiration to water and nitrogen addition as affected by grazing intensity. Functional Ecology, 2018, 32, 1890-1901.	1.7	31
60	Testing biodiversity-ecosystem functioning relationship in the worldâ€™s largest grassland: overview of the IMGRE project. Landscape Ecology, 2015, 30, 1723-1736.	1.9	30
61	Largeâ€Scale Distribution of Molecular Components in Chinese Grassland Soils: The Influence of Input and Decomposition Processes. Journal of Geophysical Research G: Biogeosciences, 2018, 123, 239-255.	1.3	29
62	Spatio-temporal patterns of satellite-derived grassland vegetation phenology from 1998 to 2012 in Inner Mongolia, China. Journal of Arid Land, 2016, 8, 462-477.	0.9	28
63	Hierarchical Plant Responses and Diversity Loss after Nitrogen Addition: Testing Three Functionally-Based Hypotheses in the Inner Mongolia Grassland. PLoS ONE, 2011, 6, e20078.	1.1	27
64	Effect of diversity on biomass across grasslands on the Mongolian Plateau: contrasting effects between plants and soil nematodes. Journal of Biogeography, 2016, 43, 955-966.	1.4	27
65	Ecological clusters based on responses of soil microbial phylotypes to precipitation explain ecosystem functions. Soil Biology and Biochemistry, 2020, 142, 107717.	4.2	27
66	Scale-dependent patterns and mechanisms of grazing-induced biodiversity loss: evidence from a field manipulation experiment in semiarid steppe. Landscape Ecology, 2015, 30, 1751-1765.	1.9	26
67	Predominant control of moisture on soil organic carbon mineralization across a broad range of arid and semiarid ecosystems on the Mongolia plateau. Landscape Ecology, 2015, 30, 1683-1699.	1.9	26
68	Long-term effects of grazing and topography on extra-radical hyphae of arbuscular mycorrhizal fungi in semi-arid grasslands. Mycorrhiza, 2018, 28, 117-127.	1.3	26
69	Disentangling the effects of nitrogen availability and soil acidification on microbial taxa and soil carbon dynamics in natural grasslands. Soil Biology and Biochemistry, 2022, 164, 108495.	4.2	26
70	Long-term regional evidence of the effects of livestock grazing on soil microbial community structure and functions in surface and deep soil layers. Soil Biology and Biochemistry, 2022, 168, 108629.	4.2	25
71	Tradeoffs and thresholds in the effects of nitrogen addition on biodiversity and ecosystem functioning: evidence from inner Mongolia Grasslands. Global Change Biology, 2010, 16, 889-889.	4.2	22
72	Assessing the impacts of human activities and climate variations on grassland productivity by partial least squares structural equation modeling (PLS-SEM). Journal of Arid Land, 2017, 9, 473-488.	0.9	22

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73	Legacy effect of grazing intensity mediates the bottomâ€up controls of resource addition on soil food webs. Journal of Applied Ecology, 2021, 58, 976-987.	1.9	22
74	Testing the scaling effects and mechanisms of Nâ€induced biodiversity loss: evidence from a decadeâ€long grassland experiment. Journal of Ecology, 2015, 103, 750-760.	1.9	21
75	Two ultraviolet radiation datasets that cover China. Advances in Atmospheric Sciences, 2017, 34, 805-815.	1.9	20
76	Sheep manure application increases soil exchangeable base cations in a semi-arid steppe of Inner Mongolia. Journal of Arid Land, 2015, 7, 361-369.	0.9	19
77	Spatial patterns of soil nutrients, plant diversity, and aboveground biomass in the Inner Mongolia grassland: before and after a biodiversity removal experiment. Landscape Ecology, 2015, 30, 1737-1750.	1.9	19
78	Can more carbon be captured by grasslands? A case study of Inner Mongolia, China. Science of the Total Environment, 2020, 723, 138085.	3.9	19
79	15N fractionation between vegetation, soil, faeces and wool is not influenced by stocking rate. Plant and Soil, 2011, 340, 25-33.	1.8	18
80	Distribution of lignin phenols in comparison with plant-derived lipids in the alpine versus temperate grassland soils. Plant and Soil, 2019, 439, 325-338.	1.8	18
81	Leaching of organic carbon from grassland soils under anaerobiosis. Soil Biology and Biochemistry, 2020, 141, 107684.	4.2	17
82	Hyperspectral retrieval of leaf physiological traits and their links to ecosystem productivity in grassland monocultures. Ecological Indicators, 2021, 122, 107267.	2.6	17
83	Direct and indirect effects of nitrogen enrichment and grazing on grassland productivity through intraspecific trait variability. Journal of Applied Ecology, 2022, 59, 598-610.	1.9	16
84	Comparison of leaf area index inversion for grassland vegetation through remotely sensed spectra by unmanned aerial vehicle and field-based spectroradiometer. Journal of Plant Ecology, 2019, 12, 395-408.	1.2	15
85	Vertical variations in plant- and microbial-derived carbon components in grassland soils. Plant and Soil, 2020, 446, 441-455.	1.8	15
86	Grassland Carbon Budget and Its Driving Factors of the Subtropical and Tropical Monsoon Region in China During 1961 to 2013. Scientific Reports, 2017, 7, 14717.	1.6	14
87	Distribution and Preservation of Rootâ€and Shootâ€Derived Carbon Components in Soils Across the Chineseâ€Mongolian Grasslands. Journal of Geophysical Research G: Biogeosciences, 2019, 124, 420-431.	1.3	14
88	Grazing regime alters plant community structure via patchâ€scale diversity in semiarid grasslands. Ecosphere, 2021, 12, e03547.	1.0	13
89	Root litter diversity and functional identity regulate soil carbon and nitrogen cycling in a typical steppe. Soil Biology and Biochemistry, 2020, 141, 107688.	4.2	12
90	The Potential of Mapping Grassland Plant Diversity with the Links among Spectral Diversity, Functional Trait Diversity, and Species Diversity. Remote Sensing, 2021, 13, 3034.	1.8	12

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91	Trend Analysis of Relationship between Primary Productivity, Precipitation and Temperature in Inner Mongolia. ISPRS International Journal of Geo-Information, 2018, 7, 214.	1.4	10
92	Rare soil microbial taxa regulate the negative effects of land degradation drivers on soil organic matter decomposition. Journal of Applied Ecology, 2021, 58, 1658-1669.	1.9	10
93	Biodiversityâ€"productivity relationships in a natural grassland community vary under diversity loss scenarios. Journal of Ecology, 2022, 110, 210-220.	1.9	10
94	Contrasting effects of arbuscular mycorrhizal fungi on nitrogen uptake in Leymus chinensis and Cleistogenes squarrosa grasses, dominants of the Inner Mongolian steppe. Plant and Soil, 2022, 475, 395-410.	1.8	10
95	Linking leaf traits to the temporal stability of above- and belowground productivity under global change and land use scenarios in a semi-arid grassland of Inner Mongolia. Science of the Total Environment, 2022, 818, 151858.	3.9	9
96	Even shortâ€term revegetation complicates soil food webs and strengthens their links with ecosystem functions. Journal of Applied Ecology, 2022, 59, 1721-1733.	1.9	9
97	Investigating the spectral and ecological characteristics of grassland communities across an ecological gradient of the Inner Mongolian grasslands with in situ hyperspectral data. International Journal of Remote Sensing, 2014, 35, 7179-7198.	1.3	8
98	Quantifying Grazing Intensity in China Using High Temporal Resolution MODIS Data. IEEE Journal of Selected Topics in Applied Earth Observations and Remote Sensing, 2017, 10, 515-523.	2.3	8
99	Mowing and topography effects on microorganisms and nitrogen transformation processes responsible for nitrous oxide emissions in semi-arid grassland of Inner Mongolia. Journal of Soils and Sediments, 2018, 18, 929-935.	1.5	8
100	Ecosystem stability in Inner Mongolia (reply). Nature, 2005, 435, E6-E7.	13.7	6
101	Heavy grazing disrupts positive effects of arbuscular mycorrhizae symbiosis on community productivity and stability under low and high phosphorus conditions. Plant and Soil, 2020, 457, 375-387.	1.8	6
102	A dataset of plant and microbial community structure after long-term grazing and mowing in a semiarid steppe. Scientific Data, 2020, 7, 403.	2.4	5
103	Seasonal variation in the response of arbuscular mycorrhizal fungi to grazing intensity. Mycorrhiza, 2020, 30, 635-646.	1.3	5
104	How precipitation legacies affect broad-scale patterns of primary productivity: Evidence from the Inner Mongolia grassland. Agricultural and Forest Meteorology, 2022, 320, 108954.	1.9	5
105	The loss of plant species diversity dominated by temperature promotes local productivity in the steppe of eastern Inner Mongolia. Ecological Indicators, 2022, 139, 108953.	2.6	5
106	Linking stoichiometric homeostasis with ecosystem structure, functioning, and stability. Nature Precedings, 2010, , .	0.1	4
107	Plant quantity and quality regulate the diversity of arthropod communities in a semiâ€arid grassland. Functional Ecology, 2021, 35, 601-613.	1.7	4
108	N-enrichment induced biodiversity loss can be explained by reductions in competitive intransitivity: Evidence from a decade-long grassland experiment. Environmental and Experimental Botany, 2021, 184, 104372.	2.0	4

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109	Grazing Intensity Rather than Host Plantâ€™s Palatability Shapes the Community of Arbuscular Mycorrhizal Fungi in a Steppe Grassland. Microbial Ecology, 2022, 84, 1062-1071.	1.4	4
110	The complexity of the bacterial community in response to fertilization determines forage production in a semiarid grassland. Ecological Indicators, 2022, 139, 108918.	2.6	4
111	Arbuscular Mycorrhizal Fungi Mediate Grazing Effects on Seasonal Soil Nitrogen Fluxes in a Steppe Ecosystem. Ecosystems, 2021, 24, 1171-1183.	1.6	3
112	Deepened snow cover mitigates soil carbon loss from intensive landâ€use in a semiâ€arid temperate grassland. Functional Ecology, 2022, 36, 635-645.	1.7	3
113	Climate and anthropogenic drivers of changes in abundance of C4 annuals and perennials in grasslands on the Mongolian Plateau. , 0, , .		2
114	Mapping grassland vegetation cover based on Support Vector Machine and association rules. , 2013, , .		1