

Jiangyang Xia

List of Publications by Year in descending order

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Version: 2024-02-01

124
papers

8,410
citations

50273

46
h-index

49904

87
g-index

132
all docs

132
docs citations

132
times ranked

8317
citing authors

#	ARTICLE	IF	CITATIONS
1	Nitrogen addition promotes soil microbial beta diversity and the stochastic assembly. <i>Science of the Total Environment</i> , 2022, 806, 150569.	8.0	26
2	Nocturnal warming accelerates drought-induced seedling mortality of two evergreen tree species. <i>Tree Physiology</i> , 2022, 42, 1164-1176.	3.1	4
3	Are regional precipitation-productivity relationships robust to decadal-scale dry period?. <i>Journal of Plant Ecology</i> , 2022, 15, 711-720.	2.3	5
4	Experimental warming reduces ecosystem resistance and resilience to severe flooding in a wetland. <i>Science Advances</i> , 2022, 8, eabl9526.	10.3	22
5	Consistent temperature-dependent patterns of leaf lifespan across spatial and temporal gradients for deciduous trees in Europe. <i>Science of the Total Environment</i> , 2022, 820, 153175.	8.0	1
6	Soil phosphorus drives plant trait variations in a mature subtropical forest. <i>Global Change Biology</i> , 2022, 28, 3310-3320.	9.5	14
7	Warming effects on grassland productivity depend on plant diversity. <i>Global Ecology and Biogeography</i> , 2022, 31, 588-598.	5.8	13
8	Can evolutionary history predict plant plastic responses to climate change?. <i>New Phytologist</i> , 2022, 235, 1260-1271.	7.3	14
9	Nutrient Limitations Lead to a Reduced Magnitude of Disequilibrium in the Global Terrestrial Carbon Cycle. <i>Journal of Geophysical Research G: Biogeosciences</i> , 2022, 127, .	3.0	4
10	Matrix Approach to Land Carbon Cycle Modeling. <i>Journal of Advances in Modeling Earth Systems</i> , 2022, 14, .	3.8	7
11	Reduced magnitude and shifted seasonality of CO ₂ sink by experimental warming in a coastal wetland. <i>Ecology</i> , 2021, 102, e03236.	3.2	9
12	The U-shaped pattern of size-dependent mortality and its correlated factors in a subtropical monsoon evergreen forest. <i>Journal of Ecology</i> , 2021, 109, 2421-2433.	4.0	7
13	A Comparison of Linear Conventional and Nonlinear Microbial Models for Simulating Pulse Dynamics of Soil Heterotrophic Respiration in a Semi-Arid Grassland. <i>Journal of Geophysical Research G: Biogeosciences</i> , 2021, 126, e2020JG006120.	3.0	5
14	A small climate-amplifying effect of climate-carbon cycle feedback. <i>Nature Communications</i> , 2021, 12, 2952.	12.8	5
15	Plant functional types regulate non-additive responses of soil respiration to 5-year warming and nitrogen addition in a semi-arid grassland. <i>Functional Ecology</i> , 2021, 35, 2593-2603.	3.6	13
16	Warming reshaped the microbial hierarchical interactions. <i>Global Change Biology</i> , 2021, 27, 6331-6347.	9.5	81
17	Modeling the typhoon disturbance effect on ecosystem carbon storage dynamics in a subtropical forest of China's coastal region. <i>Ecological Modelling</i> , 2021, 455, 109636.	2.5	0
18	A traceability analysis system for model evaluation on land carbon dynamics: design and applications. <i>Ecological Processes</i> , 2021, 10, .	3.9	7

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19	Effect of tidal flooding on ecosystem CO ₂ and CH ₄ fluxes in a salt marsh in the Yellow River Delta. <i>Estuarine, Coastal and Shelf Science</i> , 2020, 232, 106512.	2.1	14
20	Warming-induced global soil carbon loss attenuated by downward carbon movement. <i>Global Change Biology</i> , 2020, 26, 7242-7254.	9.5	28
21	Minimum carbon uptake controls the interannual variability of ecosystem productivity in tropical evergreen forests. <i>Global and Planetary Change</i> , 2020, 195, 103343.	3.5	2
22	Tidal effects on ecosystem CO ₂ exchange at multiple timescales in a salt marsh in the Yellow River Delta. <i>Estuarine, Coastal and Shelf Science</i> , 2020, 238, 106727.	2.1	13
23	Integrative ecology in the era of big data—From observation to prediction. <i>Science China Earth Sciences</i> , 2020, 63, 1429-1442.	5.2	14
24	Research challenges and opportunities for using big data in global change biology. <i>Global Change Biology</i> , 2020, 26, 6040-6061.	9.5	33
25	Nonlinear Increase of Vegetation Carbon Storage in Aging Forests and Its Implications for Earth System Models. <i>Journal of Advances in Modeling Earth Systems</i> , 2020, 12, e2020MS002304.	3.8	7
26	Robust leaf trait relationships across species under global environmental changes. <i>Nature Communications</i> , 2020, 11, 2999.	12.8	63
27	Warming-induced unprecedented high-elevation forest growth over the monsoonal Tibetan Plateau. <i>Environmental Research Letters</i> , 2020, 15, 054011.	5.2	23
28	Traits mediate drought effects on wood carbon fluxes. <i>Global Change Biology</i> , 2020, 26, 3429-3442.	9.5	15
29	Nighttime warming enhances ecosystem carbon-use efficiency in a temperate steppe. <i>Functional Ecology</i> , 2020, 34, 1721-1730.	3.6	16
30	Depth-dependent soil C-N-P stoichiometry in a mature subtropical broadleaf forest. <i>Geoderma</i> , 2020, 370, 114357.	5.1	42
31	Impacts of global environmental change drivers on non-structural carbohydrates in terrestrial plants. <i>Functional Ecology</i> , 2020, 34, 1525-1536.	3.6	44
32	Both day and night warming reduce tree growth in extremely dry soils. <i>Environmental Research Letters</i> , 2020, 15, 094074.	5.2	9
33	Spatial variations in terrestrial net ecosystem productivity and its local indicators. <i>Biogeosciences</i> , 2020, 17, 6237-6246.	3.3	3
34	A meta-analysis of 1,119 manipulative experiments on terrestrial carbon-cycling responses to global change. <i>Nature Ecology and Evolution</i> , 2019, 3, 1309-1320.	7.8	304
35	Plant NE : a global database of plant biomass from nitrogen-addition experiments. <i>Ecology</i> , 2019, 100, e02840.	3.2	5
36	High ecosystem stability of evergreen broadleaf forests under severe droughts. <i>Global Change Biology</i> , 2019, 25, 3494-3503.	9.5	89

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37	Divergent shifts in peak photosynthesis timing of temperate and alpine grasslands in China. <i>Remote Sensing of Environment</i> , 2019, 233, 111395.	11.0	85
38	Plant evolutionary history mainly explains the variance in biomass responses to climate warming at a global scale. <i>New Phytologist</i> , 2019, 222, 1338-1351.	7.3	20
39	A threefold difference in plant growth response to nitrogen addition between the laboratory and field experiments. <i>Ecosphere</i> , 2019, 10, e02572.	2.2	15
40	Different impacts of external ammonium and nitrate addition on plant growth in terrestrial ecosystems: A meta-analysis. <i>Science of the Total Environment</i> , 2019, 686, 1010-1018.	8.0	36
41	Vegetation Functional Properties Determine Uncertainty of Simulated Ecosystem Productivity: A Traceability Analysis in the East Asian Monsoon Region. <i>Global Biogeochemical Cycles</i> , 2019, 33, 668-689.	4.9	38
42	Decadal Stabilization of Soil Inorganic Nitrogen as a Benchmark for Global Land Models. <i>Journal of Advances in Modeling Earth Systems</i> , 2019, 11, 1088-1099.	3.8	8
43	Plant Feedback Aggravates Soil Organic Carbon Loss Associated With Wind Erosion in Northwest China. <i>Journal of Geophysical Research G: Biogeosciences</i> , 2019, 124, 825-839.	3.0	17
44	Evaluating the simulated mean soil carbon transit times by Earth system models using observations. <i>Biogeosciences</i> , 2019, 16, 917-926.	3.3	10
45	Approaching the potential of model-data comparisons of global land carbon storage. <i>Scientific Reports</i> , 2019, 9, 3367.	3.3	15
46	Global variation of soil microbial carbon-use efficiency in relation to growth temperature and substrate supply. <i>Scientific Reports</i> , 2019, 9, 5621.	3.3	49
47	Relative contributions of biotic and abiotic factors to the spatial variation of litter stock in a mature subtropical forest. <i>Journal of Plant Ecology</i> , 2019, 12, 769-780.	2.3	10
48	Realized ecological forecast through an interactive Ecological Platform for Assimilating Data (EcoPAD, v1.0) into models. <i>Geoscientific Model Development</i> , 2019, 12, 1119-1137.	3.6	17
49	Changing precipitation exerts greater influence on soil heterotrophic than autotrophic respiration in a semiarid steppe. <i>Agricultural and Forest Meteorology</i> , 2019, 271, 413-421.	4.8	56
50	Decadal biomass increment in early secondary succession woody ecosystems is increased by CO ₂ enrichment. <i>Nature Communications</i> , 2019, 10, 454.	12.8	68
51	Changes in plant biomass induced by soil moisture variability drive interannual variation in the net ecosystem CO ₂ exchange over a reclaimed coastal wetland. <i>Agricultural and Forest Meteorology</i> , 2019, 264, 138-148.	4.8	36
52	Spatially-explicit estimate of soil nitrogen stock and its implication for land model across Tibetan alpine permafrost region. <i>Science of the Total Environment</i> , 2019, 650, 1795-1804.	8.0	19
53	A methodological review on identification of tree mortality and their applications. <i>Chinese Science Bulletin</i> , 2019, 64, 2395-2409.	0.7	3
54	Water response of ecosystem respiration regulates future projection of net ecosystem productivity in a semiarid grassland. <i>Agricultural and Forest Meteorology</i> , 2018, 252, 175-191.	4.8	9

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55	Joint structural and physiological control on the interannual variation in productivity in a temperate grassland: A data-model comparison. <i>Global Change Biology</i> , 2018, 24, 2965-2979.	9.5	53
56	Precipitation events reduce soil respiration in a coastal wetland based on four-year continuous field measurements. <i>Agricultural and Forest Meteorology</i> , 2018, 256-257, 292-303.	4.8	79
57	Divergent responses of ecosystem respiration components to livestock exclusion on the Qinghai Tibetan Plateau. <i>Land Degradation and Development</i> , 2018, 29, 1726-1737.	3.9	19
58	Matrix approach to land carbon cycle modeling: A case study with the Community Land Model. <i>Global Change Biology</i> , 2018, 24, 1394-1404.	9.5	64
59	Dual effect of precipitation redistribution on net ecosystem CO ₂ exchange of a coastal wetland in the Yellow River Delta. <i>Agricultural and Forest Meteorology</i> , 2018, 249, 286-296.	4.8	37
60	Enhanced peak growth of global vegetation and its key mechanisms. <i>Nature Ecology and Evolution</i> , 2018, 2, 1897-1905.	7.8	169
61	Carbon-nitrogen coupling under three schemes of model representation: a traceability analysis. <i>Geoscientific Model Development</i> , 2018, 11, 4399-4416.	3.6	22
62	Non-uniform seasonal warming regulates vegetation greening and atmospheric CO ₂ amplification over northern lands. <i>Environmental Research Letters</i> , 2018, 13, 124008.	5.2	11
63	Biotic responses buffer warming-induced soil organic carbon loss in Arctic tundra. <i>Global Change Biology</i> , 2018, 24, 4946-4959.	9.5	21
64	Differential responses of carbon-degrading enzyme activities to warming: Implications for soil respiration. <i>Global Change Biology</i> , 2018, 24, 4816-4826.	9.5	131
65	Effects of litter manipulation on soil respiration under short-term nitrogen addition in a subtropical evergreen forest. <i>Forest Ecology and Management</i> , 2018, 429, 77-83.	3.2	16
66	More replenishment than priming loss of soil organic carbon with additional carbon input. <i>Nature Communications</i> , 2018, 9, 3175.	12.8	69
67	Soil and vegetation carbon turnover times from tropical to boreal forests. <i>Functional Ecology</i> , 2018, 32, 71-82.	3.6	68
68	Daytime warming lowers community temporal stability by reducing the abundance of dominant, stable species. <i>Global Change Biology</i> , 2017, 23, 154-163.	9.5	95
69	Comparing the Performance of Three Land Models in Global C Cycle Simulations: A Detailed Structural Analysis. <i>Land Degradation and Development</i> , 2017, 28, 524-533.	3.9	32
70	Challenging terrestrial biosphere models with data from the long-term multifactor Prairie Heating and CO ₂ Enrichment experiment. <i>Global Change Biology</i> , 2017, 23, 3623-3645.	9.5	42
71	Asymmetric sensitivity of ecosystem carbon and water processes in response to precipitation change in a semi-arid steppe. <i>Functional Ecology</i> , 2017, 31, 1301-1311.	3.6	84
72	Terrestrial ecosystem model performance in simulating productivity and its vulnerability to climate change in the northern permafrost region. <i>Journal of Geophysical Research G: Biogeosciences</i> , 2017, 122, 430-446.	3.0	47

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73	Quantifying uncertainties from additional nitrogen data and processes in a terrestrial ecosystem model with Bayesian probabilistic inversion. Journal of Advances in Modeling Earth Systems, 2017, 9, 548-565.	3.8	9
74	Gross primary production responses to warming, elevated CO ₂ , and irrigation: quantifying the drivers of ecosystem physiology in a semiarid grassland. Global Change Biology, 2017, 23, 3092-3106.	9.5	43
75	Transient Traceability Analysis of Land Carbon Storage Dynamics: Procedures and Its Application to Two Forest Ecosystems. Journal of Advances in Modeling Earth Systems, 2017, 9, 2822-2835.	3.8	13
76	Warming Effects on Ecosystem Carbon Fluxes Are Modulated by Plant Functional Types. Ecosystems, 2017, 20, 515-526.	3.4	54
77	Effects of warming and increased precipitation on net ecosystem productivity: A long-term manipulative experiment in a semiarid grassland. Agricultural and Forest Meteorology, 2017, 232, 359-366.	4.8	65
78	Transient dynamics of terrestrial carbon storage: mathematical foundation and its applications. Biogeosciences, 2017, 14, 145-161.	3.3	91
79	Divergent predictions of carbon storage between two global land models: attribution of the causes through traceability analysis. Earth System Dynamics, 2016, 7, 649-658.	7.1	36
80	Stronger warming effects on microbial abundances in colder regions. Scientific Reports, 2016, 5, 18032.	3.3	88
81	Nighttime warming enhances drought resistance of plant communities in a temperate steppe. Scientific Reports, 2016, 6, 23267.	3.3	47
82	Global patterns and substrate-based mechanisms of the terrestrial nitrogen cycle. Ecology Letters, 2016, 19, 697-709.	6.4	192
83	Variation of parameters in a Flux-Based Ecosystem Model across 12 sites of terrestrial ecosystems in the conterminous USA. Ecological Modelling, 2016, 336, 57-69.	2.5	24
84	Dual mechanisms regulate ecosystem stability under decade-long warming and hay harvest. Nature Communications, 2016, 7, 11973.	12.8	66
85	Variability in the sensitivity among model simulations of permafrost and carbon dynamics in the permafrost region between 1960 and 2009. Global Biogeochemical Cycles, 2016, 30, 1015-1037.	4.9	116
86	Conspecific Leaf Litter-Mediated Effect of Conspecific Adult Neighborhood on Early-Stage Seedling Survival in A Subtropical Forest. Scientific Reports, 2016, 6, 37830.	3.3	6
87	Methodological uncertainty in estimating carbon turnover times of soil fractions. Soil Biology and Biochemistry, 2016, 100, 118-124.	8.8	42
88	Precipitation regime drives warming responses of microbial biomass and activity in temperate steppe soils. Biology and Fertility of Soils, 2016, 52, 469-477.	4.3	28
89	Toward more realistic projections of soil carbon dynamics by Earth system models. Global Biogeochemical Cycles, 2016, 30, 40-56.	4.9	343
90	Differential responses of ecosystem respiration components to experimental warming in a meadow grassland on the Tibetan Plateau. Agricultural and Forest Meteorology, 2016, 220, 21-29.	4.8	117

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91	Experimental warming altered rates of carbon processes, allocation, and carbon storage in a tallgrass prairie. <i>Ecosphere</i> , 2015, 6, 1-16.	2.2	20
92	Explicitly representing soil microbial processes in Earth system models. <i>Global Biogeochemical Cycles</i> , 2015, 29, 1782-1800.	4.9	286
93	Evidence for long-term shift in plant community composition under decadal experimental warming. <i>Journal of Ecology</i> , 2015, 103, 1131-1140.	4.0	78
94	Application of a two-pool model to soil carbon dynamics under elevated CO_2 . <i>Global Change Biology</i> , 2015, 21, 4293-4297.	9.5	18
95	Importance of vegetation dynamics for future terrestrial carbon cycling. <i>Environmental Research Letters</i> , 2015, 10, 054019.	5.2	60
96	Joint control of terrestrial gross primary productivity by plant phenology and physiology. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2015, 112, 2788-2793.	7.1	265
97	Scale-Dependent Performance of CMIP5 Earth System Models in Simulating Terrestrial Vegetation Carbon*. <i>Journal of Climate</i> , 2015, 28, 5217-5232.	3.2	24
98	Grazing and watering alter plant phenological processes in a desert steppe community. <i>Plant Ecology</i> , 2015, 216, 599-613.	1.6	27
99	Precipitation Regime Shift Enhanced the Rain Pulse Effect on Soil Respiration in a Semi-Arid Steppe. <i>PLoS ONE</i> , 2014, 9, e104217.	2.5	41
100	Rain use efficiency as affected by climate warming and biofuel harvest: results from a 12-year field experiment. <i>GCB Bioenergy</i> , 2014, 6, 556-565.	5.6	9
101	Modeling permafrost thaw and ecosystem carbon cycle under annual and seasonal warming at an Arctic tundra site in Alaska. <i>Journal of Geophysical Research G: Biogeosciences</i> , 2014, 119, 1129-1146.	3.0	19
102	Terrestrial carbon cycle affected by non-uniform climate warming. <i>Nature Geoscience</i> , 2014, 7, 173-180.	12.9	226
103	Plant growth and mortality under climatic extremes: An overview. <i>Environmental and Experimental Botany</i> , 2014, 98, 13-19.	4.2	157
104	Ecosystem photosynthesis regulates soil respiration on a diurnal scale with a short-term time lag in a coastal wetland. <i>Soil Biology and Biochemistry</i> , 2014, 68, 85-94.	8.8	76
105	Evaluation and improvement of a global land model against soil carbon data using a Bayesian Markov chain Monte Carlo method. <i>Journal of Geophysical Research G: Biogeosciences</i> , 2014, 119, 403-417.	3.0	82
106	The effect of warming on grassland evapotranspiration partitioning using laser-based isotope monitoring techniques. <i>Geochimica Et Cosmochimica Acta</i> , 2013, 111, 28-38.	3.9	67
107	Global patterns of the responses of leaf-level photosynthesis and respiration in terrestrial plants to experimental warming. <i>Journal of Plant Ecology</i> , 2013, 6, 437-447.	2.3	116
108	Traceable components of terrestrial carbon storage capacity in biogeochemical models. <i>Global Change Biology</i> , 2013, 19, 2104-2116.	9.5	141

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109	Nitrogen deposition weakens plant-microbe interactions in grassland ecosystems. <i>Global Change Biology</i> , 2013, 19, 3688-3697.	9.5	221
110	Independent effects of warming and nitrogen addition on plant phenology in the Inner Mongolian steppe. <i>Annals of Botany</i> , 2013, 111, 1207-1217.	2.9	96
111	Nitrogen Addition and Warming Independently Influence the Belowground Micro-Food Web in a Temperate Steppe. <i>PLoS ONE</i> , 2013, 8, e60441.	2.5	53
112	Effects of mowing and nitrogen addition on soil respiration in three patches in an oldfield grassland in Inner Mongolia. <i>Journal of Plant Ecology</i> , 2012, 5, 219-228.	2.3	46
113	The Effects of Warming-Shifted Plant Phenology on Ecosystem Carbon Exchange Are Regulated by Precipitation in a Semi-Arid Grassland. <i>PLoS ONE</i> , 2012, 7, e32088.	2.5	42
114	Water-use efficiency in response to climate change: from leaf to ecosystem in a temperate steppe. <i>Global Change Biology</i> , 2011, 17, 1073-1082.	9.5	271
115	Effects of Increased Nitrogen Deposition and Precipitation on Seed and Seedling Production of <i>Potentilla tanacetifolia</i> in a Temperate Steppe Ecosystem. <i>PLoS ONE</i> , 2011, 6, e28601.	2.5	28
116	Impacts of day versus night warming on soil microclimate: Results from a semiarid temperate steppe. <i>Science of the Total Environment</i> , 2010, 408, 2807-2816.	8.0	31
117	Climate warming and biomass accumulation of terrestrial plants: a meta-analysis. <i>New Phytologist</i> , 2010, 188, 187-198.	7.3	298
118	Nitrogen effects on net ecosystem carbon exchange in a temperate steppe. <i>Global Change Biology</i> , 2010, 16, 144-155.	9.5	183
119	Response of ecosystem carbon exchange to warming and nitrogen addition during two hydrologically contrasting growing seasons in a temperate steppe. <i>Global Change Biology</i> , 2009, 15, 1544-1556.	9.5	228
120	Photosynthetic overcompensation under nocturnal warming enhances grassland carbon sequestration. <i>Ecology</i> , 2009, 90, 2700-2710.	3.2	213
121	Water-mediated responses of ecosystem carbon fluxes to climatic change in a temperate steppe. <i>New Phytologist</i> , 2008, 177, 209-219.	7.3	392
122	Global response patterns of terrestrial plant species to nitrogen addition. <i>New Phytologist</i> , 2008, 179, 428-439.	7.3	579
123	Climatic warming changes plant photosynthesis and its temperature dependence in a temperate steppe of northern China. <i>Environmental and Experimental Botany</i> , 2008, 63, 91-101.	4.2	105
124	Plant photosynthetic overcompensation under nocturnal warming: lack of evidence in subtropical evergreen trees. <i>Annals of Botany</i> , 0, , .	2.9	1