Shilong Piao

List of Publications by Year
in descending order

Source: https://exaly.com/author-pdf/1464600/publications.pdf

Version: 2024-02-01

378	68,222	701	799
papers	citations	121 h-index	247 g-index

385	385	385	36755
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	A Large and Persistent Carbon Sink in the Worldâ€™s Forests. Science, 2011, 333, 988-993.	12.6	5,393
2	The impacts of climate change on water resources and agriculture in China. Nature, 2010, 467, 43-51.	27.8	2,656
3	Temperature increase reduces global yields of major crops in four independent estimates. Proceedings of the National Academy of Sciences of the United States of America, 2017, 114, 9326-9331.	7.1	1,708
4	Greening of the Earth and its drivers. Nature Climate Change, 2016, 6, 791-795.	18.8	1,675
5	China and India lead in greening of the world through land-use management. Nature Sustainability, 2019, 2, 122-129.	23.7	1,636
6	Revegetation in Chinaâ€™s Loess Plateau is approaching sustainable water resource limits. Nature Climate Change, 2016, 6, 1019-1022.	18.8	1,270
7	Reduction of forest soil respiration in response to nitrogen deposition. Nature Geoscience, 2010, 3, 315-322.	12.9	1,254
8	The carbon balance of terrestrial ecosystems in China. Nature, 2009, 458, 1009-1013.	27.8	1,243
9	Evaluation of the terrestrial carbon cycle, future plant geography and climateâ€carbon cycle feedbacks using five Dynamic Global Vegetation Models (DGVMs). Global Change Biology, 2008, 14, 2015-2039.	9.5	1,097
10	Reduced sediment transport in the Yellow River due to anthropogenic changes. Nature Geoscience, 2016, 9, 38-41.	12.9	948
11	Plant phenology and global climate change: Current progresses and challenges. Global Change Biology, 2019, 25, 1922-1940.	9.5	944
12	Net carbon dioxide losses of northern ecosystems in response to autumn warming. Nature, 2008, 451, 49-52.	27.8	930
13	Characteristics, drivers and feedbacks of global greening. Nature Reviews Earth & Environment, 2020, 1, 14-27.	29.7	889
14	Surface Urban Heat Island Across 419 Global Big Cities. Environmental Science & Technology, 2012, 46, 696-703.	10.0	864
15	CO₂ balance of boreal, temperate, and tropical forests derived from a global database. Global Change Biology, 2007, 13, 2509-2537.	9.5	863
16	Increased atmospheric vapor pressure deficit reduces global vegetation growth. Science Advances, 2019, 5, eaax1396.	10.3	755
17	Influence of spring and autumn phenological transitions on forest ecosystem productivity. Philosophical Transactions of the Royal Society B: Biological Sciences, 2010, 365, 3227-3246.	4.0	751
18	Global Data Sets of Vegetation Leaf Area Index (LAI)3g and Fraction of Photosynthetically Active Radiation (FPAR)3g Derived from Global Inventory Modeling and Mapping Studies (GIMMS) Normalized Difference Vegetation Index (NDVI3g) for the Period 1981 to 2011. Remote Sensing, 2013, 5, 927-948.	4.0	748

#	Article	IF	Citations
19	The impacts of climate change and human activities on biogeochemical cycles on the <scp>Q</scp>inghaiâ€<scp>T</scp>ibetan <scp>P</scp>lateau. Global Change Biology, 2013, 19, 2940-2955.	9.5	670
20	Variations in satellite-derived phenology in China's temperate vegetation. Global Change Biology, 2006, 12, 672-685.	9.5	643
21	Mapping tree density at a global scale. Nature, 2015, 525, 201-205.	27.8	642
22	Declining global warming effects on the phenology of spring leaf unfolding. Nature, 2015, 526, 104-107.	27.8	637
23	Evaluation of terrestrial carbon cycle models for their response to climate variability and to <scp><scp>CO₂</scp></scp> trends. Global Change Biology, 2013, 19, 2117-2132.	9.5	617
24	Growing season extension and its impact on terrestrial carbon cycle in the Northern Hemisphere over the past 2 decades. Global Biogeochemical Cycles, 2007, 21, .	4.9	598
25	Detection and attribution of vegetation greening trend in China over the last 30Âyears. Global Change Biology, 2015, 21, 1601-1609.	9.5	597
26	Recent Third Poleâ€™s Rapid Warming Accompanies Cryospheric Melt and Water Cycle Intensification and Interactions between Monsoon and Environment: Multidisciplinary Approach with Observations, Modeling, and Analysis. Bulletin of the American Meteorological Society, 2019, 100, 423-444.	3.3	590
27	Recent trends and drivers of regional sources and sinks of carbon dioxide. Biogeosciences, 2015, 12, 653-679.	3.3	587
28	Changes in satelliteâ€derived vegetation growth trend in temperate and boreal Eurasia from 1982 to 2006. Global Change Biology, 2011, 17, 3228-3239.	9.5	586
29	Changes in climate and land use have a larger direct impact than rising CO ₂ on global river runoff trends. Proceedings of the National Academy of Sciences of the United States of America, 2007, 104, 15242-15247.	7.1	504
30	Afforestation in China cools local land surface temperature. Proceedings of the National Academy of Sciences of the United States of America, 2014, 111, 2915-2919.	7.1	501
31	Stabilization of atmospheric nitrogen deposition in China over the past decade. Nature Geoscience, 2019, 12, 424-429.	12.9	490
32	Temperature and vegetation seasonality diminishment over northern lands. Nature Climate Change, 2013, 3, 581-586.	18.8	485
33	Asymmetric effects of daytime and night-time warming on Northern Hemisphere vegetation. Nature, 2013, 501, 88-92.	27.8	482
34	Terrestrial vegetation carbon sinks in China, 1981â€“2000. Science in China Series D: Earth Sciences, 2007, 50, 1341-1350.	0.9	466
35	NDVI-based increase in growth of temperate grasslands and its responses to climate changes in China. Global Environmental Change, 2006, 16, 340-348.	7.8	447
36	Altitude and temperature dependence of change in the spring vegetation green-up date from 1982 to 2006 in the Qinghai-Xizang Plateau. Agricultural and Forest Meteorology, 2011, 151, 1599-1608.	4.8	442

#	Article	IF	Citations
37	Spring temperature change and its implication in the change of vegetation growth in North America from 1982 to 2006. Proceedings of the National Academy of Sciences of the United States of America, 2011, 108, 1240-1245.	7.1	432
38	Spatiotemporal patterns of terrestrial gross primary production: A review. Reviews of Geophysics, 2015, 53, 785-818.	23.0	432
39	Evidence for a weakening relationship between interannual temperature variability and northern vegetation activity. Nature Communications, 2014, 5, 5018.	12.8	414
40	Evaporative cooling over the Tibetan Plateau induced by vegetation growth. Proceedings of the National Academy of Sciences of the United States of America, 2015, 112, 9299-9304.	7.1	404
41	High carbon dioxide uptake by subtropical forest ecosystems in the East Asian monsoon region. Proceedings of the National Academy of Sciences of the United States of America, 2014, 111, 4910-4915.	7.1	403
42	Interannual variations of monthly and seasonal normalized difference vegetation index (NDVI) in China from 1982 to 1999. Journal of Geophysical Research, 2003, 108, .	3.3	401
43	Leaf onset in the northern hemisphere triggered by daytime temperature. Nature Communications, 2015, 6, 6911.	12.8	384
44	Nutrient availability as the key regulator of global forest carbon balance. Nature Climate Change, 2014, 4, 471-476.	18.8	383
45	Precipitation impacts on vegetation spring phenology on the <scp>T</scp>ibetan <scp>P</scp>lateau. Global Change Biology, 2015, 21, 3647-3656.	9.5	377
46	Widespread decline of Congo rainforest greenness in the past decade. Nature, 2014, 509, 86-90.	27.8	351
47	Increasing altitudinal gradient of spring vegetation phenology during the last decade on the Qinghaiâ€“Tibetan Plateau. Agricultural and Forest Meteorology, 2014, 189-190, 71-80.	4.8	323
48	Climate mitigation from vegetation biophysical feedbacks during the past three decades. Nature Climate Change, 2017, 7, 432-436.	18.8	323
49	Delayed autumn phenology in the Northern Hemisphere is related to change in both climate and spring phenology. Global Change Biology, 2016, 22, 3702-3711.	9.5	319
50	Air temperature optima of vegetation productivity across global biomes. Nature Ecology and Evolution, 2019, 3, 772-779.	7.8	316
51	A meta-analysis of 1,119 manipulative experiments on terrestrial carbon-cycling responses to global change. Nature Ecology and Evolution, 2019, 3, 1309-1320.	7.8	304
52	Temperature, precipitation, and insolation effects on autumn vegetation phenology in temperate China. Global Change Biology, 2016, 22, 644-655.	9.5	294
53	Divergent hydrological response to large-scale afforestation and vegetation greening in China. Science Advances, 2018, 4, eaar4182.	10.3	287
54	The imbalance of the Asian water tower. Nature Reviews Earth & Environment, 2022, 3, 618-632.	29.7	286

#	Article	IF	Citations
55	A two-fold increase of carbon cycle sensitivity to tropical temperature variations. Nature, 2014, 506, 212-215.	27.8	284
56	Multifaceted characteristics of dryland aridity changes in a warming world. Nature Reviews Earth & Environment, 2021, 2, 232-250.	29.7	281
57	Changes in satelliteâ€derived spring vegetation greenâ€up date and its linkage to climate in China from 1982 to 2010: a multimethod analysis. Global Change Biology, 2013, 19, 881-891.	9.5	276
58	Fertile forests produce biomass more efficiently. Ecology Letters, 2012, 15, 520-526.	6.4	273
59	Largeâ€scale variations in the vegetation growing season and annual cycle of atmospheric <scp><scp>CO₂</scp></scp> at high northern latitudes from 1950 to 2011. Global Change Biology, 2013, 19, 3167-3183.	9.5	273
60	Variations in Vegetation Net Primary Production in the Qinghai-Xizang Plateau, China, from 1982 to 1999. Climatic Change, 2006, 74, 253-267.	3.6	271
61	Nitrogen and phosphorus constrain the CO2 fertilization of global plant biomass. Nature Climate Change, 2019, 9, 684-689.	18.8	269
62	A framework for benchmarking land models. Biogeosciences, 2012, 9, 3857-3874.	3.3	267
63	Joint control of terrestrial gross primary productivity by plant phenology and physiology. Proceedings of the National Academy of Sciences of the United States of America, 2015, 112, 2788-2793.	7.1	265
64	Carbon accumulation in European forests. Nature Geoscience, 2008, 1, 425-429.	12.9	263
65	Summer soil drying exacerbated by earlier spring greening of northern vegetation. Science Advances, 2020, 6, eaax0255.	10.3	258
66	Recent change of vegetation growth trend in China. Environmental Research Letters, 2011, 6, 044027.	5.2	255
67	Variation in leaf flushing date influences autumnal senescence and next yearâ€™s flushing date in two temperate tree species. Proceedings of the National Academy of Sciences of the United States of America, 2014, 111, 7355-7360.	7.1	254
68	Regional differences of lake evolution across China during 1960sâ€“2015 and its natural and anthropogenic causes. Remote Sensing of Environment, 2019, 221, 386-404.	11.0	252
69	Impacts of climate and CO2 changes on the vegetation growth and carbon balance of Qinghaiâ€“Tibetan grasslands over the past five decades. Global and Planetary Change, 2012, 98-99, 73-80.	3.5	248
70	The European carbon balance. Part 3: forests. Global Change Biology, 2010, 16, 1429-1450.	9.5	247
71	A reversal in global terrestrial stilling and its implications for wind energy production. Nature Climate Change, 2019, 9, 979-985.	18.8	246
72	Changes in vegetation net primary productivity from 1982 to 1999 in China. Global Biogeochemical Cycles, 2005, 19, n/a-n/a.	4.9	244

#	Article	IF	Citations
73	Soil respiration under climate warming: differential response of heterotrophic and autotrophic respiration. Global Change Biology, 2014, 20, 3229-3237.	9.5	239
74	Contrasting responses of water use efficiency to drought across global terrestrial ecosystems. Scientific Reports, 2016, 6, 23284.	3.3	227
75	Terrestrial carbon cycle affected by non-uniform climate warming. Nature Geoscience, 2014, 7, 173-180.	12.9	226
76	Emerging opportunities and challenges in phenology: a review. Ecosphere, 2016, 7, e01436.	2.2	225
77	Temperature sensitivity of soil respiration in different ecosystems in China. Soil Biology and Biochemistry, 2009, 41, 1008-1014.	8.8	223
78	Strong impacts of daily minimum temperature on the greenâ€up date and summer greenness of the Tibetan Plateau. Global Change Biology, 2016, 22, 3057-3066.	9.5	223
79	Extensive and drastically different alpine lake changes on Asia's high plateaus during the past four decades. Geophysical Research Letters, 2017, 44, 252-260.	4.0	223
80	Spring vegetation green-up date in China inferred from SPOT NDVI data: A multiple model analysis. Agricultural and Forest Meteorology, 2012, 165, 104-113.	4.8	222
81	Species interactions slow warming-induced upward shifts of treelines on the Tibetan Plateau. Proceedings of the National Academy of Sciences of the United States of America, 2016, 113, 4380-4385.	7.1	221
82	Partitioning global land evapotranspiration using CMIP5 models constrained by observations. Nature Climate Change, 2018, 8, 640-646.	18.8	219
83	Change in terrestrial ecosystem waterâ€use efficiency over the last three decades. Global Change Biology, 2015, 21, 2366-2378.	9.5	215
84	The contribution of Chinaâ€™s emissions to global climate forcing. Nature, 2016, 531, 357-361.	27.8	214
85	Interannual variation of terrestrial carbon cycle: Issues and perspectives. Global Change Biology, 2020, 26, 300-318.	9.5	214
86	A crossâ€biome synthesis of soil respiration and its determinants under simulated precipitation changes. Global Change Biology, 2016, 22, 1394-1405.	9.5	211
87	Recent spring phenology shifts in western <scp>C</scp>entral <scp>E</scp>urope based on multiscale observations. Global Ecology and Biogeography, 2014, 23, 1255-1263.	5.8	208
88	Effect of climate and CO2changes on the greening of the Northern Hemisphere over the past two decades. Geophysical Research Letters, 2006, 33, .	4.0	207
89	The impact of the 2009/2010 drought on vegetation growth and terrestrial carbon balance in Southwest China. Agricultural and Forest Meteorology, 2019, 269-270, 239-248.	4.8	199
90	Increasing net primary production in China from 1982 to 1999. Frontiers in Ecology and the Environment, 2003, 1, 293-297.	4.0	195

#	Article	IF	Citations
91	Extension of the growing season increases vegetation exposure to frost. Nature Communications, 2018, 9, 426.	12.8	190
92	Current systematic carbon-cycle observations and the need for implementing a policy-relevant carbon observing system. Biogeosciences, 2014, 11, 3547-3602.	3.3	189
93	Recent increases in terrestrial carbon uptake at little cost to the water cycle. Nature Communications, 2017, 8, 110.	12.8	186
94	Weakening temperature control on the interannual variations of spring carbon uptake across northern lands. Nature Climate Change, 2017, 7, 359-363.	18.8	183
95	Spatiotemporal patterns of terrestrial carbon cycle during the 20th century. Global Biogeochemical Cycles, 2009, 23, .	4.9	180
96	Precipitation patterns alter growth of temperate vegetation. Geophysical Research Letters, 2005, 32, .	4.0	179
97	Spatiotemporal pattern of gross primary productivity and its covariation with climate in China over the last thirty years. Global Change Biology, 2018, 24, 184-196.	9.5	177
98	Changes in nutrient concentrations of leaves and roots in response to global change factors. Global Change Biology, 2017, 23, 3849-3856.	9.5	174
99	Forest annual carbon cost: a globalâ€scale analysis of autotrophic respiration. Ecology, 2010, 91, 652-661.	3.2	171
100	Shifting from a fertilization-dominated to a warming-dominated period. Nature Ecology and Evolution, 2017, 1, 1438-1445.	7.8	167
101	Drought timing influences the legacy of tree growth recovery. Global Change Biology, 2018, 24, 3546-3559.	9.5	165
102	High-resolution mapping of combustion processes and implications for CO₂ emissions. Atmospheric Chemistry and Physics, 2013, 13, 5189-5203.	4.9	164
103	Variation in a satellite-based vegetation index in relation to climate in China. Journal of Vegetation Science, 2004, 15, 219.	2.2	163
104	Global trends in carbon sinks and their relationships with CO2 and temperature. Nature Climate Change, 2019, 9, 73-79.	18.8	163
105	Plant phenological responses to climate change on the Tibetan Plateau: research status and challenges. National Science Review, 2015, 2, 454-467.	9.5	161
106	Unexpected role of winter precipitation in determining heat requirement for spring vegetation greenâ€up at northern middle and high latitudes. Global Change Biology, 2014, 20, 3743-3755.	9.5	159
107	Increased heat requirement for leaf flushing in temperate woody species over 1980â€“2012: effects of chilling, precipitation and insolation. Global Change Biology, 2015, 21, 2687-2697.	9.5	158
108	Global forest carbon uptake due to nitrogen and phosphorus deposition from 1850 to 2100. Global Change Biology, 2017, 23, 4854-4872.	9.5	158

#	Article	IF	Citations
109	Keeping global warming within 1.5 Â°C constrains emergence of aridification. Nature Climate Change, 2018, 8, 70-74.	18.8	158
110	Deceleration of Chinaâ€™s human water use and its key drivers. Proceedings of the National Academy of Sciences of the United States of America, 2020, 117, 7702-7711.	7.1	155
111	Estimation of Chinaâ€™s terrestrial ecosystem carbon sink: Methods, progress and prospects. Science China Earth Sciences, 2022, 65, 641-651.	5.2	155
112	Increased control of vegetation on global terrestrial energy fluxes. Nature Climate Change, 2020, 10, 356-362.	18.8	152
113	Drought and spring cooling induced recent decrease in vegetation growth in Inner Asia. Agricultural and Forest Meteorology, 2013, 178-179, 21-30.	4.8	150
114	Excessive Afforestation and Soil Drying on China's Loess Plateau. Journal of Geophysical Research G: Biogeosciences, 2018, 123, 923-935.	3.0	147
115	Large inert carbon pool in the terrestrial biosphere during the Last Glacial Maximum. Nature Geoscience, 2012, 5, 74-79.	12.9	145
116	Human-induced greening of the northern extratropical land surface. Nature Climate Change, 2016, 6, 959-963.	18.8	145
117	Variations in atmospheric CO ₂ growth rates coupled with tropical temperature. Proceedings of the National Academy of Sciences of the United States of America, 2013, 110, 13061-13066.	7.1	144
118	Impact of Earth Greening on the Terrestrial Water Cycle. Journal of Climate, 2018, 31, 2633-2650.	3.2	142
119	Afforestation neutralizes soil pH. Nature Communications, 2018, 9, 520.	12.8	140
120	Ecosystem Traits Linking Functional Traits to Macroecology. Trends in Ecology and Evolution, 2019, 34, 200-210.	8.7	140
121	The bioelements, the elementome, and the biogeochemical niche. Ecology, 2019, 100, e02652.	3.2	139
122	Increasingly Important Role of Atmospheric Aridity on Tibetan Alpine Grasslands. Geophysical Research Letters, 2018, 45, 2852-2859.	4.0	136
123	The impacts of climate extremes on the terrestrial carbon cycle: A review. Science China Earth Sciences, 2019, 62, 1551-1563.	5.2	134
124	Temporal trade-off between gymnosperm resistance and resilience increases forest sensitivity to extreme drought. Nature Ecology and Evolution, 2020, 4, 1075-1083.	7.8	134
125	Precipitation amount, seasonality and frequency regulate carbon cycling of a semi-arid grassland ecosystem in Inner Mongolia, China: A modeling analysis. Agricultural and Forest Meteorology, 2013, 178-179, 46-55.	4.8	130
126	Changes in biomass carbon stocks in China's grasslands between 1982 and 1999. Global Biogeochemical Cycles, 2007, 21, n/a-n/a.	4.9	127

#	Article	IF	Citations
127	Accelerated increase in vegetation carbon sequestration in China after 2010: A turning point resulting from climate and human interaction. Global Change Biology, 2021, 27, 5848-5864.	9.5	127
128	Global evapotranspiration over the past three decades: estimation based on the water balance equation combined with empirical models. Environmental Research Letters, 2012, 7, 014026.	5.2	126
129	NDVI-indicated decline in desertification in China in the past two decades. Geophysical Research Letters, 2005, 32, .	4.0	125
130	Larger temperature response of autumn leaf senescence than spring leafâ€out phenology. Global Change Biology, 2018, 24, 2159-2168.	9.5	124
131	NDVI indicated characteristics of vegetation cover change in Chinaâ€™s metropolises over the last three decades. Environmental Monitoring and Assessment, 2011, 179, 1-14.	2.7	119
132	Disentangling climatic and anthropogenic controls on global terrestrial evapotranspiration trends. Environmental Research Letters, 2015, 10, 094008.	5.2	119
133	Divergent changes in the elevational gradient of vegetation activities over the last 30 years. Nature Communications, 2019, 10, 2970.	12.8	119
134	Application of the ORCHIDEE global vegetation model to evaluate biomass and soil carbon stocks of Qinghaiâ€Tibetan grasslands. Global Biogeochemical Cycles, 2010, 24, .	4.9	118
135	Divergent responses of soil organic carbon to afforestation. Nature Sustainability, 2020, 3, 694-700.	23.7	118
136	Lateral transport of soil carbon and landâ^'atmosphere CO ₂ flux induced by water erosion in China. Proceedings of the National Academy of Sciences of the United States of America, 2016, 113, 6617-6622.	7.1	117
137	Permafrost thawing puts the frozen carbon at risk over the Tibetan Plateau. Science Advances, 2020, 6, eaaz3513.	10.3	117
138	Change in winter snow depth and its impacts on vegetation in China. Global Change Biology, 2010, 16, 3004-3013.	9.5	115
139	Plausible rice yield losses under future climate warming. Nature Plants, 2017, 3, 16202.	9.3	114
140	Has the advancing onset of spring vegetation greenâ€up slowed down or changed abruptly over the last three decades?. Global Ecology and Biogeography, 2015, 24, 621-631.	5.8	111
141	Lower land-use emissions responsible for increased net land carbon sink during the slow warming period. Nature Geoscience, 2018, 11, 739-743.	12.9	110
142	A worldwide analysis of spatiotemporal changes in water balanceâ€based evapotranspiration from 1982 to 2009. Journal of Geophysical Research D: Atmospheres, 2014, 119, 1186-1202.	3.3	109
143	Biomass production efficiency controlled by management in temperate and boreal ecosystems. Nature Geoscience, 2015, 8, 843-846.	12.9	109
144	Climate Change Trends and Impacts on Vegetation Greening Over the Tibetan Plateau. Journal of Geophysical Research D: Atmospheres, 2019, 124, 7540-7552.	3.3	109

#	Article	IF	Citations
145	Recent trends in Inner Asian forest dynamics to temperature and precipitation indicate high sensitivity to climate change. Agricultural and Forest Meteorology, 2013, 178-179, 31-45.	4.8	108
146	Are ecological gradients in seasonal Q10 of soil respiration explained by climate or by vegetation seasonality?. Soil Biology and Biochemistry, 2010, 42, 1728-1734.	8.8	106
147	Increased phosphate uptake but not resorption alleviates phosphorus deficiency induced by nitrogen deposition in temperate Larix principisâ€rupprechtii plantations. New Phytologist, 2016, 212, 1019-1029.	7.3	106
148	Biomass carbon stocks in Chinaâ€™s forests between 2000 and 2050: A prediction based on forest biomass-age relationships. Science China Life Sciences, 2010, 53, 776-783.	4.9	105
149	Quantifying the response of forest carbon balance to future climate change in Northeastern China: Model validation and prediction. Global and Planetary Change, 2009, 66, 179-194.	3.5	103
150	The carbon budget of terrestrial ecosystems in East Asia over the last two decades. Biogeosciences, 2012, 9, 3571-3586.	3.3	103
151	No evidence of continuously advanced green-up dates in the Tibetan Plateau over the last decade. Proceedings of the National Academy of Sciences of the United States of America, 2013, 110, E2329.	7.1	103
152	Multispherical interactions and their effects on the Tibetan Plateau's earth system: a review of the recent researches. National Science Review, 2015, 2, 468-488.	9.5	103
153	Global patterns and climate drivers of waterâ€use efficiency in terrestrial ecosystems deduced from satelliteâ€based datasets and carbon cycle models. Global Ecology and Biogeography, 2016, 25, 311-323.	5.8	102
154	Seasonal responses of terrestrial ecosystem waterâ€use efficiency to climate change. Global Change Biology, 2016, 22, 2165-2177.	9.5	100
155	Varying responses of vegetation activity to climate changes on the Tibetan Plateau grassland. International Journal of Biometeorology, 2017, 61, 1433-1444.	3.0	99
156	Forest biomass carbon stocks in China over the past 2 decades: Estimation based on integrated inventory and satellite data. Journal of Geophysical Research, 2005, 110, .	3.3	98
157	Benchmarking coupled climateâ€carbon models against longâ€term atmospheric CO₂ measurements. Global Biogeochemical Cycles, 2010, 24, .	4.9	97
158	Emergent constraint on crop yield response to warmer temperature from field experiments. Nature Sustainability, 2020, 3, 908-916.	23.7	96
159	Data-driven estimates of global nitrous oxide emissions from croplands. National Science Review, 2020, 7, 441-452.	9.5	95
160	The carbon budget of South Asia. Biogeosciences, 2013, 10, 513-527.	3.3	94
161	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.	9.5	93
162	Future biomass carbon sequestration capacity of Chinese forests. Science Bulletin, 2018, 63, 1108-1117.	9.0	92

#	Article	IF	Citations
163	Spatial and temporal variations of spring dust emissions in northern China over the last 30 years. Atmospheric Environment, 2016, 126, 117-127.	4.1	91
164	Responses and feedback of the Tibetan Plateau’s alpine ecosystem to climate change. Chinese Science Bulletin, 2019, 64, 2842-2855.	0.7	91
165	Response of terrestrial evapotranspiration to Earth's greening. Current Opinion in Environmental Sustainability, 2018, 33, 9-25.	6.3	89
166	Daylength helps temperate deciduous trees to leafâ€out at the optimal time. Global Change Biology, 2019, 25, 2410-2418.	9.5	88
167	Atmospheric dynamic constraints on Tibetan Plateau freshwater under Paris climate targets. Nature Climate Change, 2021, 11, 219-225.	18.8	87
168	The effect of nitrogen addition on soil respiration from a nitrogen-limited forest soil. Agricultural and Forest Meteorology, 2014, 197, 103-110.	4.8	85
169	Contribution of climate change and rising CO2 to terrestrial carbon balance in East Asia: A multi-model analysis. Global and Planetary Change, 2011, 75, 133-142.	3.5	84
170	Effects of double cropping on summer climate of the North China Plain and neighbouring regions. Nature Climate Change, 2014, 4, 615-619.	18.8	84
171	Vegetation coverâ€"another dominant factor in determining global water resources in forested regions. Global Change Biology, 2018, 24, 786-795.	9.5	84
172	Changes in timing of seasonal peak photosynthetic activity in northern ecosystems. Global Change Biology, 2019, 25, 2382-2395.	9.5	83
173	Evaluation of Land Surface Models in Reproducing Satellite-Derived LAI over the High-Latitude Northern Hemisphere. Part I: Uncoupled DGVMs. Remote Sensing, 2013, 5, 4819-4838.	4.0	82
174	A New High-Resolution N₂O Emission Inventory for China in 2008. Environmental Science & Technology, 2014, 48, 8538-8547.	10.0	82
175	Three times greater weight of daytime than of nightâ€time temperature on leaf unfolding phenology in temperate trees. New Phytologist, 2016, 212, 590-597.	7.3	82
176	Mapping spatial distribution of forest age in China. Earth and Space Science, 2017, 4, 108-116.	2.6	79
177	Velocity of change in vegetation productivity over northern high latitudes. Nature Ecology and Evolution, 2017, 1, 1649-1654.	7.8	79
178	An earlier start of the thermal growing season enhances tree growth in cold humid areas but not in dry areas. Nature Ecology and Evolution, 2022, 6, 397-404.	7.8	78
179	Development of a land surface model with coupled snow and frozen soil physics. Water Resources Research, 2017, 53, 5085-5103.	4.2	76
180	Disentangling the mechanisms behind winter snow impact on vegetation activity in northern ecosystems. Global Change Biology, 2018, 24, 1651-1662.	9.5	76

#	Article	IF	Citations
181	Evaluation of Land Surface Models in Reproducing Satellite Derived Leaf Area Index over the High-Latitude Northern Hemisphere. Part II: Earth System Models. Remote Sensing, 2013, 5, 3637-3661.	4.0	75
182	Spatiotemporal pattern of terrestrial evapotranspiration in China during the past thirty years. Agricultural and Forest Meteorology, 2018, 259, 131-140.	4.8	75
183	European land CO2 sink influenced by NAO and East-Atlantic Pattern coupling. Nature Communications, 2016, 7, 10315.	12.8	74
184	Can we reconcile atmospheric estimates of the Northern terrestrial carbon sink with land-based accounting?. Current Opinion in Environmental Sustainability, 2010, 2, 225-230.	6.3	73
185	Field warming experiments shed light on the wheat yield response to temperature in China. Nature Communications, 2016, 7, 13530.	12.8	73
186	Deforestation-induced warming over tropical mountain regions regulated by elevation. Nature Geoscience, 2021, 14, 23-29.	12.9	73
187	Seasonally different response of photosynthetic activity to daytime and nightâ€time warming in the Northern Hemisphere. Global Change Biology, 2015, 21, 377-387.	9.5	72
188	Enhanced habitat loss of the Himalayan endemic flora driven by warming-forced upslope tree expansion. Nature Ecology and Evolution, 2022, 6, 890-899.	7.8	72
189	Age-Related Modulation of the Nitrogen Resorption Efficiency Response to Growth Requirements and Soil Nitrogen Availability in a Temperate Pine Plantation. Ecosystems, 2016, 19, 698-709.	3.4	71
190	Global patterns of vegetation carbon use efficiency and their climate drivers deduced from MODIS satellite data and process-based models. Agricultural and Forest Meteorology, 2018, 256-257, 150-158.	4.8	69
191	Asymmetric sensitivity of first flowering date to warming and cooling in alpine plants. Ecology, 2014, 95, 3387-3398.	3.2	67
192	Biophysical impacts of Earth greening largely controlled by aerodynamic resistance. Science Advances, 2020, 6, .	10.3	67
193	Ecological change on the Tibetan Plateau. Chinese Science Bulletin, 2015, 60, 3048-3056.	0.7	66
194	Spatio-temporal patterns of the area experiencing negative vegetation growth anomalies in China over the last three decades. Environmental Research Letters, 2012, 7, 035701.	5.2	65
195	Spring phenology at different altitudes is becoming more uniform under global warming in Europe. Global Change Biology, 2018, 24, 3969-3975.	9.5	64
196	Field evidences for the positive effects of aerosols on tree growth. Global Change Biology, 2018, 24, 4983-4992.	9.5	64
197	Attributing the increase in atmospheric CO2 to emitters and absorbers. Nature Climate Change, 2013, 3, 926-930.	18.8	63
198	Evaluation of an improved intermediate complexity snow scheme in the ORCHIDEE land surface model. Journal of Geophysical Research D: Atmospheres, 2013, 118, 6064-6079.	3.3	63

#	Article	IF	Citations
199	Seasonal and interannual changes in vegetation activity of tropical forests in Southeast Asia. Agricultural and Forest Meteorology, 2016, 224, 1-10.	4.8	63
200	Short photoperiod reduces the temperature sensitivity of leafâ€out in saplings of Fagus sylvatica but not in horse chestnut. Global Change Biology, 2019, 25, 1696-1703.	9.5	63
201	Atmospheric deposition, CO2, and change in the land carbon sink. Scientific Reports, 2017, 7, 9632.	3.3	62
202	Contrasting responses of grassland water and carbon exchanges to climate change between Tibetan Plateau and Inner Mongolia. Agricultural and Forest Meteorology, 2018, 249, 163-175.	4.8	62
203	Global irrigation contribution to wheat and maize yield. Nature Communications, 2021, 12, 1235.	12.8	61
204	Local and teleconnected temperature effects of afforestation and vegetation greening in China. National Science Review, 2020, 7, 897-912.	9.5	60
205	Optimal temperature of vegetation productivity and its linkage with climate and elevation on the Tibetan Plateau. Global Change Biology, 2021, 27, 1942-1951.	9.5	60
206	Perspectives on the role of terrestrial ecosystems in the â€˜carbon neutralityâ€™ strategy. Science China Earth Sciences, 2022, 65, 1178-1186.	5.2	60
207	Diagnosing phosphorus limitations in natural terrestrial ecosystems in carbon cycle models. Earth's Future, 2017, 5, 730-749.	6.3	59
208	Enhanced growth after extreme wetness compensates for post-drought carbon loss in dry forests. Nature Communications, 2019, 10, 195.	12.8	59
209	The effects of teleconnections on carbon fluxes of global terrestrial ecosystems. Geophysical Research Letters, 2017, 44, 3209-3218.	4.0	58
210	A new estimation of Chinaâ€™s net ecosystem productivity based on eddy covariance measurements and a model tree ensemble approach. Agricultural and Forest Meteorology, 2018, 253-254, 84-93.	4.8	58
211	Field-experiment constraints on the enhancement of the terrestrial carbon sink by CO2 fertilization. Nature Geoscience, 2019, 12, 809-814.	12.9	58
212	Autumn temperature and carbon balance of a boreal Scots pine forest in Southern Finland. Biogeosciences, 2010, 7, 163-176.	3.3	57
213	Shifts in the dynamics of productivity signal ecosystem state transitions at the biomeâ€scale. Ecology Letters, 2018, 21, 1457-1466.	6.4	57
214	Effects of land use change and management on the European cropland carbon balance. Global Change Biology, 2011, 17, 320-338.	9.5	56
215	Soil quality both increases crop production and improves resilience to climate change. Nature Climate Change, 2022, 12, 574-580.	18.8	56
216	Quantifying nitrogen leaching response to fertilizer additions in China's cropland. Environmental Pollution, 2016, 211, 241-251.	7.5	54

#	Article	IF	Citations
217	Contrasting streamflow regimes induced by melting glaciers across the Tien Shan â€“ Pamir â€“ North Karakoram. Scientific Reports, 2018, 8, 16470.	3.3	54
218	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
219	Causes of spring vegetation growth trends in the northern midâ€“high latitudes from 1982 to 2004. Environmental Research Letters, 2012, 7, 014010.	5.2	53
220	Stand ages regulate the response of soil respiration to temperature in a Larix principis-rupprechtii plantation. Agricultural and Forest Meteorology, 2014, 184, 179-187.	4.8	53
221	Joint structural and physiological control on the interannual variation in productivity in a temperate grassland: A dataâ€model comparison. Global Change Biology, 2018, 24, 2965-2979.	9.5	53
222	Biomass energy in China's terrestrial ecosystems: Insights into the nation's sustainable energy supply. Renewable and Sustainable Energy Reviews, 2020, 127, 109857.	16.4	51
223	The Tibetan Plateau as the engine for Asian environmental change: the Tibetan Plateau Earth system research into a new era. Science Bulletin, 2021, 66, 1263-1266.	9.0	51
224	Interannual variability of terrestrial net ecosystem productivity over China: regional contributions and climate attribution. Environmental Research Letters, 2019, 14, 014003.	5.2	50
225	Divergence of climate impacts on maize yield in Northeast China. Agriculture, Ecosystems and Environment, 2014, 196, 51-58.	5.3	49
226	Worldwide impacts of atmospheric vapor pressure deficit on the interannual variability of terrestrial carbon sinks. National Science Review, 2022, 9, nwab150.	9.5	49
227	Increasing terrestrial vegetation activity in China, 1982â€“1999. Science in China Series C: Life Sciences, 2004, 47, 229-240.	1.3	48
228	Benchmarking the seasonal cycle of CO₂ fluxes simulated by terrestrial ecosystem models. Global Biogeochemical Cycles, 2015, 29, 46-64.	4.9	48
229	Management outweighs climate change on affecting length of rice growing period for early rice and single rice in China during 1991â€“2012. Agricultural and Forest Meteorology, 2017, 233, 1-11.	4.8	48
230	On the causes of trends in the seasonal amplitude of atmospheric <scp>CO</scp>₂. Global Change Biology, 2018, 24, 608-616.	9.5	48
231	Threeâ€dimensional change in temperature sensitivity of northern vegetation phenology. Global Change Biology, 2020, 26, 5189-5201.	9.5	48
232	Little change in heat requirement for vegetation green-up on the Tibetan Plateau over the warming period of 1998â€“2012. Agricultural and Forest Meteorology, 2017, 232, 650-658.	4.8	47
233	Detection and attribution of nitrogen runoff trend in China's croplands. Environmental Pollution, 2018, 234, 270-278.	7.5	47
234	Future reversal of warming-enhanced vegetation productivity in the Northern Hemisphere. Nature Climate Change, 2022, 12, 581-586.	18.8	47

#	Article	IF	Citations
235	Responses of land evapotranspiration to Earthâ€™s greening in CMIP5 Earth System Models. Environmental Research Letters, 2016, 11, 104006.	5.2	46
236	Evaluating biases in simulated land surface albedo from CMIP5 global climate models. Journal of Geophysical Research D: Atmospheres, 2016, 121, 6178-6190.	3.3	46
237	Responses of vegetation greenness and carbon cycle to extreme droughts in China. Agricultural and Forest Meteorology, 2021, 298-299, 108307.	4.8	46
238	Browning in desert boundaries in Asia in recent decades. Journal of Geophysical Research, 2011, 116, .	3.3	45
239	Deciphering impacts of climate extremes on Tibetan grasslands in the last fifteen years. Science Bulletin, 2019, 64, 446-454.	9.0	45
240	Seasonal biological carryover dominates northern vegetation growth. Nature Communications, 2021, 12, 983.	12.8	45
241	Patterns of fish species richness in China's lakes. Global Ecology and Biogeography, 2006, 15, 386-394.	5.8	44
242	Simulating the onset of spring vegetation growth across the Northern Hemisphere. Global Change Biology, 2018, 24, 1342-1356.	9.5	44
243	Temporal response of soil organic carbon after grasslandâ€related landâ€use change. Global Change Biology, 2018, 24, 4731-4746.	9.5	44
244	Controls on winter ecosystem respiration in temperate and boreal ecosystems. Biogeosciences, 2011, 8, 2009-2025.	3.3	42
245	Drought Influences the Accuracy of Simulated Ecosystem Fluxes: A Model-Data Meta-analysis for Mediterranean Oak Woodlands. Ecosystems, 2013, 16, 749-764.	3.4	42
246	New model for capturing the variations of fertilizerâ€induced emission factors of N₂O. Global Biogeochemical Cycles, 2015, 29, 885-897.	4.9	42
247	Accelerated terrestrial ecosystem carbon turnover and its drivers. Global Change Biology, 2020, 26, 5052-5062.	9.5	42
248	The Effect of Afforestation on Soil Moisture Content in Northeastern China. PLoS ONE, 2016, 11, e0160776.	2.5	41
249	Attribution of seasonal leaf area index trends in the northern latitudes with â€œoptimallyâ€integrated ecosystem models. Global Change Biology, 2017, 23, 4798-4813.	9.5	41
250	Modeling leaf senescence of deciduous tree species in Europe. Global Change Biology, 2020, 26, 4104-4118.	9.5	41
251	Climatic Warming Increases Spatial Synchrony in Spring Vegetation Phenology Across the Northern Hemisphere. Geophysical Research Letters, 2019, 46, 1641-1650.	4.0	40
252	Essential outcomes for COP26. Global Change Biology, 2022, 28, 1-3.	9.5	40

#	Article	IF	Citations
253	Reducing uncertainties in decadal variability of the global carbon budget with multiple datasets. Proceedings of the National Academy of Sciences of the United States of America, 2016, 113, 13104-13108.	7.1	39
254	Global land carbon sink response to temperature and precipitation varies with ENSO phase. Environmental Research Letters, 2017, 12, 064007.	5.2	39
255	The paleoclimatic footprint in the soil carbon stock of the Tibetan permafrost region. Nature Communications, 2019, 10, 4195.	12.8	39
256	The weakening relationship between Eurasian spring snow cover and Indian summer monsoon rainfall. Science Advances, 2019, 5, eaau8932.	10.3	39
257	Occurrence of crop pests and diseases has largely increased in China since 1970. Nature Food, 2022, 3, 57-65.	14.0	39
258	Footprint of temperature changes in the temperate and boreal forest carbon balance. Geophysical Research Letters, 2009, 36, .	4.0	38
259	Nutrient availability alters the correlation between spring leaf-out and autumn leaf senescence dates. Tree Physiology, 2019, 39, 1277-1284.	3.1	37
260	Vegetation forcing modulates global land monsoon and water resources in a CO2-enriched climate. Nature Communications, 2020, 11, 5184.	12.8	37
261	Climate warming increases spring phenological differences among temperate trees. Global Change Biology, 2020, 26, 5979-5987.	9.5	37
262	Using research networks to create the comprehensive datasets needed to assess nutrient availability as a key determinant of terrestrial carbon cycling. Environmental Research Letters, 2018, 13, 125006.	5.2	36
263	Evaluation of CMIP5 Earth System Models for the Spatial Patterns of Biomass and Soil Carbon Turnover Times and Their Linkage with Climate. Journal of Climate, 2018, 31, 5947-5960.	3.2	36
264	Improving the dynamics of Northern Hemisphere high-latitude vegetation in the ORCHIDEE ecosystem model. Geoscientific Model Development, 2015, 8, 2263-2283.	3.6	36
265	Spatial patterns of climatological temperature lapse rate in mainland China: A multiâ€“time scale investigation. Journal of Geophysical Research D: Atmospheres, 2015, 120, 2661-2675.	3.3	35
266	Relatively stable response of fruiting stage to warming and cooling relative to other phenological events. Ecology, 2016, 97, 1961-1969.	3.2	35
267	MODIS Based Estimation of Forest Aboveground Biomass in China. PLoS ONE, 2015, 10, e0130143.	2.5	35
268	Combining livestock production information in a process-based vegetation model to reconstruct the history of grassland management. Biogeosciences, 2016, 13, 3757-3776.	3.3	34
269	Elevated CO₂ does not stimulate carbon sink in a semi-arid grassland. Ecology Letters, 2019, 22, 458-468.	6.4	34
270	Definitions and methods to estimate regional land carbon fluxes for the second phase of the REgional Carbon Cycle Assessment and Processes Project (RECCAP-2). Geoscientific Model Development, 2022, 15, 1289-1316.	3.6	34

#	Article	IF	Citations
271	Decoupling of greenness and gross primary productivity as aridity decreases. Remote Sensing of Environment, 2022, 279, 113120.	11.0	34
272	Spatial variations in responses of vegetation autumn phenology to climate change on the Tibetan Plateau. Journal of Plant Ecology, 0, , rtw084.	2.3	33
273	Higher temperature variability reduces temperature sensitivity of vegetation growth in Northern Hemisphere. Geophysical Research Letters, 2017, 44, 6173-6181.	4.0	33
274	Global terrestrial stilling: does Earthâ€™s greening play a role?. Environmental Research Letters, 2018, 13, 124013.	5.2	33
275	Wildfire Detection Probability of MODIS Fire Products under the Constraint of Environmental Factors: A Study Based on Confirmed Ground Wildfire Records. Remote Sensing, 2019, 11, 3031.	4.0	33
276	GOLUM-CNP v1.0: a data-driven modeling of carbon, nitrogen and phosphorus cycles in major terrestrial biomes. Geoscientific Model Development, 2018, 11, 3903-3928.	3.6	32
277	Regional carbon fluxes from land use and land cover change in Asia, 1980â€“2009. Environmental Research Letters, 2016, 11, 074011.	5.2	31
278	Emerging negative impact of warming on summer carbon uptake in northern ecosystems. Nature Communications, 2018, 9, 5391.	12.8	31
279	Short-lived climate forcers have long-term climate impacts via the carbonâ€“climate feedback. Nature Climate Change, 2020, 10, 851-855.	18.8	31
280	Regional air pollution brightening reverses the greenhouse gases induced warmingâ€elevation relationship. Geophysical Research Letters, 2015, 42, 4563-4572.	4.0	30
281	Benchmarking carbon fluxes of the ISIMIP2a biome models. Environmental Research Letters, 2017, 12, 045002.	5.2	30
282	Dominant regions and drivers of the variability of the global land carbon sink across timescales. Global Change Biology, 2018, 24, 3954-3968.	9.5	30
283	Quantifying Water Scarcity in Northern China Within the Context of Climatic and Societal Changes and Southâ€toâ€North Water Diversion. Earth's Future, 2020, 8, e2020EF001492.	6.3	30
284	Spring and autumn phenology across the Tibetan Plateau inferred from normalized difference vegetation index and solar-induced chlorophyll fluorescence. Big Earth Data, 2021, 5, 182-200.	4.4	30
285	Influence of Vegetation Growth on the Enhanced Seasonality of Atmospheric CO₂. Global Biogeochemical Cycles, 2018, 32, 32-41.	4.9	29
286	Soil organic carbon and nutrient losses resulted from spring dust emissions in Northern China. Atmospheric Environment, 2019, 213, 585-596.	4.1	28
287	Warming homogenizes apparent temperature sensitivity of ecosystem respiration. Science Advances, 2021, 7, .	10.3	28
288	Negative effect of nitrogen addition on soil respiration dependent on stand age: Evidence from a 7-year field study of larch plantations in northern China. Agricultural and Forest Meteorology, 2018, 262, 24-33.	4.8	27

#	Article	IF	Citations
289	Increased Global Land Carbon Sink Due to Aerosolâ€Induced Cooling. Global Biogeochemical Cycles, 2019, 33, 439-457.	4.9	27
290	Estimation of gross primary production in China (1982â€“2010) with multiple ecosystem models. Ecological Modelling, 2016, 324, 33-44.	2.5	26
291	Regional patterns of future runoff changes from Earth system models constrained by observation. Geophysical Research Letters, 2017, 44, 5540-5549.	4.0	26
292	Biophysical impacts of northern vegetation changes on seasonal warming patterns. Nature Communications, 2022, 13, .	12.8	26
293	The recent hiatus in global warming of the land surface: Scaleâ€dependent breakpoint occurrences in space and time. Geophysical Research Letters, 2015, 42, 6471-6478.	4.0	25
294	Multicriteria evaluation of discharge simulation in Dynamic Global Vegetation Models. Journal of Geophysical Research D: Atmospheres, 2015, 120, 7488-7505.	3.3	25
295	Spatiotemporal variations in the difference between satelliteâ€observed daily maximum land surface temperature and stationâ€based daily maximum nearâ€surface air temperature. Journal of Geophysical Research D: Atmospheres, 2017, 122, 2254-2268.	3.3	24
296	Contributions of Climate Change, CO2, Land-Use Change, and Human Activities to Changes in River Flow across 10 Chinese Basins. Journal of Hydrometeorology, 2018, 19, 1899-1914.	1.9	24
297	A Large Committed Longâ€Term Sink of Carbon due to Vegetation Dynamics. Earth's Future, 2018, 6, 1413-1432.	6.3	24
298	Effects of extreme temperature on Chinaâ€™s tea production. Environmental Research Letters, 2021, 16, 044040.	5.2	23
299	Environmental determinants of tropical forest and savanna distribution: A quantitative model evaluation and its implication. Journal of Geophysical Research G: Biogeosciences, 2014, 119, 1432-1445.	3.0	22
300	The role of plant phenology in stomatal ozone flux modeling. Global Change Biology, 2018, 24, 235-248.	9.5	22
301	The carbon sequestration potential of China's grasslands. Ecosphere, 2018, 9, e02452.	2.2	22
302	1982â€“2010 Trends of Light Use Efficiency and Inherent Water Use Efficiency in African vegetation: Sensitivity to Climate and Atmospheric CO2 Concentrations. Remote Sensing, 2014, 6, 8923-8944.	4.0	21
303	Changes in the Response of the Northern Hemisphere Carbon Uptake to Temperature Over the Last Three Decades. Geophysical Research Letters, 2018, 45, 4371-4380.	4.0	21
304	Changing the retention properties of catchments and their influence on runoff under climate change. Environmental Research Letters, 2018, 13, 094019.	5.2	21
305	Committed changes in tropical tree cover under the projected 21st century climate change. Scientific Reports, 2013, 3, 1951.	3.3	20
306	Shortened temperatureâ€relevant period of spring leafâ€out in temperateâ€zone trees. Global Change Biology, 2019, 25, 4282-4290.	9.5	20

#	Article	IF	Citations
307	Tropical tall forests are more sensitive and vulnerable to drought than short forests. Global Change Biology, 2022, 28, 1583-1595.	9.5	20
308	Changes in forest biomass over China during the 2000s and implications for management. Forest Ecology and Management, 2015, 357, 76-83.	3.2	19
309	Recent Changes in Global Photosynthesis and Terrestrial Ecosystem Respiration Constrained From Multiple Observations. Geophysical Research Letters, 2018, 45, 1058-1068.	4.0	19
310	Comment on â€œSatellites reveal contrasting responses of regional climate to the widespread greening of Earthâ€• Science, 2018, 360, .	12.6	19
311	Irrigation, damming, and streamflow fluctuations of the Yellow River. Hydrology and Earth System Sciences, 2021, 25, 1133-1150.	4.9	19
312	Divergent responses of ecosystem water use efficiency to drought timing over Northern Eurasia. Environmental Research Letters, 2021, 16, 045016.	5.2	19
313	A global map of root biomass across the world's forests. Earth System Science Data, 2021, 13, 4263-4274.	9.9	19
314	A comprehensive framework for seasonal controls of leaf abscission and productivity in evergreen broadleaved tropical and subtropical forests. Innovation(China), 2021, 2, 100154.	9.1	19
315	State-dependent errors in a land surface model across biomes inferred from eddy covariance observations on multiple timescales. Ecological Modelling, 2012, 246, 11-25.	2.5	18
316	Changes in productivity and carbon storage of grasslands in China under future global warming scenarios of 1.5Â°C and 2Â°C. Journal of Plant Ecology, 2019, 12, 804-814.	2.3	18
317	Annual ecosystem respiration is resistant to changes in freezeâ€“thaw periods in semiâ€arid permafrost. Global Change Biology, 2020, 26, 2630-2641.	9.5	18
318	Regional and seasonal partitioning of water and temperature controls on global land carbon uptake variability. Nature Communications, 2022, 13, .	12.8	18
319	Changes in interannual climate sensitivities of terrestrial carbon fluxes during the 21st century predicted by CMIP5 Earth System Models. Journal of Geophysical Research G: Biogeosciences, 2016, 121, 903-918.	3.0	17
320	Spring Snowâ€Albedo Feedback Analysis Over the Third Pole: Results From Satellite Observation and CMIP5 Model Simulations. Journal of Geophysical Research D: Atmospheres, 2018, 123, 750-763.	3.3	17
321	Plant Feedback Aggravates Soil Organic Carbon Loss Associated With Wind Erosion in Northwest China. Journal of Geophysical Research G: Biogeosciences, 2019, 124, 825-839.	3.0	17
322	Decrease in winter respiration explains 25% of the annual northern forest carbon sink enhancement over the last 30 years. Global Ecology and Biogeography, 2016, 25, 586-595.	5.8	16
323	Soil thawing regulates the spring growth onset in tundra and alpine biomes. Science of the Total Environment, 2020, 742, 140637.	8.0	16
324	Vegetation Response to Rising CO₂ Amplifies Contrasts in Water Resources Between Global Wet and Dry Land Areas. Geophysical Research Letters, 2021, 48, e2021GL094293.	4.0	16

#	Article	IF	Citations
325	Response to Comment on â€œSurface Urban Heat Island Across 419 Global Big Citiesâ€• Environmental Science & Technology, 2012, 46, 6889-6890.	10.0	15
326	Multimodel projections and uncertainties of net ecosystem production in China over the twenty-first century. Science Bulletin, 2014, 59, 4681-4691.	1.7	15
327	Improvement of the Irrigation Scheme in the ORCHIDEE Land Surface Model and Impacts of Irrigation on Regional Water Budgets Over China. Journal of Advances in Modeling Earth Systems, 2020, 12, e2019MS001770.	3.8	15
328	The contributions of individual countries and regions to the global radiative forcing. Proceedings of the National Academy of Sciences of the United States of America, 2021, 118, .	7.1	15
329	Moving toward a new era of ecosystem science. Geography and Sustainability, 2021, 2, 151-162.	4.3	15
330	Dominance of climate warming effects on recent drying trends over wet monsoon regions. Atmospheric Chemistry and Physics, 2017, 17, 10467-10476.	4.9	14
331	Causes of slowingâ€down seasonal CO₂ amplitude at Mauna Loa. Global Change Biology, 2020, 26, 4462-4477.	9.5	14
332	Spatiotemporal dynamics of ecosystem fires and biomass burning-induced carbon emissions in China over the past two decades. Geography and Sustainability, 2020, 1, 47-58.	4.3	14
333	Carbon turnover times shape topsoil carbon difference between Tibetan Plateau and Arctic tundra. Science Bulletin, 2021, 66, 1698-1704.	9.0	14
334	The Accelerating Land Carbon Sink of the 2000s May Not Be Driven Predominantly by the Warming Hiatus. Geophysical Research Letters, 2018, 45, 1402-1409.	4.0	13
335	Evaluation of ORCHIDEE-MICT-simulated soil moisture over China and impacts of different atmospheric forcing data. Hydrology and Earth System Sciences, 2018, 22, 5463-5484.	4.9	13
336	Quantifying the unauthorized lake water withdrawals and their impacts on the water budget of eutrophic lake Dianchi, China. Journal of Hydrology, 2018, 565, 39-48.	5.4	13
337	Higher soil acidification risk in southeastern Tibetan Plateau. Science of the Total Environment, 2021, 755, 143372.	8.0	13
338	The response of the suspended sediment load of the headwaters of the Brahmaputra River to climate change: Quantitative attribution to the effects of hydrological, cryospheric and vegetation controls. Global and Planetary Change, 2022, 210, 103753.	3.5	13
339	Amplified warming from physiological responses to carbon dioxide reduces the potential of vegetation for climate change mitigation. Communications Earth & Environment, 2022, 3, .	6.8	13
340	Seasonal Responses of Terrestrial Carbon Cycle to Climate Variations in CMIP5 Models: Evaluation and Projection. Journal of Climate, 2017, 30, 6481-6503.	3.2	12
341	Richness of plant communities plays a larger role than climate in determining responses of species richness to climate change. Journal of Ecology, 2019, 107, 1944-1955.	4.0	12
342	Reducing the uncertainty of parameters controlling seasonal carbon and water fluxes in Chinese forests and its implication for simulated climate sensitivities. Global Biogeochemical Cycles, 2017, 31, 1344-1366.	4.9	11

#	Article	IF	Citations
343	Effects of wildfire on soil respiration and its heterotrophic and autotrophic components in a montane coniferous forest. Journal of Plant Ecology, 2019, 12, 336-345.	2.3	11
344	Low and contrasting impacts of vegetation CO₂ fertilization on global terrestrial runoff over 1982â€“2010: accounting for aboveground and belowground vegetationâ€“CO₂ effects. Hydrology and Earth System Sciences, 2021, 25, 3411-3427.	4.9	11
345	Missed atmospheric organic phosphorus emitted by terrestrial plants, part 2: Experiment of volatile phosphorus. Environmental Pollution, 2020, 258, 113728.	7.5	10
346	Long-term linear trends mask phenological shifts. International Journal of Biometeorology, 2016, 60, 1611-1613.	3.0	9
347	Contrasting effects of N addition on the N and P status of understory vegetation in plantations of sapling and matureLarix principis-rupprechtii. Journal of Plant Ecology, 2018, 11, 843-852.	2.3	9
348	Strong but Intermittent Spatial Covariations in Tropical Land Temperature. Geophysical Research Letters, 2019, 46, 356-364.	4.0	9
349	Ambient climate determines the directional trend of community stability under warming and grazing. Global Change Biology, 2021, 27, 5198-5210.	9.5	9
350	Diurnal and Seasonal Change in Stem Respiration of Larix principis-rupprechtii Trees, Northern China. PLoS ONE, 2014, 9, e89294.	2.5	9
351	Mining can exacerbate global degradation of dryland. Geophysical Research Letters, 2021, 48, e2021GL094490.	4.0	9
352	Does the integration of the dynamic nitrogen cycle in a terrestrial biosphere model improve the long-term trend of the leaf area index?. Climate Dynamics, 2013, 40, 2535-2548.	3.8	8
353	Application of the metabolic scaling theory and waterâ€“energy balance equation to model largeâ€scale patterns of maximum forest canopy height. Global Ecology and Biogeography, 2016, 25, 1428-1442.	5.8	8
354	Decelerating Autumn CO 2 Release With Warming Induced by Attenuated Temperature Dependence of Respiration in Northern Ecosystems. Geophysical Research Letters, 2018, 45, 5562-5571.	4.0	8
355	Chinaâ€™s road towards sustainable development: Geography bridges science and solution. Progress in Physical Geography, 2019, 43, 694-706.	3.2	8
356	Dataâ€driven estimates of global litter production imply slower vegetation carbon turnover. Global Change Biology, 2021, 27, 1678-1688.	9.5	8
357	Five years of variability in the global carbon cycle: comparing an estimate from the Orbiting Carbon Observatory-2 and process-based models. Environmental Research Letters, 2021, 16, 054041.	5.2	8
358	Species richness is a strong driver of forest biomass along broad bioclimatic gradients in the Himalayas. Ecosphere, 2022, 13, .	2.2	8
359	Rising ecosystem water demand exacerbates the lengthening of tropical dry seasons. Nature Communications, 2022, 13, .	12.8	8
360	Global Patterns and Climate Controls of Terrestrial Ecosystem Light Use Efficiency. Journal of Geophysical Research G: Biogeosciences, 2020, 125, e2020JG005908.	3.0	7

#	Article	IF	Citations
361	Higher temperature sensitivity of flowering than leafâ€out alters the time between phenophases across temperate tree species. Global Ecology and Biogeography, 2022, 31, 901-911.	5.8	7
362	Emerging Negative Warming Impacts on Tibetan Crop Yield. Engineering, 2022, 14, 163-168.	6.7	6
363	Unusual characteristics of the carbon cycle during the 2015â˜2016 El NiÃ±o. Global Change Biology, 2021, 27, 3798-3809.	9.5	6
364	Higher plant photosynthetic capability in autumn responding to low atmospheric vapor pressure deficit. Innovation(China), 2021, 2, 100163.	9.1	6
365	Contrasting phenology responses to climate warming across the northern extra-tropics. Fundamental Research, 2022, 2, 708-715.	3.3	6
366	Short-term reduction of regional enhancement of atmospheric CO₂ in China during the first COVID-19 pandemic period. Environmental Research Letters, 2022, 17, 024036.	5.2	6
367	Climate Warming Mitigation from Nationally Determined Contributions. Advances in Atmospheric Sciences, 2022, 39, 1217-1228.	4.3	6
368	A small climate-amplifying effect of climate-carbon cycle feedback. Nature Communications, 2021, 12, 2952.	12.8	5
369	Vegetation Physiological Response to Increasing Atmospheric CO₂ Slows the Decreases in the Seasonal Amplitude of Temperature. Geophysical Research Letters, 2022, 49, .	4.0	5
370	Data-driven quantification of nitrogen enrichment impact on Northern Hemisphere plant biomass. Environmental Research Letters, 2022, 17, 074032.	5.2	5
371	Forest annual carbon cost: reply. Ecology, 2011, 92, 1998-2002.	3.2	3
372	Greenhouse Gas Concentration and Volcanic Eruptions Controlled the Variability of Terrestrial Carbon Uptake Over the Last Millennium. Journal of Advances in Modeling Earth Systems, 2019, 11, 1715-1734.	3.8	3
373	Strong direct and indirect influences of climate change on water yield confirmed by the Budyko framework. Geography and Sustainability, 2021, 2, 281-287.	4.3	3
374	The stimulatory effect of elevated CO2 on soil respiration is unaffected by N addition. Science of the Total Environment, 2021, 813, 151907.	8.0	3
375	Reply to: Disentangling biology from mathematical necessity in twentieth-century gymnosperm resilience trends. Nature Ecology and Evolution, 2021, 5, 736-737.	7.8	1
376	Greater responses of flower phenology of Kobresia pygmaea community to precipitation addition than to constant and stepwise warming. Journal of Plant Ecology, 0, , .	2.3	1
377	Detection and Attribution of Changes in Land Surface Sensitive Components. Springer Geography, 2017, , 495-509.	0.4	0
378	Global Change and Terrestrial Ecosystems. Springer Geography, 2017, , 205-232.	0.4	0