Shilong Piao

List of Publications by Citations

366	43,960	103	204
papers	citations	h-index	g-index
385	55,799	10.4	7.33
ext. papers	ext. citations	avg, IF	L-index

#	Paper	IF	Citations
366	A large and persistent carbon sink in the world's forests. *Science*, **2011**, 333, 988-93	33.3	3950
365	The impacts of climate change on water resources and agriculture in China. *Nature*, **2010**, 467, 43-51	50.4	2046
364	Greening of the Earth and its drivers. *Nature Climate Change*, **2016**, 6, 791-795	21.4	1036
363	Reduction of forest soil respiration in response to nitrogen deposition. *Nature Geoscience*, **2010**, 3, 315-322	12.3	988
362	Evaluation of the terrestrial carbon cycle, future plant geography and climate-carbon cycle feedbacks using five Dynamic Global Vegetation Models (DGVMs). *Global Change Biology*, **2008**, 14, 2015-2039	11.4	955
361	The carbon balance of terrestrial ecosystems in China. *Nature*, **2009**, 458, 1009-13	50.4	887
360	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	11.5	886
359	China and India lead in greening of the world through land-use management. *Nature Sustainability*, **2019**, 2, 122-129	22.1	796
358	Net carbon dioxide losses of northern ecosystems in response to autumn warming. *Nature*, **2008**, 451, 49-52	50.4	759
357	CO2 balance of boreal, temperate, and tropical forests derived from a global database. *Global Change Biology*, **2007**, 13, 2509-2537	11.4	744
356	Revegetation in China□ Loess Plateau is approaching sustainable water resource limits. *Nature Climate Change*, **2016**, 6, 1019-1022	21.4	708
355	Reduced sediment transport in the Yellow River due to anthropogenic changes. *Nature Geoscience*, **2016**, 9, 38-41	18.3	613
354	Surface urban heat island across 419 global big cities. *Environmental Science & Technology*, **2012**, 46, 696-703	10.3	598
353	Influence of spring and autumn phenological transitions on forest ecosystem productivity. *Philosophical Transactions of the Royal Society B: Biological Sciences*, **2010**, 365, 3227-46	5.8	594
352	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*, **2015**, 5, 927-948	5	579
351	Variations in satellite-derived phenology in China's temperate vegetation. *Global Change Biology*, **2006**, 12, 672-685	11.4	505
350	Evaluation of terrestrial carbon cycle models for their response to climate variability and to CO2 trends. *Global Change Biology*, **2013**, 19, 2117-32	11.4	481

349	Changes in satellite-derived vegetation growth trend in temperate and boreal Eurasia from 1982 to 2006. *Global Change Biology*, **2011**, 17, 3228-3239	11.4	451
348	Growing season extension and its impact on terrestrial carbon cycle in the Northern Hemisphere over the past 2 decades. *Global Biogeochemical Cycles*, **2007**, 21, n/a-n/a	5.9	443
347	Recent trends and drivers of regional sources and sinks of carbon dioxide. *Biogeosciences*, **2015**, 12, 653-679	4.8	432
346	The impacts of climate change and human activities on biogeochemical cycles on the Qinghai-Tibetan Plateau. *Global Change Biology*, **2013**, 19, 2940-55	11.4	428
345	Changes in climate and land use have a larger direct impact than rising CO2 on global river runoff trends. *Proceedings of the National Academy of Sciences of the United States of America*, **2007**, 104, 15242-7	11.5	422
344	Declining global warming effects on the phenology of spring leaf unfolding. *Nature*, **2015**, 526, 104-7	50.4	409
343	Mapping tree density at a global scale. *Nature*, **2015**, 525, 201-5	50.4	402
342	Plant phenology and global climate change: Current progresses and challenges. *Global Change Biology*, **2019**, 25, 1922-1940	11.4	382
341	Temperature and vegetation seasonality diminishment over northern lands. *Nature Climate Change*, **2013**, 3, 581-586	21.4	381
340	Detection and attribution of vegetation greening trend in China over the last 30 years. *Global Change Biology*, **2015**, 21, 1601-9	11.4	373
339	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, 1240-5	11.5	352
338	NDVI-based increase in growth of temperate grasslands and its responses to climate changes in China. *Global Environmental Change*, **2006**, 16, 340-348	10.1	345
337	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	5.8	331
336	Afforestation in China cools local land surface temperature. *Proceedings of the National Academy of Sciences of the United States of America*, **2014**, 111, 2915-9	11.5	329
335	Asymmetric effects of daytime and night-time warming on Northern Hemisphere vegetation. *Nature*, **2013**, 501, 88-92	50.4	328
334	Terrestrial vegetation carbon sinks in China, 1981–2000. *Science in China Series D: Earth Sciences*, **2007**, 50, 1341-1350		322
333	Characteristics, drivers and feedbacks of global greening. *Nature Reviews Earth & Environment*, **2020**, 1, 14-27	30.2	316
332	Interannual variations of monthly and seasonal normalized difference vegetation index (NDVI) in China from 1982 to 1999. *Journal of Geophysical Research*, **2003**, 108,		312

331	Spatiotemporal patterns of terrestrial gross primary production: A review. *Reviews of Geophysics*, **2015**, 53, 785-818	23.1	297
330	Evidence for a weakening relationship between interannual temperature variability and northern vegetation activity. *Nature Communications*, **2014**, 5, 5018	17.4	274
329	Widespread decline of Congo rainforest greenness in the past decade. *Nature*, **2014**, 509, 86-90	50.4	274
328	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, 9299-304	11.5	270
327	Increased atmospheric vapor pressure deficit reduces global vegetation growth. *Science Advances*, **2019**, 5, eaax1396	14.3	270
326	Nutrient availability as the key regulator of global forest carbon balance. *Nature Climate Change*, **2014**, 4, 471-476	21.4	269
325	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, 4910-5	11.5	266
324	Leaf onset in the northern hemisphere triggered by daytime temperature. *Nature Communications*, **2015**, 6, 6911	17.4	261
323	Precipitation impacts on vegetation spring phenology on the Tibetan Plateau. *Global Change Biology*, **2015**, 21, 3647-56	11.4	260
322	Recent Third Pole'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	6.1	253
321	A framework for benchmarking land models. *Biogeosciences*, **2012**, 9, 3857-3874	4.6	238
320	Increasing altitudinal gradient of spring vegetation phenology during the last decade on the Qinghai□Tibetan Plateau. *Agricultural and Forest Meteorology*, **2014**, 189-190, 71-80	5.8	236
319	Stabilization of atmospheric nitrogen deposition in China over the past decade. *Nature Geoscience*, **2019**, 12, 424-429	18.3	232
318	Variations in Vegetation Net Primary Production in the Qinghai-Xizang Plateau, China, from 1982 to 1999. *Climatic Change*, **2006**, 74, 253-267	4.5	229
317	Carbon accumulation in European forests. *Nature Geoscience*, **2008**, 1, 425-429	18.3	227
316	Changes in satellite-derived spring vegetation green-up date and its linkage to climate in China from 1982 to 2010: a multimethod analysis. *Global Change Biology*, **2013**, 19, 881-91	11.4	215
315	Fertile forests produce biomass more efficiently. *Ecology Letters*, **2012**, 15, 520-6	10	211
314	A two-fold increase of carbon cycle sensitivity to tropical temperature variations. *Nature*, **2014**, 506, 212-5	50.4	210

313	Large-scale variations in the vegetation growing season and annual cycle of atmospheric CO2 at high northern latitudes from 1950 to 2011. *Global Change Biology*, **2013**, 19, 3167-83	11.4	206
312	The European carbon balance. Part 3: forests. *Global Change Biology*, **2010**, 16, 1429-1450	11.4	206
311	Delayed autumn phenology in the Northern Hemisphere is related to change in both climate and spring phenology. *Global Change Biology*, **2016**, 22, 3702-3711	11.4	199
310	Recent change of vegetation growth trend in China. *Environmental Research Letters*, **2011**, 6, 044027	6.2	197
309	Temperature sensitivity of soil respiration in different ecosystems in China. *Soil Biology and Biochemistry*, **2009**, 41, 1008-1014	7.5	187
308	Changes in vegetation net primary productivity from 1982 to 1999 in China. *Global Biogeochemical Cycles*, **2005**, 19, n/a-n/a	5.9	185
307	Temperature, precipitation, and insolation effects on autumn vegetation phenology in temperate China. *Global Change Biology*, **2016**, 22, 644-55	11.4	184
306	Climate mitigation from vegetation biophysical feedbacks during the past three decades. *Nature Climate Change*, **2017**, 7, 432-436	21.4	181
305	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, 2788-93	11.5	181
304	Variation in leaf flushing date influences autumnal senescence and next year's flushing date in two temperate tree species. *Proceedings of the National Academy of Sciences of the United States of America*, **2014**, 111, 7355-60	11.5	178
303	Soil respiration under climate warming: differential response of heterotrophic and autotrophic respiration. *Global Change Biology*, **2014**, 20, 3229-37	11.4	177
302	Impacts of climate and CO2 changes on the vegetation growth and carbon balance of Qinghai□Tibetan grasslands over the past five decades. *Global and Planetary Change*, **2012**, 98-99, 73-80	4.2	171
301	Spring vegetation green-up date in China inferred from SPOT NDVI data: A multiple model analysis. *Agricultural and Forest Meteorology*, **2012**, 165, 104-113	5.8	170
300	Increasing net primary production in China from 1982 to 1999. *Frontiers in Ecology and the Environment*, **2003**, 1, 293-297	5.5	167
299	Effect of climate and CO2 changes on the greening of the Northern Hemisphere over the past two decades. *Geophysical Research Letters*, **2006**, 33,	4.9	166
298	Spatiotemporal patterns of terrestrial carbon cycle during the 20th century. *Global Biogeochemical Cycles*, **2009**, 23, n/a-n/a	5.9	151
297	A meta-analysis of 1,119 manipulative experiments on terrestrial carbon-cycling responses to global change. *Nature Ecology and Evolution*, **2019**, 3, 1309-1320	12.3	150
296	Terrestrial carbon cycle affected by non-uniform climate warming. *Nature Geoscience*, **2014**, 7, 173-180	18.3	149

295	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, 4380-5	11.5	149
294	Strong impacts of daily minimum temperature on the green-up date and summer greenness of the Tibetan Plateau. *Global Change Biology*, **2016**, 22, 3057-66	11.4	147
293	A cross-biome synthesis of soil respiration and its determinants under simulated precipitation changes. *Global Change Biology*, **2016**, 22, 1394-405	11.4	145
292	The contribution of China's emissions to global climate forcing. *Nature*, **2016**, 531, 357-61	50.4	145
291	Change in terrestrial ecosystem water-use efficiency over the last three decades. *Global Change Biology*, **2015**, 21, 2366-78	11.4	144
290	Emerging opportunities and challenges in phenology: a review. *Ecosphere*, **2016**, 7, e01436	3.1	144
289	Contrasting responses of water use efficiency to drought across global terrestrial ecosystems. *Scientific Reports*, **2016**, 6, 23284	4.9	143
288	Recent spring phenology shifts in western Central Europe based on multiscale observations. *Global Ecology and Biogeography*, **2014**, 23, 1255-1263	6.1	143
287	Extensive and drastically different alpine lake changes on Asia's high plateaus during the past four decades. *Geophysical Research Letters*, **2017**, 44, 252-260	4.9	141
286	Regional differences of lake evolution across China during 1960s2015 and its natural and anthropogenic causes. *Remote Sensing of Environment*, **2019**, 221, 386-404	13.2	140
285	Forest annual carbon cost: a global-scale analysis of autotrophic respiration. *Ecology*, **2010**, 91, 652-61	4.6	137
284	Current systematic carbon-cycle observations and the need for implementing a policy-relevant carbon observing system. *Biogeosciences*, **2014**, 11, 3547-3602	4.6	136
283	Variation in a satellite-based vegetation index in relation to climate in China. *Journal of Vegetation Science*, **2004**, 15, 219	3.1	136
282	Precipitation patterns alter growth of temperate vegetation. *Geophysical Research Letters*, **2005**, 32,	4.9	135
281	High-resolution mapping of combustion processes and implications for CO₂ emissions. *Atmospheric Chemistry and Physics*, **2013**, 13, 5189-5203	6.8	131
280	Air temperature optima of vegetation productivity across global biomes. *Nature Ecology and Evolution*, **2019**, 3, 772-779	12.3	128
279	Divergent hydrological response to large-scale afforestation and vegetation greening in China. *Science Advances*, **2018**, 4, eaar4182	14.3	128
278	Nitrogen and phosphorus constrain the CO2 fertilization of global plant biomass. *Nature Climate Change*, **2019**, 9, 684-689	21.4	125

277	Partitioning global land evapotranspiration using CMIP5 models constrained by observations. *Nature Climate Change*, **2018**, 8, 640-646	21.4	123
276	Unexpected role of winter precipitation in determining heat requirement for spring vegetation green-up at northern middle and high latitudes. *Global Change Biology*, **2014**, 20, 3743-55	11.4	122
275	Large inert carbon pool in the terrestrial biosphere during the Last Glacial Maximum. *Nature Geoscience*, **2012**, 5, 74-79	18.3	120
274	Variations in atmospheric CO2 growth rates coupled with tropical temperature. *Proceedings of the National Academy of Sciences of the United States of America*, **2013**, 110, 13061-6	11.5	119
273	A reversal in global terrestrial stilling and its implications for wind energy production. *Nature Climate Change*, **2019**, 9, 979-985	21.4	115
272	Drought and spring cooling induced recent decrease in vegetation growth in Inner Asia. *Agricultural and Forest Meteorology*, **2013**, 178-179, 21-30	5.8	114
271	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	11.4	110
270	Human-induced greening of the northern extratropical land surface. *Nature Climate Change*, **2016**, 6, 959-963	21.4	109
269	Weakening temperature control on the interannual variations of spring carbon uptake across northern lands. *Nature Climate Change*, **2017**, 7, 359-363	21.4	107
268	Changes in nutrient concentrations of leaves and roots in response to global change factors. *Global Change Biology*, **2017**, 23, 3849-3856	11.4	106
267	Extension of the growing season increases vegetation exposure to frost. *Nature Communications*, **2018**, 9, 426	17.4	106
266	Summer soil drying exacerbated by earlier spring greening of northern vegetation. *Science Advances*, **2020**, 6, eaax0255	14.3	106
265	Increased heat requirement for leaf flushing in temperate woody species over 1980-2012: effects of chilling, precipitation and insolation. *Global Change Biology*, **2015**, 21, 2687-2697	11.4	103
264	Recent increases in terrestrial carbon uptake at little cost to the water cycle. *Nature Communications*, **2017**, 8, 110	17.4	103
263	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	5.8	102
262	Changes in biomass carbon stocks in China's grasslands between 1982 and 1999. *Global Biogeochemical Cycles*, **2007**, 21, n/a-n/a	5.9	102
261	NDVI-indicated decline in desertification in China in the past two decades. *Geophysical Research Letters*, **2005**, 32,	4.9	102
260	Plant phenological responses to climate change on the Tibetan Plateau: research status and challenges. *National Science Review*, **2015**, 2, 454-467	10.8	99

259	Shifting from a fertilization-dominated to a warming-dominated period. *Nature Ecology and Evolution*, **2017**, 1, 1438-1445	12.3	99
258	Keeping global warming within 1.5 ℃ constrains emergence of aridification. *Nature Climate Change*, **2018**, 8, 70-74	21.4	96
257	Global forest carbon uptake due to nitrogen and phosphorus deposition from 1850 to 2100. *Global Change Biology*, **2017**, 23, 4854-4872	11.4	95
256	Disentangling climatic and anthropogenic controls on global terrestrial evapotranspiration trends. *Environmental Research Letters*, **2015**, 10, 094008	6.2	93
255	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	5.8	92
254	Application of the ORCHIDEE global vegetation model to evaluate biomass and soil carbon stocks of Qinghai-Tibetan grasslands. *Global Biogeochemical Cycles*, **2010**, 24, n/a-n/a	5.9	92
253	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	5.8	89
252	Benchmarking coupled climate-carbon models against long-term atmospheric CO2 measurements. *Global Biogeochemical Cycles*, **2010**, 24, n/a-n/a	5.9	88
251	NDVI indicated characteristics of vegetation cover change in China's metropolises over the last three decades. *Environmental Monitoring and Assessment*, **2011**, 179, 1-14	3.1	87
250	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	4.2	87
249	Are ecological gradients in seasonal Q10 of soil respiration explained by climate or by vegetation seasonality?. *Soil Biology and Biochemistry*, **2010**, 42, 1728-1734	7.5	87
248	Lateral transport of soil carbon and land-atmosphere CO2 flux induced by water erosion in China. *Proceedings of the National Academy of Sciences of the United States of America*, **2016**, 113, 6617-22	11.5	86
247	Has the advancing onset of spring vegetation green-up slowed down or changed abruptly over the last three decades?. *Global Ecology and Biogeography*, **2015**, 24, 621-631	6.1	86
246	Global evapotranspiration over the past three decades: estimation based on the water balance equation combined with empirical models. *Environmental Research Letters*, **2012**, 7, 014026	6.2	86
245	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	11.5	85
244	Drought timing influences the legacy of tree growth recovery. *Global Change Biology*, **2018**, 24, 3546-3559	11.4	83
243	The carbon budget of terrestrial ecosystems in East Asia over the last two decades. *Biogeosciences*, **2012**, 9, 3571-3586	4.6	83
242	Interannual variation of terrestrial carbon cycle: Issues and perspectives. *Global Change Biology*, **2020**, 26, 300-318	11.4	83

241	Biomass production efficiency controlled by management in temperate and boreal ecosystems. *Nature Geoscience*, **2015**, 8, 843-846	18.3	79
240	A worldwide analysis of spatiotemporal changes in water balance-based evapotranspiration from 1982 to 2009. *Journal of Geophysical Research D: Atmospheres*, **2014**, 119, 1186-1202	4.4	79
239	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,		77
238	Global trends in carbon sinks and their relationships with CO2 and temperature. *Nature Climate Change*, **2019**, 9, 73-79	21.4	77
237	Excessive Afforestation and Soil Drying on China's Loess Plateau. *Journal of Geophysical Research G: Biogeosciences*, **2018**, 123, 923-935	3.7	73
236	Impact of Earth Greening on the Terrestrial Water Cycle. *Journal of Climate*, **2018**, 31, 2633-2650	4.4	72
235	The bioelements, the elementome, and the biogeochemical niche. *Ecology*, **2019**, 100, e02652	4.6	71
234	The carbon budget of South Asia. *Biogeosciences*, **2013**, 10, 513-527	4.6	71
233	The effect of nitrogen addition on soil respiration from a nitrogen-limited forest soil. *Agricultural and Forest Meteorology*, **2014**, 197, 103-110	5.8	70
232	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	5	69
231	Biomass carbon stocks in China's forests between 2000 and 2050: a prediction based on forest biomass-age relationships. *Science China Life Sciences*, **2010**, 53, 776-83	8.5	69
230	Increased phosphate uptake but not resorption alleviates phosphorus deficiency induced by nitrogen deposition in temperate Larix principis-rupprechtii plantations. *New Phytologist*, **2016**, 212, 1019-1029	9.8	69
229	Increasingly Important Role of Atmospheric Aridity on Tibetan Alpine Grasslands. *Geophysical Research Letters*, **2018**, 45, 2852-2859	4.9	65
228	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	10.8	65
227	Effects of double cropping on summer climate of the North China Plain and neighbouring regions. *Nature Climate Change*, **2014**, 4, 615-619	21.4	64
226	Ecosystem Traits Linking Functional Traits to Macroecology. *Trends in Ecology and Evolution*, **2019**, 34, 200-210	10.9	64
225	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	4.2	63
224	Can we reconcile atmospheric estimates of the Northern terrestrial carbon sink with land-based accounting?. *Current Opinion in Environmental Sustainability*, **2010**, 2, 225-230	7.2	63

223	Global patterns and climate drivers of water-use efficiency in terrestrial ecosystems deduced from satellite-based datasets and carbon cycle models. *Global Ecology and Biogeography*, **2016**, 25, 311-323	6.1	63
222	Varying responses of vegetation activity to climate changes on the Tibetan Plateau grassland. *International Journal of Biometeorology*, **2017**, 61, 1433-1444	3.7	62
221	Afforestation neutralizes soil pH. *Nature Communications*, **2018**, 9, 520	17.4	62
220	Lower land-use emissions responsible for increased net land carbon sink during the slow warming period. *Nature Geoscience*, **2018**, 11, 739-743	18.3	62
219	Larger temperature response of autumn leaf senescence than spring leaf-out phenology. *Global Change Biology*, **2018**, 24, 2159-2168	11.4	62
218	Deceleration of China'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	11.5	61
217	Divergent changes in the elevational gradient of vegetation activities over the last 30 years. *Nature Communications*, **2019**, 10, 2970	17.4	59
216	Change in winter snow depth and its impacts on vegetation in China. *Global Change Biology*, **2010**, 16, no-no	11.4	59
215	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	5	58
214	A new high-resolution N2O emission inventory for China in 2008. *Environmental Science & Technology*, **2014**, 48, 8538-47	10.3	57
213	Evaluation of an improved intermediate complexity snow scheme in the ORCHIDEE land surface model. *Journal of Geophysical Research D: Atmospheres*, **2013**, 118, 6064-6079	4.4	57
212	Multifaceted characteristics of dryland aridity changes in a warming world. *Nature Reviews Earth & Environment*, **2021**, 2, 232-250	30.2	57
211	Seasonal responses of terrestrial ecosystem water-use efficiency to climate change. *Global Change Biology*, **2016**, 22, 2165-77	11.4	57
210	Plausible rice yield losses under future climate warming. *Nature Plants*, **2016**, 3, 16202	11.5	55
209	Increased control of vegetation on global terrestrial energy fluxes. *Nature Climate Change*, **2020**, 10, 356-362	21.4	55
208	The impacts of climate extremes on the terrestrial carbon cycle: A review. *Science China Earth Sciences*, **2019**, 62, 1551-1563	4.6	54
207	European land CO2 sink influenced by NAO and East-Atlantic Pattern coupling. *Nature Communications*, **2016**, 7, 10315	17.4	54
206	Spatial and temporal variations of spring dust emissions in northern China over the last 30 years. *Atmospheric Environment*, **2016**, 126, 117-127	5.3	54

205	Attributing the increase in atmospheric CO2 to emitters and absorbers. *Nature Climate Change*, **2013**, 3, 926-930	21.4	53
204	Three times greater weight of daytime than of night-time temperature on leaf unfolding phenology in temperate trees. *New Phytologist*, **2016**, 212, 590-597	9.8	52
203	Asymmetric sensitivity of first flowering date to warming and cooling in alpine plants. *Ecology*, **2014**, 95, 3387-3398	4.6	52
202	Daylength helps temperate deciduous trees to leaf-out at the optimal time. *Global Change Biology*, **2019**, 25, 2410-2418	11.4	50
201	Spatio-temporal patterns of the area experiencing negative vegetation growth anomalies in China over the last three decades. *Environmental Research Letters*, **2012**, 7, 035701	6.2	50
200	Vegetation cover-another dominant factor in determining global water resources in forested regions. *Global Change Biology*, **2018**, 24, 786-795	11.4	50
199	Permafrost thawing puts the frozen carbon at risk over the Tibetan Plateau. *Science Advances*, **2020** , 6, eaaz3513	14.3	49
198	Effects of land use change and management on the European cropland carbon balance. *Global Change Biology*, **2011**, 17, 320-338	11.4	49
197	Autumn temperature and carbon balance of a boreal Scots pine forest in Southern Finland. *Biogeosciences*, **2010**, 7, 163-176	4.6	49
196	Seasonally different response of photosynthetic activity to daytime and night-time warming in the Northern Hemisphere. *Global Change Biology*, **2015**, 21, 377-87	11.4	48
195	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	3.9	46
194	Future biomass carbon sequestration capacity of Chinese forests. *Science Bulletin*, **2018**, 63, 1108-1117	10.6	45
193	Development of a land surface model with coupled snow and frozen soil physics. *Water Resources Research*, **2017**, 53, 5085-5103	5.4	45
192	Velocity of change in vegetation productivity over northern high latitudes. *Nature Ecology and Evolution*, **2017**, 1, 1649-1654	12.3	43
191	Regional differences in the timing of recent air warming during the past four decades in China. *Science Bulletin*, **2010**, 55, 1968-1973		43
190	Benchmarking the seasonal cycle of CO2 fluxes simulated by terrestrial ecosystem models. *Global Biogeochemical Cycles*, **2015**, 29, 46-64	5.9	42
189	Temporal trade-off between gymnosperm resistance and resilience increases forest sensitivity to extreme drought. *Nature Ecology and Evolution*, **2020**, 4, 1075-1083	12.3	42
188	Spatiotemporal pattern of terrestrial evapotranspiration in China during the past thirty years. *Agricultural and Forest Meteorology*, **2018**, 259, 131-140	5.8	42

187	Stand ages regulate the response of soil respiration to temperature in a Larix principis-rupprechtii plantation. *Agricultural and Forest Meteorology*, **2014**, 184, 179-187	5.8	42
186	Causes of spring vegetation growth trends in the northern mid–high latitudes from 1982 to 2004. *Environmental Research Letters*, **2012**, 7, 014010	6.2	42
185	Data-driven estimates of global nitrous oxide emissions from croplands. *National Science Review*, **2020**, 7, 441-452	10.8	42
184	Response of terrestrial evapotranspiration to Earth's greening. *Current Opinion in Environmental Sustainability*, **2018**, 33, 9-25	7.2	41
183	Disentangling the mechanisms behind winter snow impact on vegetation activity in northern ecosystems. *Global Change Biology*, **2018**, 24, 1651-1662	11.4	41
182	Climate Change Trends and Impacts on Vegetation Greening Over the Tibetan Plateau. *Journal of Geophysical Research D: Atmospheres*, **2019**, 124, 7540-7552	4.4	41
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