

Philippe Ciaïs

List of Publications by Year in descending order

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Version: 2024-02-01

946
papers

145,277
citations

82

170
h-index

123

340
g-index

1050
all docs

1050
docs citations

1050
times ranked

70194
citing authors

#	ARTICLE	IF	CITATIONS
1	TransCom 3 CO ₂ ; inversion intercomparison: 1. Annual mean control results and sensitivity to transport and prior flux information. <i>Tellus, Series B: Chemical and Physical Meteorology</i> , 2022, 55, 555.	1.6	105
2	Vulnerability of permafrost carbon to global warming. Part I: model description and role of heat generated by organic matter decomposition. <i>Tellus, Series B: Chemical and Physical Meteorology</i> , 2022, 60, 250.	1.6	87
3	Vulnerability of permafrost carbon to global warming. Part II: sensitivity of permafrost carbon stock to global warming. <i>Tellus, Series B: Chemical and Physical Meteorology</i> , 2022, 60, 265.	1.6	57
4	The YAK-AEROSIB transcontinental aircraft campaigns: new insights on the transport of CO ₂ , CO and O ₃ ; across Siberia. <i>Tellus, Series B: Chemical and Physical Meteorology</i> , 2022, 60, 551.	1.6	61
5	Historical and future perspectives of global soil carbon response to climate and land-use changes. <i>Tellus, Series B: Chemical and Physical Meteorology</i> , 2022, 62, 700.	1.6	103
6	A recent build-up of atmospheric CO ₂ ; over Europe. Part 1: observed signals and possible explanations. <i>Tellus, Series B: Chemical and Physical Meteorology</i> , 2022, 62, 1.	1.6	40
7	The relationship between peak warming and cumulative CO ₂ ; emissions, and its use to quantify vulnerabilities in the carbon-climate-human system. <i>Tellus, Series B: Chemical and Physical Meteorology</i> , 2022, 63, 145.	1.6	58
8	Decadal trends in the seasonal-cycle amplitude of terrestrial CO ₂ ; exchange resulting from the ensemble of terrestrial biosphere models. <i>Tellus, Series B: Chemical and Physical Meteorology</i> , 2022, 68, 28968.	1.6	31
9	Bidirectional drought-related canopy dynamics across pantropical forests: a satellite-based statistical analysis. <i>Remote Sensing in Ecology and Conservation</i> , 2022, 8, 72-91.	4.3	6
10	Regional trends and drivers of the global methane budget. <i>Global Change Biology</i> , 2022, 28, 182-200.	9.5	56
11	Global maps and factors driving forest foliar elemental composition: the importance of evolutionary history. <i>New Phytologist</i> , 2022, 233, 169-181.	7.3	15
12	Near-real-time global gridded daily CO ₂ emissions. <i>Innovation(China)</i> , 2022, 3, 100182.	9.1	24
13	Data-driven estimates of fertilizer-induced soil NH ₃ , NO and N ₂ O emissions from croplands in China and their climate change impacts. <i>Global Change Biology</i> , 2022, 28, 1008-1022.	9.5	51
14	Improved global-scale predictions of soil carbon stocks with Millennial Version 2. <i>Soil Biology and Biochemistry</i> , 2022, 164, 108466.	8.8	36
15	Natural forests promote phosphorus retention in soil. <i>Global Change Biology</i> , 2022, 28, 1678-1689.	9.5	13
16	Tropical tall forests are more sensitive and vulnerable to drought than short forests. <i>Global Change Biology</i> , 2022, 28, 1583-1595.	9.5	20
17	Vertical profiles of leaf photosynthesis and leaf traits and soil nutrients in two tropical rainforests in French Guiana before and after a 3-year nitrogen and phosphorus addition experiment. <i>Earth System Science Data</i> , 2022, 14, 5-18.	9.9	6
18	Indicate separate contributions of long-lived and short-lived greenhouse gases in emission targets. <i>Npj Climate and Atmospheric Science</i> , 2022, 5, 5.	6.8	36

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19	Impact of Lockdowns and Winter Temperatures on Natural Gas Consumption in Europe. <i>Earth's Future</i> , 2022, 10, .	6.3	10
20	Global Water Scarcity Assessment Incorporating Green Water in Crop Production. <i>Water Resources Research</i> , 2022, 58, .	4.2	19
21	Short-term reduction of regional enhancement of atmospheric CO ₂ in China during the first COVID-19 pandemic period. <i>Environmental Research Letters</i> , 2022, 17, 024036.	5.2	6
22	Are Land Use Change Emissions in Southeast Asia Decreasing or Increasing?. <i>Global Biogeochemical Cycles</i> , 2022, 36, .	4.9	7
23	Assessing the Effectiveness of an Urban CO ₂ Monitoring Network over the Paris Region through the COVID-19 Lockdown Natural Experiment. <i>Environmental Science & Technology</i> , 2022, 56, 2153-2162.	10.0	20
24	A strong mitigation scenario maintains climate neutrality of northern peatlands. <i>One Earth</i> , 2022, 5, 86-97.	6.8	14
25	Decarbonising the iron and steel sector for a 2°C target using inherent waste streams. <i>Nature Communications</i> , 2022, 13, 297.	12.8	26
26	A new SMAP soil moisture and vegetation optical depth product (SMAP-IB): Algorithm, assessment and inter-comparison. <i>Remote Sensing of Environment</i> , 2022, 271, 112921.	11.0	46
27	French crop yield, area and production data for ten staple crops from 1900 to 2018 at county resolution. <i>Scientific Data</i> , 2022, 9, 38.	5.3	4
28	A large but transient carbon sink from urbanization and rural depopulation in China. <i>Nature Sustainability</i> , 2022, 5, 321-328.	23.7	130
29	Deciphering the multiple effects of climate warming on the temporal shift of leaf unfolding. <i>Nature Climate Change</i> , 2022, 12, 193-199.	18.8	25
30	Global assessment of oil and gas methane ultra-emitters. <i>Science</i> , 2022, 375, 557-561.	12.6	114
31	Pyrogenic carbon decomposition critical to resolving fire's role in the Earth system. <i>Nature Geoscience</i> , 2022, 15, 135-142.	12.9	22
32	Atmospheric dryness reduces photosynthesis along a large range of soil water deficits. <i>Nature Communications</i> , 2022, 13, 989.	12.8	100
33	Spatiotemporal patterns and drivers of terrestrial dissolved organic carbon (DOC) leaching into the European river network. <i>Earth System Dynamics</i> , 2022, 13, 393-418.	7.1	11
34	Decreasing rainfall frequency contributes to earlier leaf onset in northern ecosystems. <i>Nature Climate Change</i> , 2022, 12, 386-392.	18.8	24
35	Definitions and methods to estimate regional land carbon fluxes for the second phase of the REgional Carbon Cycle Assessment and Processes Project (RECCAP-2). <i>Geoscientific Model Development</i> , 2022, 15, 1289-1316.	3.6	34
36	Retention of deposited ammonium and nitrate and its impact on the global forest carbon sink. <i>Nature Communications</i> , 2022, 13, 880.	12.8	55

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37	Surface temperatures reveal the patterns of vegetation water stress and their environmental drivers across the tropical Americas. <i>Global Change Biology</i> , 2022, 28, 2940-2955.	9.5	9
38	Emissions rebound from the COVID-19 pandemic. <i>Nature Climate Change</i> , 2022, 12, 412-414.	18.8	41
39	The land-to-ocean loops of the global carbon cycle. <i>Nature</i> , 2022, 603, 401-410.	27.8	150
40	Global fossil carbon emissions rebound near pre-COVID-19 levels. <i>Environmental Research Letters</i> , 2022, 17, 031001.	5.2	42
41	Monitoring global carbon emissions in 2021. <i>Nature Reviews Earth & Environment</i> , 2022, 3, 217-219.	29.7	215
42	Deficiencies of Phenology Models in Simulating Spatial and Temporal Variations in Temperate Spring Leaf Phenology. <i>Journal of Geophysical Research G: Biogeosciences</i> , 2022, 127, .	3.0	6
43	Large CO ₂ Emitters as Seen From Satellite: Comparison to a Gridded Global Emission Inventory. <i>Geophysical Research Letters</i> , 2022, 49, .	4.0	23
44	The critical benefits of snowpack insulation and snowmelt for winter wheat productivity. <i>Nature Climate Change</i> , 2022, 12, 485-490.	18.8	19
45	Assessing methane emissions for northern peatlands in ORCHIDEE-PEAT revision 7020. <i>Geoscientific Model Development</i> , 2022, 15, 2813-2838.	3.6	8
46	Near-field atmospheric inversions for the localization and quantification of controlled methane releases using stationary and mobile measurements. <i>Quarterly Journal of the Royal Meteorological Society</i> , 2022, 148, 1886-1912.	2.7	10
47	Direct observations of CO ₂ emission reductions due to COVID-19 lockdown across European urban districts. <i>Science of the Total Environment</i> , 2022, 830, 154662.	8.0	37
48	Uncovering the critical soil moisture thresholds of plant water stress for European ecosystems. <i>Global Change Biology</i> , 2022, 28, 2111-2123.	9.5	23
49	Global soil organic carbon changes and economic revenues with biochar application. <i>GCB Bioenergy</i> , 2022, 14, 364-377.	5.6	23
50	Doubling of annual forest carbon loss over the tropics during the early twenty-first century. <i>Nature Sustainability</i> , 2022, 5, 444-451.	23.7	47
51	Recent expansion of oil palm plantations into carbon-rich forests. <i>Nature Sustainability</i> , 2022, 5, 574-577.	23.7	14
52	Impact of bioenergy crop expansion on climate's carbon cycle feedbacks in overshoot scenarios. <i>Earth System Dynamics</i> , 2022, 13, 779-794.	7.1	8
53	Field-based tree mortality constraint reduces estimates of model-projected forest carbon sinks. <i>Nature Communications</i> , 2022, 13, 2094.	12.8	8
54	Exploring complex water stress's gross primary production relationships: Impact of climatic drivers, main effects, and interactive effects. <i>Global Change Biology</i> , 2022, 28, 4110-4123.	9.5	37

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55	Comparing national greenhouse gas budgets reported in UNFCCC inventories against atmospheric inversions. <i>Earth System Science Data</i> , 2022, 14, 1639-1675.	9.9	58
56	Trade-off between tree planting and wetland conservation in China. <i>Nature Communications</i> , 2022, 13, 1967.	12.8	32
57	Effect of tree demography and flexible root water uptake for modeling the carbon and water cycles of Amazonia. <i>Ecological Modelling</i> , 2022, 469, 109969.	2.5	7
58	Global Carbon Budget 2021. <i>Earth System Science Data</i> , 2022, 14, 1917-2005.	9.9	663
59	Paris Agreement requires substantial, broad, and sustained policy efforts beyond COVID-19 public stimulus packages. <i>Climatic Change</i> , 2022, 172, 1.	3.6	7
60	Observed strong atmospheric water constraints on forest photosynthesis using eddy covariance and satellite-based data across the Northern Hemisphere. <i>International Journal of Applied Earth Observation and Geoinformation</i> , 2022, 110, 102808.	1.9	0
61	Differential impacts of urbanization characteristics on city-level carbon emissions from passenger transport on road: Evidence from 360 cities in China. <i>Building and Environment</i> , 2022, 219, 109165.	6.9	8
62	Bottom-up approaches for estimating terrestrial GHG budgets: Bookkeeping, process-based modeling, and data-driven methods. , 2022, , 59-85.		0
63	Balancing greenhouse gas sources and sinks: Inventories, budgets, and climate policy. , 2022, , 3-28.		0
64	Large loss and rapid recovery of vegetation cover and aboveground biomass over forest areas in Australia during 2019â€“2020. <i>Remote Sensing of Environment</i> , 2022, 278, 113087.	11.0	26
65	How the Glasgow Declaration on Forests can help keep alive the 1.5â€“C target. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2022, 119, .	7.1	11
66	Climate Warming Mitigation from Nationally Determined Contributions. <i>Advances in Atmospheric Sciences</i> , 2022, 39, 1217-1228.	4.3	6
67	Climatic and biotic factors influencing regional declines and recovery of tropical forest biomass from the 2015/16 El NiÃ±o. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2022, 119, .	7.1	13
68	Regional and seasonal partitioning of water and temperature controls on global land carbon uptake variability. <i>Nature Communications</i> , 2022, 13, .	12.8	18
69	Timing and Order of Extreme Drought and Wetness Determine Bioclimatic Sensitivity of Tree Growth. <i>Earth's Future</i> , 2022, 10, .	6.3	7
70	Gridded maps of wetlands dynamics over mid-low latitudes for 1980â€“2020 based on TOPMODEL. <i>Scientific Data</i> , 2022, 9, .	5.3	7
71	Mid-Holocene high-resolution temperature and precipitation gridded reconstructions over China: Implications for elevation-dependent temperature changes. <i>Earth and Planetary Science Letters</i> , 2022, 593, 117656.	4.4	7
72	Global patterns of daily CO2 emissions reductions in the first year of COVID-19. <i>Nature Geoscience</i> , 2022, 15, 615-620.	12.9	46

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73	Improved global wetland carbon isotopic signatures support post-2006 microbial methane emission increase. <i>Communications Earth & Environment</i> , 2022, 3, .	6.8	11
74	Climate Change and Weather Extremes in the Eastern Mediterranean and Middle East. <i>Reviews of Geophysics</i> , 2022, 60, .	23.0	131
75	High-Resolution Lagrangian Inverse Modeling of CO ₂ Emissions Over the Paris Region During the First 2020 Lockdown Period. <i>Journal of Geophysical Research D: Atmospheres</i> , 2022, 127, .	3.3	5
76	Decoupling of greenness and gross primary productivity as aridity decreases. <i>Remote Sensing of Environment</i> , 2022, 279, 113120.	11.0	34
77	The co-evolution of life and organics on earth: Expansions of energy harnessing. <i>Critical Reviews in Environmental Science and Technology</i> , 2021, 51, 603-625.	12.8	2
78	Integrating the evidence for a terrestrial carbon sink caused by increasing atmospheric CO ₂ . <i>New Phytologist</i> , 2021, 229, 2413-2445.	7.3	286
79	Empirical estimates of regional carbon budgets imply reduced global soil heterotrophic respiration. <i>National Science Review</i> , 2021, 8, nwa145.	9.5	70
80	Global-scale assessment and inter-comparison of recently developed/reprocessed microwave satellite vegetation optical depth products. <i>Remote Sensing of Environment</i> , 2021, 253, 112208.	11.0	58
81	Changes in Biomass Turnover Times in Tropical Forests and Their Environmental Drivers From 2001 to 2012. <i>Earth's Future</i> , 2021, 9, .	6.3	6
82	Deforestation-induced warming over tropical mountain regions regulated by elevation. <i>Nature Geoscience</i> , 2021, 14, 23-29.	12.9	73
83	Future impacts of climate change on inland Ramsar wetlands. <i>Nature Climate Change</i> , 2021, 11, 45-51.	18.8	103
84	Can N ₂ O emissions offset the benefits from soil organic carbon storage?. <i>Global Change Biology</i> , 2021, 27, 237-256.	9.5	174
85	Historical and future contributions of inland waters to the Congo Basin carbon balance. <i>Earth System Dynamics</i> , 2021, 12, 37-62.	7.1	13
86	Gridded fossil CO ₂ emissions and related O ₂ combustion consistent with national inventories 1959–2018. <i>Scientific Data</i> , 2021, 8, 2.	5.3	56
87	Coarse woody debris are buffering mortality-induced carbon losses to the atmosphere in tropical forests. <i>Environmental Research Letters</i> , 2021, 16, 011006.	5.2	12
88	A local- to national-scale inverse modeling system to assess the potential of spaceborne CO ₂ measurements for the monitoring of anthropogenic emissions. <i>Atmospheric Measurement Techniques</i> , 2021, 14, 403-433.	3.1	3
89	How much carbon can be added to soil by sorption?. <i>Biogeochemistry</i> , 2021, 152, 127-142.	3.5	27
90	Climate warming from managed grasslands cancels the cooling effect of carbon sinks in sparsely grazed and natural grasslands. <i>Nature Communications</i> , 2021, 12, 118.	12.8	106

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91	Empirical support for the biogeochemical niche hypothesis in forest trees. <i>Nature Ecology and Evolution</i> , 2021, 5, 184-194.	7.8	50
92	Data-driven estimates of global litter production imply slower vegetation carbon turnover. <i>Global Change Biology</i> , 2021, 27, 1678-1688.	9.5	8
93	Risk and vulnerability of Mongolian grasslands under climate change. <i>Environmental Research Letters</i> , 2021, 16, 034035.	5.2	46
94	Global irrigation contribution to wheat and maize yield. <i>Nature Communications</i> , 2021, 12, 1235.	12.8	61
95	The Mediterranean Region as a Paradigm of the Global Decoupling of N and P Between Soils and Freshwaters. <i>Global Biogeochemical Cycles</i> , 2021, 35, e2020GB006874.	4.9	9
96	Potential yield simulated by global gridded crop models: using a process-based emulator to explain their differences. <i>Geoscientific Model Development</i> , 2021, 14, 1639-1656.	3.6	6
97	Global synthesis for the scaling of soil microbial nitrogen to phosphorus in terrestrial ecosystems. <i>Environmental Research Letters</i> , 2021, 16, 044034.	5.2	8
98	Reply to: Old-growth forest carbon sinks overestimated. <i>Nature</i> , 2021, 591, E24-E25.	27.8	14
99	Responses of vegetation greenness and carbon cycle to extreme droughts in China. <i>Agricultural and Forest Meteorology</i> , 2021, 298-299, 108307.	4.8	46
100	Soil moisture-atmosphere feedback dominates land carbon uptake variability. <i>Nature</i> , 2021, 592, 65-69.	27.8	241
101	Irrigation, damming, and streamflow fluctuations of the Yellow River. <i>Hydrology and Earth System Sciences</i> , 2021, 25, 1133-1150.	4.9	19
102	Global evaluation of the nutrient-enabled version of the land surface model ORCHIDEE-CNP v1.2 (r5986). <i>Geoscientific Model Development</i> , 2021, 14, 1987-2010.	3.6	22
103	Widespread decline in winds delayed autumn foliar senescence over high latitudes. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2021, 118, .	7.1	41
104	Carbon loss from forest degradation exceeds that from deforestation in the Brazilian Amazon. <i>Nature Climate Change</i> , 2021, 11, 442-448.	18.8	166
105	Variations of carbon allocation and turnover time across tropical forests. <i>Global Ecology and Biogeography</i> , 2021, 30, 1271-1285.	5.8	12
106	Quantifying forest change in the European Union. <i>Nature</i> , 2021, 592, E13-E14.	27.8	31
107	How to reconstruct aerosol-induced diffuse radiation scenario for simulating GPP in land surface models? An evaluation of reconstruction methods with ORCHIDEE_DFv1.0_DFforc. <i>Geoscientific Model Development</i> , 2021, 14, 2029-2039.	3.6	2
108	Global CO ₂ uptake by cement from 1930 to 2019. <i>Earth System Science Data</i> , 2021, 13, 1791-1805.	9.9	35

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109	Reply to: Disentangling biology from mathematical necessity in twentieth-century gymnosperm resilience trends. <i>Nature Ecology and Evolution</i> , 2021, 5, 736-737.	7.8	1
110	The contributions of individual countries and regions to the global radiative forcing. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2021, 118, .	7.1	15
111	Wetter environment and increased grazing reduced the area burned in northern Eurasia from 2002 to 2016. <i>Biogeosciences</i> , 2021, 18, 2559-2572.	3.3	7
112	Microbial Activity and Root Carbon Inputs Are More Important than Soil Carbon Diffusion in Simulating Soil Carbon Profiles. <i>Journal of Geophysical Research G: Biogeosciences</i> , 2021, 126, e2020JG006205.	3.0	9
113	Cost-effective implementation of the Paris Agreement using flexible greenhouse gas metrics. <i>Science Advances</i> , 2021, 7, .	10.3	29
114	Uncovering the Past and Future Climate Drivers of Wheat Yield Shocks in Europe With Machine Learning. <i>Earth's Future</i> , 2021, 9, e2020EF001815.	6.3	15
115	Spatially explicit analysis identifies significant potential for bioenergy with carbon capture and storage in China. <i>Nature Communications</i> , 2021, 12, 3159.	12.8	58
116	Increased CO ₂ emissions surpass reductions of non-CO ₂ emissions more under higher experimental warming in an alpine meadow. <i>Science of the Total Environment</i> , 2021, 769, 144559.	8.0	18
117	Global Simulation and Evaluation of Soil Organic Matter and Microbial Carbon and Nitrogen Stocks Using the Microbial Decomposition Model ORCHIMIC v2.0. <i>Global Biogeochemical Cycles</i> , 2021, 35, e2020GB006836.	4.9	15
118	Greening drylands despite warming consistent with carbon dioxide fertilization effect. <i>Global Change Biology</i> , 2021, 27, 3336-3349.	9.5	50
119	Decadal variability in land carbon sink efficiency. <i>Carbon Balance and Management</i> , 2021, 16, 15.	3.2	6
120	A small climate-amplifying effect of climate-carbon cycle feedback. <i>Nature Communications</i> , 2021, 12, 2952.	12.8	5
121	Comparing machine learning-derived global estimates of soil respiration and its components with those from terrestrial ecosystem models. <i>Environmental Research Letters</i> , 2021, 16, 054048.	5.2	18
122	The Key Role of Production Efficiency Changes in Livestock Methane Emission Mitigation. <i>AGU Advances</i> , 2021, 2, e2021AV000391.	5.4	39
123	Carbon Cycle Response to Temperature Overshoot Beyond 2Â°C: An Analysis of CMIP6 Models. <i>Earth's Future</i> , 2021, 9, e2020EF001967.	6.3	17
124	Unusual characteristics of the carbon cycle during the 2015~2016 El NiÃ±o. <i>Global Change Biology</i> , 2021, 27, 3798-3809.	9.5	6
125	The consolidated European synthesis of CH ₄ and N ₂ O emissions for the European Union and United Kingdom: 1990~2017. <i>Earth System Science Data</i> , 2021, 13, 2307-2362.	9.9	16
126	The consolidated European synthesis of CO ₂ emissions and removals for the European Union and United Kingdom: 1990~2018. <i>Earth System Science Data</i> , 2021, 13, 2363-2406.	9.9	23

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127	Recent advances and future research in ecological stoichiometry. <i>Perspectives in Plant Ecology, Evolution and Systematics</i> , 2021, 50, 125611.	2.7	57
128	Vapor Pressure Deficit and Sunlight Explain Seasonality of Leaf Phenology and Photosynthesis Across Amazonian Evergreen Broadleaved Forest. <i>Global Biogeochemical Cycles</i> , 2021, 35, e2020GB006893.	4.9	31
129	A 30m terrace mapping in China using Landsat 8 imagery and digital elevation model based on the Google Earth Engine. <i>Earth System Science Data</i> , 2021, 13, 2437-2456.	9.9	39
130	Tradeoff of CO ₂ and CH ₄ emissions from global peatlands under water-table drawdown. <i>Nature Climate Change</i> , 2021, 11, 618-622.	18.8	57
131	Insights on Nitrogen and Phosphorus Co-limitation in Global Croplands From Theoretical and Modeling Fertilization Experiments. <i>Global Biogeochemical Cycles</i> , 2021, 35, e2020GB006915.	4.9	3
132	Climate change-induced greening on the Tibetan Plateau modulated by mountainous characteristics. <i>Environmental Research Letters</i> , 2021, 16, 064064.	5.2	16
133	Large historical carbon emissions from cultivated northern peatlands. <i>Science Advances</i> , 2021, 7, .	10.3	37
134	Influences of international agricultural trade on the global phosphorus cycle and its associated issues. <i>Global Environmental Change</i> , 2021, 69, 102282.	7.8	16
135	Potential CO ₂ removal from enhanced weathering by ecosystem responses to powdered rock. <i>Nature Geoscience</i> , 2021, 14, 545-549.	12.9	69
136	Fire enhances forest degradation within forest edge zones in Africa. <i>Nature Geoscience</i> , 2021, 14, 479-483.	12.9	26
137	Bioenergy Crops for Low Warming Targets Require Half of the Present Agricultural Fertilizer Use. <i>Environmental Science & Technology</i> , 2021, 55, 10654-10661.	10.0	14
138	Additional carbon inputs to reach a 4 per 1000 objective in Europe: feasibility and projected impacts of climate change based on Century simulations of long-term arable experiments. <i>Biogeosciences</i> , 2021, 18, 3981-4004.	3.3	24
139	A mixed-effect model approach for assessing land-based mitigation in integrated assessment models: A regional perspective. <i>Global Change Biology</i> , 2021, 27, 4671-4685.	9.5	4
140	Recent leveling off of vegetation greenness and primary production reveals the increasing soil water limitations on the greening Earth. <i>Science Bulletin</i> , 2021, 66, 1462-1471.	9.0	46
141	Sensitivity to the sources of uncertainties in the modeling of atmospheric CO ₂ concentration within and in the vicinity of Paris. <i>Atmospheric Chemistry and Physics</i> , 2021, 21, 10707-10726.	4.9	14
142	Disentangling the Impacts of Anthropogenic Aerosols on Terrestrial Carbon Cycle During 1850–2014. <i>Earth's Future</i> , 2021, 9, e2021EF002035.	6.3	11
143	Oil palm modelling in the global land surface model ORCHIDEE-MICT. <i>Geoscientific Model Development</i> , 2021, 14, 4573-4592.	3.6	1
144	Annual Maps of Forests in Australia from Analyses of Microwave and Optical Images with FAO Forest Definition. <i>Journal of Remote Sensing</i> , 2021, 2021, .	6.7	3

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145	Predicting the effect of confinement on the COVID-19 spread using machine learning enriched with satellite air pollution observations. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2021, 118, .	7.1	16
146	No historical evidence for increased vulnerability of French crop production to climatic hazards. <i>Agricultural and Forest Meteorology</i> , 2021, 306, 108453.	4.8	5
147	A global map of root biomass across the world's forests. <i>Earth System Science Data</i> , 2021, 13, 4263-4274.	9.9	19
148	Indication of paleoecological evidence on the evolution of alpine vegetation productivity and soil erosion in central China since the mid-Holocene. <i>Science China Earth Sciences</i> , 2021, 64, 1774-1783.	5.2	5
149	A Data-Driven Global Soil Heterotrophic Respiration Dataset and the Drivers of Its Inter-Annual Variability. <i>Global Biogeochemical Cycles</i> , 2021, 35, e2020GB006918.	4.9	18
150	Early Summer Soil Moisture Contribution to Western European Summer Warming. <i>Journal of Geophysical Research D: Atmospheres</i> , 2021, 126, e2021JD034646.	3.3	15
151	Accelerating methane growth rate from 2010 to 2017: leading contributions from the tropics and East Asia. <i>Atmospheric Chemistry and Physics</i> , 2021, 21, 12631-12647.	4.9	23
152	Emerging reporting and verification needs under the Paris Agreement: How can the research community effectively contribute?. <i>Environmental Science and Policy</i> , 2021, 122, 116-126.	4.9	23
153	Recent Slowdown of Anthropogenic Methane Emissions in China Driven by Stabilized Coal Production. <i>Environmental Science and Technology Letters</i> , 2021, 8, 739-746.	8.7	25
154	The effect of global change on soil phosphatase activity. <i>Global Change Biology</i> , 2021, 27, 5989-6003.	9.5	59
155	Global greenhouse gas emissions from animal-based foods are twice those of plant-based foods. <i>Nature Food</i> , 2021, 2, 724-732.	14.0	298
156	Global hunter-gatherer population densities constrained by influence of seasonality on diet composition. <i>Nature Ecology and Evolution</i> , 2021, 5, 1536-1545.	7.8	21
157	Mobile atmospheric measurements and local-scale inverse estimation of the location and rates of brief CH ₄ and CO ₂ releases from point sources. <i>Atmospheric Measurement Techniques</i> , 2021, 14, 5987-6003.	3.1	6
158	Saturation of Global Terrestrial Carbon Sink Under a High Warming Scenario. <i>Global Biogeochemical Cycles</i> , 2021, 35, e2020GB006800.	4.9	11
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