Josep Canadell

List of Publications by Year
in descending order

195 papers	59,329 citations	2669 95 h-index	2812 191 g-index
243 all docs	243 docs citations	243 times ranked	47231 citing authors

#	Article	IF	Citations
1	A Large and Persistent Carbon Sink in the Worldâ€™s Forests. Science, 2011, 333, 988-993.	6.0	5,393
2	Soil organic carbon pools in the northern circumpolar permafrost region. Global Biogeochemical Cycles, 2009, 23, .	1.9	1,938
3	Contributions to accelerating atmospheric CO ₂ growth from economic activity, carbon intensity, and efficiency of natural sinks. Proceedings of the National Academy of Sciences of the United States of America, 2007, 104, 18866-18870.	3.3	1,770
4	Trends in the sources and sinks of carbon dioxide. Nature Geoscience, 2009, 2, 831-836.	5.4	1,746
5	Greening of the Earth and its drivers. Nature Climate Change, 2016, 6, 791-795.	8.1	1,675
6	Three decades of global methane sources and sinks. Nature Geoscience, 2013, 6, 813-823.	5.4	1,649
7	Global Carbon Budget 2020. Earth System Science Data, 2020, 12, 3269-3340.	3.7	1,477
8	Global and regional drivers of accelerating CO2 emissions. Proceedings of the National Academy of Sciences of the United States of America, 2007, 104, 10288-10293.	3.3	1,426
9	Temporary reduction in daily global CO2 emissions during the COVID-19 forced confinement. Nature Climate Change, 2020, 10, 647-653.	8.1	1,408
10	Vulnerability of Permafrost Carbon to Climate Change: Implications for the Global Carbon Cycle. BioScience, 2008, 58, 701-714.	2.2	1,379
11	The Global Methane Budget 2000â€“2017. Earth System Science Data, 2020, 12, 1561-1623.	3.7	1,199
12	Global Carbon Budget 2018. Earth System Science Data, 2018, 10, 2141-2194.	3.7	1,167
13	Global Carbon Budget 2019. Earth System Science Data, 2019, 11, 1783-1838.	3.7	1,159
14	Contribution of semi-arid ecosystems to interannual variability of the global carbon cycle. Nature, 2014, 509, 600-603.	13.7	1,054
15	Managing Forests for Climate Change Mitigation. Science, 2008, 320, 1456-1457.	6.0	1,036
16	The dominant role of semi-arid ecosystems in the trend and variability of the land CO ₂ sink. Science, 2015, 348, 895-899.	6.0	1,002
17	Biophysical and economic limits to negative CO2 emissions. Nature Climate Change, 2016, 6, 42-50.	8.1	973
18	Global Carbon Budget 2016. Earth System Science Data, 2016, 8, 605-649.	3.7	905

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19	Betting on negative emissions. Nature Climate Change, 2014, 4, 850-853.	8.1	846
20	The global methane budget 2000â€“2012. Earth System Science Data, 2016, 8, 697-751.	3.7	824
21	A comprehensive quantification of global nitrous oxide sources and sinks. Nature, 2020, 586, 248-256.	13.7	814
22	The challenge to keep global warming below 2 Â°C. Nature Climate Change, 2013, 3, 4-6.	8.1	809
23	Global Carbon Budget 2017. Earth System Science Data, 2018, 10, 405-448.	3.7	801
24	Rapid growth in CO2 emissions after the 2008â€“2009 global financial crisis. Nature Climate Change, 2012, 2, 2-4.	8.1	697
25	Principles for knowledge co-production in sustainability research. Nature Sustainability, 2020, 3, 182-190.	11.5	697
26	Effects of climate extremes on the terrestrial carbon cycle: concepts, processes and potential future impacts. Global Change Biology, 2015, 21, 2861-2880.	4.2	683
27	Global Carbon Budget 2021. Earth System Science Data, 2022, 14, 1917-2005.	3.7	663
28	Peatlands and the carbon cycle: from local processes to global implications â€“ a synthesis. Biogeosciences, 2008, 5, 1475-1491.	1.3	630
29	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.	4.2	617
30	Global Carbon Budget 2015. Earth System Science Data, 2015, 7, 349-396.	3.7	616
31	Persistent growth of CO2 emissions and implications for reaching climate targets. Nature Geoscience, 2014, 7, 709-715.	5.4	615
32	Global Warming and Terrestrial Ecosystems: A Conceptual Framework for Analysis. BioScience, 2000, 50, 871.	2.2	599
33	Recent trends and drivers of regional sources and sinks of carbon dioxide. Biogeosciences, 2015, 12, 653-679.	1.3	587
34	Update on CO2 emissions. Nature Geoscience, 2010, 3, 811-812.	5.4	561
35	Current and future CO₂ emissions from drained peatlands in Southeast Asia. Biogeosciences, 2010, 7, 1505-1514.	1.3	548
36	The shared socio-economic pathway (SSP) greenhouse gas concentrations and their extensions to 2500. Geoscientific Model Development, 2020, 13, 3571-3605.	1.3	539

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37	The global carbon budget 1959â€“2011. Earth System Science Data, 2013, 5, 165-185.	3.7	527
38	Global carbon budget 2014. Earth System Science Data, 2015, 7, 47-85.	3.7	463
39	Recent reversal in loss of global terrestrialÂbiomass. Nature Climate Change, 2015, 5, 470-474.	8.1	447
40	Increased water-use efficiency during the 20th century did not translate into enhanced tree growth. Global Ecology and Biogeography, 2011, 20, 597-608.	2.7	417
41	Evidence for a weakening relationship between interannual temperature variability and northern vegetation activity. Nature Communications, 2014, 5, 5018.	5.8	414
42	The terrestrial biosphere as a net source of greenhouse gases to the atmosphere. Nature, 2016, 531, 225-228.	13.7	402
43	Elevated CO2, litter chemistry, and decomposition: a synthesis. Oecologia, 2001, 127, 153-165.	0.9	400
44	ENVIRONMENT: Tropical Forests and Climate Policy. Science, 2007, 316, 985-986.	6.0	386
45	CLIMATE: The Terrestrial Carbon Cycle: Implications for the Kyoto Protocol. Science, 1998, 280, 1393-1394.	6.0	378
46	Historical greenhouse gas concentrations for climate modelling (CMIP6). Geoscientific Model Development, 2017, 10, 2057-2116.	1.3	350
47	Carbon dioxide emissions continue to grow amidst slowly emerging climate policies. Nature Climate Change, 2020, 10, 3-6.	8.1	324
48	Protecting climate with forests. Environmental Research Letters, 2008, 3, 044006.	2.2	313
49	Global carbon budget 2013. Earth System Science Data, 2014, 6, 235-263.	3.7	311
50	Drivers of declining CO2 emissions in 18 developed economies. Nature Climate Change, 2019, 9, 213-217.	8.1	307
51	Recent pause in the growth rate of atmospheric CO2 due to enhanced terrestrial carbon uptake. Nature Communications, 2016, 7, 13428.	5.8	305
52	Biophysical considerations in forestry for climate protection. Frontiers in Ecology and the Environment, 2011, 9, 174-182.	1.9	301
53	Key indicators to track current progress and future ambition of the Paris Agreement. Nature Climate Change, 2017, 7, 118-122.	8.1	298
54	Sharing a quota on cumulative carbon emissions. Nature Climate Change, 2014, 4, 873-879.	8.1	295

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55	Integrating the evidence for a terrestrial carbon sink caused by increasing atmospheric CO₂. New Phytologist, 2021, 229, 2413-2445.	3.5	286
56	The growing role of methane in anthropogenic climate change. Environmental Research Letters, 2016, 11, 120207.	2.2	274
57	Expert assessment of vulnerability of permafrost carbon to climate change. Climatic Change, 2013, 119, 359-374.	1.7	257
58	The Northern Circumpolar Soil Carbon Database: spatially distributed datasets of soil coverage and soil carbon storage in the northern permafrost regions. Earth System Science Data, 2013, 5, 3-13.	3.7	253
59	Increasing anthropogenic methane emissions arise equally from agricultural and fossil fuel sources. Environmental Research Letters, 2020, 15, 071002.	2.2	232
60	Nonlinearities, Feedbacks and Critical Thresholds within the Earth's Climate System. Climatic Change, 2004, 65, 11-38.	1.7	229
61	Acceleration of global N2O emissions seen from two decades of atmospheric inversion. Nature Climate Change, 2019, 9, 993-998.	8.1	229
62	Commentary: Carbon Metabolism of the Terrestrial Biosphere: A Multitechnique Approach for Improved Understanding. Ecosystems, 2000, 3, 115-130.	1.6	225
63	Global soil nitrous oxide emissions since the preindustrial era estimated by an ensemble of terrestrial biosphere models: Magnitude, attribution, and uncertainty. Global Change Biology, 2019, 25, 640-659.	4.2	214
64	Interannual variation of terrestrial carbon cycle: Issues and perspectives. Global Change Biology, 2020, 26, 300-318.	4.2	214
65	Reaching peak emissions. Nature Climate Change, 2016, 6, 7-10.	8.1	194
66	Sustainability of terrestrial carbon sequestration: A case study in Duke Forest with inversion approach. Global Biogeochemical Cycles, 2003, 17, .	1.9	191
67	Current systematic carbon-cycle observations and the need for implementing a policy-relevant carbon observing system. Biogeosciences, 2014, 11, 3547-3602.	1.3	189
68	Global energy growth is outpacing decarbonization. Environmental Research Letters, 2018, 13, 120401.	2.2	188
69	Recent increases in terrestrial carbon uptake at little cost to the water cycle. Nature Communications, 2017, 8, 110.	5.8	186
70	Comment on â€œThe global tree restoration potentialâ€ Science, 2019, 366, .	6.0	185
71	Global and Regional Trends and Drivers of Fire Under Climate Change. Reviews of Geophysics, 2022, 60, .	9.0	182
72	Multi-decadal increase of forest burned area in Australia is linked to climate change. Nature Communications, 2021, 12, 6921.	5.8	173

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73	Fossil CO2 emissions in the post-COVID-19 era. Nature Climate Change, 2021, 11, 197-199.	8.1	171
74	Towards real-time verification of CO2 emissions. Nature Climate Change, 2017, 7, 848-850.	8.1	168
75	Shifting from a fertilization-dominated to a warming-dominated period. Nature Ecology and Evolution, 2017, 1, 1438-1445.	3.4	167
76	Global trends in carbon sinks and their relationships with CO2 and temperature. Nature Climate Change, 2019, 9, 73-79.	8.1	163
77	Warning signs for stabilizing global CO ₂ emissions. Environmental Research Letters, 2017, 12, 110202.	2.2	158
78	Global potential of biospheric carbon management for climate mitigation. Nature Communications, 2014, 5, 5282.	5.8	153
79	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.	3.3	144
80	Urban infrastructure choices structure climate solutions. Nature Climate Change, 2016, 6, 1054-1056.	8.1	144
81	Climate drives global soil carbon sequestration and crop yield changes under conservation agriculture. Global Change Biology, 2020, 26, 3325-3335.	4.2	142
82	Research priorities for negative emissions. Environmental Research Letters, 2016, 11, 115007.	2.2	138
83	Persistent fossil fuel growth threatens the Paris Agreement and planetary health. Environmental Research Letters, 2019, 14, 121001.	2.2	133
84	Factoring out natural and indirect human effects on terrestrial carbon sources and sinks. Environmental Science and Policy, 2007, 10, 370-384.	2.4	132
85	Global wetland contribution to 2000â€“2012 atmospheric methane growth rate dynamics. Environmental Research Letters, 2017, 12, 094013.	2.2	129
86	Combating ecosystem collapse from the tropics to the Antarctic. Global Change Biology, 2021, 27, 1692-1703.	4.2	128
87	Five decades of northern land carbon uptake revealed by the interhemispheric CO2 gradient. Nature, 2019, 568, 221-225.	13.7	124
88	The Global N2O Model Intercomparison Project. Bulletin of the American Meteorological Society, 2018, 99, 1231-1251.	1.7	123
89	A synopsis of land use, land-use change and forestry (LULUCF) under the Kyoto Protocol and Marrakech Accords. Environmental Science and Policy, 2007, 10, 271-282.	2.4	121
90	The effects of elevated [CO2] on plant-soil carbon below-ground: A summary and synthesis. Plant and Soil, 1995, 187, 391-400.	1.8	114

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91	A new version of the CABLE land surface model (Subversion revision r4601) incorporating land use and land cover change, woody vegetation demography, and a novel optimisation-based approach to plant coordination of photosynthesis. Geoscientific Model Development, 2018, 11, 2995-3026.	1.3	114
92	Increased global nitrous oxide emissions from streams and rivers in the Anthropocene. Nature Climate Change, 2020, 10, 138-142.	8.1	114
93	Lower land-use emissions responsible for increased net land carbon sink during the slow warming period. Nature Geoscience, 2018, 11, 739-743.	5.4	110
94	The Australian terrestrial carbon budget. Biogeosciences, 2013, 10, 851-869.	1.3	109
95	Quantification of global and national nitrogen budgets for crop production. Nature Food, 2021, 2, 529-540.	6.2	108
96	Anthropogenic and biophysical contributions to increasing atmospheric CO₂ growth rate and airborne fraction. Biogeosciences, 2008, 5, 1601-1613.	1.3	107
97	Multiple observation types reduce uncertainty in Australia's terrestrial carbon and water cycles. Biogeosciences, 2013, 10, 2011-2040.	1.3	100
98	Simulating the Earth system response to negative emissions. Environmental Research Letters, 2016, 11, 095012.	2.2	98
99	Higher than expected CO₂ fertilization inferred from leaf to global observations. Global Change Biology, 2020, 26, 2390-2402.	4.2	98
100	Saturation of the Terrestrial Carbon Sink. , 2007, , 59-78.		97
101	Methane removal and atmospheric restoration. Nature Sustainability, 2019, 2, 436-438.	11.5	96
102	Data-driven estimates of global nitrous oxide emissions from croplands. National Science Review, 2020, 7, 441-452.	4.6	95
103	The carbon budget of South Asia. Biogeosciences, 2013, 10, 513-527.	1.3	94
104	Plant Species Mediate Changes in Soil Microbial N in Response to Elevated CO2. Ecology, 1996, 77, 2505-2515.	1.5	93
105	An International Effort to Quantify Regional Carbon Fluxes. Eos, 2011, 92, 81-82.	0.1	93
106	Topâ€“down assessment of the Asian carbon budget since the mid 1990s. Nature Communications, 2016, 7, 10724.	5.8	93
107	Fire in Australian savannas: from leaf to landscape. Global Change Biology, 2015, 21, 62-81.	4.2	88
108	Variability and quasi-decadal changes in the methane budget over the period 2000â€“2012. Atmospheric Chemistry and Physics, 2017, 17, 11135-11161.	1.9	85

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109	Underground Structures of Woody Plants in Mediterranean Ecosystems of Australia, California, and Chile. Ecological Studies, 1995, , 177-210.	0.4	82
110	Root biomass of <i>Quercus</i> <i>ilex</i> in a montane Mediterranean forest. Canadian Journal of Forest Research, 1991, 21, 1771-1778.	0.8	80
111	Gas hydrates: entrance to a methane age or climate threat?. Environmental Research Letters, 2009, 4, 034007.	2.2	73
112	Can we reconcile atmospheric estimates of the Northern terrestrial carbon sink with land-based accounting?. Current Opinion in Environmental Sustainability, 2010, 2, 225-230.	3.1	73
113	Empirical estimates of regional carbon budgets imply reduced global soil heterotrophic respiration. National Science Review, 2021, 8, nwaa145.	4.6	70
114	Opportunities and challenges in using remaining carbon budgets to guide climate policy. Nature Geoscience, 2020, 13, 769-779.	5.4	68
115	Global mapping of crop-specific emission factors highlights hotspots of nitrous oxide mitigation. Nature Food, 2021, 2, 886-893.	6.2	68
116	A comprehensive and synthetic dataset for global, regional, and national greenhouse gas emissions by sector 1970â€“2018 with an extension to 2019. Earth System Science Data, 2021, 13, 5213-5252.	3.7	68
117	Comment on â€œThe global tree restoration potentialâ€. Science, 2019, 366, .	6.0	67
118	The size of the land carbon sink in China. Nature, 2022, 603, E7-E9.	13.7	67
119	Carbon and the Anthropocene. Current Opinion in Environmental Sustainability, 2010, 2, 210-218.	3.1	66
120	Carbon cycle responses of semiâ€arid ecosystems to positive asymmetry in rainfall. Global Change Biology, 2017, 23, 793-800.	4.2	66
121	Future precipitation changes and their implications for tropical peatlands. Geophysical Research Letters, 2007, 34, .	1.5	65
122	Developing a common strategy for integrative global environmental change research and outreach: the Earth System Science Partnership (ESSP). Current Opinion in Environmental Sustainability, 2009, 1, 4-13.	3.1	65
123	A global dataset of CO2 emissions and ancillary data related to emissions for 343 cities. Scientific Data, 2019, 6, 180280.	2.4	65
124	Attributing the increase in atmospheric CO2 to emitters and absorbers. Nature Climate Change, 2013, 3, 926-930.	8.1	63
125	Impact of the 2015/2016 El NiÃ±o on the terrestrial carbon cycle constrained by bottom-up and top-down approaches. Philosophical Transactions of the Royal Society B: Biological Sciences, 2018, 373, 20170304.	1.8	63
126	Interactions of the carbon cycle, human activity, and the climate system: a research portfolio. Current Opinion in Environmental Sustainability, 2010, 2, 301-311.	3.1	62

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127	The declining uptake rate of atmospheric CO₂ by land and ocean sinks. Biogeosciences, 2014, 11, 3453-3475.	1.3	62
128	Atmospheric deposition, CO2, and change in the land carbon sink. Scientific Reports, 2017, 7, 9632.	1.6	62
129	Moving toward Net-Zero Emissions Requires New Alliances for Carbon Dioxide Removal. One Earth, 2020, 3, 145-149.	3.6	61
130	Mediterranean terrestrial ecosystems: research priorities on global change effects. Global Ecology and Biogeography, 1998, 7, 157-166.	2.7	60
131	Sources of Uncertainty in Regional and Global Terrestrial CO₂ Exchange Estimates. Global Biogeochemical Cycles, 2020, 34, e2019GB006393.	1.9	59
132	Anthropogenic CO₂ emissions in Africa. Biogeosciences, 2009, 6, 463-468.	1.3	58
133	The relationship between peak warming and cumulative CO₂ emissions, and its use to quantify vulnerabilities in the carbonâ€“climateâ€“human system. Tellus, Series B: Chemical and Physical Meteorology, 2022, 63, 145.	0.8	58
134	Evaluation of six satellite-derived Fraction of Absorbed Photosynthetic Active Radiation (FAPAR) products across the Australian continent. Remote Sensing of Environment, 2014, 140, 241-256.	4.6	58
135	Regional trends and drivers of the global methane budget. Global Change Biology, 2022, 28, 182-200.	4.2	56
136	Inter-model comparison of global hydroxyl radical (OH) distributions and their impact on atmospheric methane over the 2000â€“2016 period. Atmospheric Chemistry and Physics, 2019, 19, 13701-13723.	1.9	52
137	Anthropogenicâ€driven rapid shifts in tree distribution lead to increased dominance of broadleaf species. Global Change Biology, 2016, 22, 3984-3995.	4.2	51
138	Carbon analytics for net-zero emissions sustainable cities. Nature Sustainability, 2021, 4, 460-463.	11.5	50
139	Global Nitrous Oxide Emissions From Pasturelands and Rangelands: Magnitude, Spatiotemporal Patterns, and Attribution. Global Biogeochemical Cycles, 2019, 33, 200-222.	1.9	47
140	Largely underestimated carbon emission from land use and land cover change in the conterminous United States. Global Change Biology, 2019, 25, 3741-3752.	4.2	46
141	Global patterns of daily CO2 emissions reductions in the first year of COVID-19. Nature Geoscience, 2022, 15, 615-620.	5.4	46
142	Atmospheric methane removal: a research agenda. Philosophical Transactions Series A, Mathematical, Physical, and Engineering Sciences, 2021, 379, 20200454.	1.6	44
143	State of the science in reconciling topâ€down and bottomâ€up approaches for terrestrial CO₂ budget. Global Change Biology, 2020, 26, 1068-1084.	4.2	43
144	Systematic long-term observations of the global carbon cycle. Trends in Ecology and Evolution, 2009, 24, 427-430.	4.2	42

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145	Global fossil carbon emissions rebound near pre-COVID-19 levels. Environmental Research Letters, 2022, 17, 031001.	2.2	42
146	Structure and Dynamics of the Root System. Ecological Studies, 1999, , 47-59.	0.4	40
147	Responding to complex societal challenges: A decade of Earth System Science Partnership (ESSP) interdisciplinary research. Current Opinion in Environmental Sustainability, 2012, 4, 147-158.	3.1	39
148	The terrestrial carbon budget of South and Southeast Asia. Environmental Research Letters, 2016, 11, 105006.	2.2	39
149	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.	3.3	39
150	Emissions from the Oil and Gas Sectors, Coal Mining and Ruminant Farming Drive Methane Growth over the Past Three Decades. Journal of the Meteorological Society of Japan, 2021, 99, 309-337.	0.7	38
151	Hydrologic resilience and Amazon productivity. Nature Communications, 2017, 8, 387.	5.8	37
152	Quantifying the impacts of vegetation changes on catchment storageâ€discharge dynamics using pairedâ€catchment data. Water Resources Research, 2017, 53, 5963-5979.	1.7	36
153	Spatial Patterns and Predictors of Forest Carbon Stocks in Western Mediterranean. Ecosystems, 2012, 15, 1258-1270.	1.6	35
154	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.	1.3	34
155	Quantifying, Understanding and Managing the Carbon Cycle in the Next Decades. Climatic Change, 2004, 67, 147-160.	1.7	33
156	Regional carbon fluxes from land use and land cover change in Asia, 1980â€“2009. Environmental Research Letters, 2016, 11, 074011.	2.2	31
157	Corrigendum to "Peatlands and the carbon cycle: from local processes to global implications a synthesis" published in Biogeosciences, 5, 1475â€“1491, 2008. Biogeosciences, 2008, 5, 1739-1739.	1.3	29
158	A standâ€alone tree demography and landscape structure module for Earth system models. Geophysical Research Letters, 2013, 40, 5234-5239.	1.5	28
159	Environmental reporting and accounting in Australia: Progress, prospects and research priorities. Science of the Total Environment, 2014, 473-474, 338-349.	3.9	28
160	Land use change and El NiÃ±o-Southern Oscillation drive decadal carbon balance shifts in Southeast Asia. Nature Communications, 2018, 9, 1154.	5.8	28
161	Large loss and rapid recovery of vegetation cover and aboveground biomass over forest areas in Australia during 2019â€“2020. Remote Sensing of Environment, 2022, 278, 113087.	4.6	26
162	Interannual variability in Australia's terrestrial carbon cycle constrained by multiple observation types. Biogeosciences, 2016, 13, 6363-6383.	1.3	23

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163	Anthropogenic emission is the main contributor to the rise of atmospheric methane during 1993â€“2017. National Science Review, 2022, 9, nwab200.	4.6	20
164	Recent Changes in Global Photosynthesis and Terrestrial Ecosystem Respiration Constrained From Multiple Observations. Geophysical Research Letters, 2018, 45, 1058-1068.	1.5	19
165	Influences of hydroxyl radicals (OH) on top-down estimates of the global and regional methane budgets. Atmospheric Chemistry and Physics, 2020, 20, 9525-9546.	1.9	19
166	Anthropogenic CO2 emissions. Nature Climate Change, 2013, 3, 603-604.	8.1	18
167	Biomass Partitioning and Resource Allocation of Plants from Mediterranean-Type Ecosystems: Possible Responses to Elevated Atmospheric CO2. Ecological Studies, 1995, , 76-101.	0.4	18
168	On the role of trend and variability in the hydroxyl radical (OH) in the global methane budget. Atmospheric Chemistry and Physics, 2020, 20, 13011-13022.	1.9	18
169	A 130â€year global inventory of methane emissions from livestock: Trends, patterns, and drivers. Global Change Biology, 2022, 28, 5142-5158.	4.2	17
170	Observing a Vulnerable Carbon Cycle. Ecological Studies, 2008, , 5-32.	0.4	16
171	Iconic CO ₂ Time Series at Risk. Science, 2012, 337, 1038-1040.	6.0	15
172	Focus on negative emissions. Environmental Research Letters, 2017, 12, 110201.	2.2	15
173	Challenges of a changing Earth. Trends in Ecology and Evolution, 2001, 16, 664-666.	4.2	12
174	An International Carbon Office to assist policy-based science. Current Opinion in Environmental Sustainability, 2010, 2, 297-300.	3.1	11
175	Residential energy consumption and associated carbon emission in forest rural area in China: A case study in Weichang County. Journal of Mountain Science, 2014, 11, 792-804.	0.8	11
176	The rapidly changing greenhouse gas budget of Asia. Eos, 2012, 93, 237-237.	0.1	8
177	Magnitude and Uncertainty of Nitrous Oxide Emissions From North America Based on Bottomâ€Up and Topâ€Down Approaches: Informing Future Research and National Inventories. Geophysical Research Letters, 2021, 48, e2021GL095264.	1.5	7
178	Are Landâ€Use Change Emissions in Southeast Asia Decreasing or Increasing?. Global Biogeochemical Cycles, 2022, 36, .	1.9	7
179	Forest ecosystems and environments: scaling up from shoot module to watershed. Ecological Research, 2005, 20, 241-241.	0.7	6
180	Peatlands and the carbon cycle: From local processes to global implications. Eos, 2007, 88, 295-295.	0.1	6

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181	Increased extreme fire weather occurrence in southeast Australia and related atmospheric drivers. Weather and Climate Extremes, 2021, 34, 100397.	1.6	6
182	Estimating cropland carbon mitigation potentials in China affected by three improved cropland practices. Journal of Mountain Science, 2016, 13, 1840-1854.	0.8	5
183	Ecosystem metabolism and the global carbon cycle. Trends in Ecology and Evolution, 1999, 14, 249.	4.2	4
184	Ecosystem Collapse and Climate Change: An Introduction. Ecological Studies, 2021, , 1-9.	0.4	4
185	IGBP/GCTE terrestrial transects: Dynamics of terrestrial ecosystems under environmental change â€" Introduction. Journal of Vegetation Science, 2002, 13, 298.	1.1	3
186	Corrigendum to "The Australian Terrestrial Carbon Budget" published in Biogeosciences, 10, 851â€"869, 2013. Biogeosciences, 2015, 12, 3603-3605.	1.3	3
187	Reply to: Practical constraints on atmospheric methane removal. Nature Sustainability, 2020, 3, 358-359.	11.5	3
188	New observations suggest vulnerability of the carbon sink in tropical rainforests. IOP Conference Series: Earth and Environmental Science, 2009, 6, 042003.	0.2	2
189	The Future Research Challenge: the Global Land Project. Global Change - the IGBP Series, 2007, , 313-322.	2.1	2
190	Effect on the Biosphere of Elevated Atmospheric CO2. Science, 1999, 285, 1849i-1849.	6.0	2
191	Changing Metabolism of Terrestrial Ecosystems under Global Change1. , 2000, 10, 1551-1552.		2
192	Ecosystem Sustainability through Strategies of Integrated Carbon and Land-Use Management. , 0, , 523-538.		1
193	Bioenergy: Potentials and limitations. EPJ Web of Conferences, 2015, 98, 04003.	0.1	1
194	Bottom-up approaches for estimating terrestrial GHG budgets: Bookkeeping, process-based modeling, and data-driven methods. , 2022, , 59-85.		0
195	Balancing greenhouse gas sources and sinks: Inventories, budgets, and climate policy. , 2022, , 3-28.		0