Richard A Houghton

List of Publications by Year
in descending order

#	Article	IF	Citations
1	Terrestrial sources and sinks of carbon inferred from terrestrial data. Tellus, Series B: Chemical and Physical Meteorology, 2022, 48, 420.	0.8	50
2	The annual net flux of carbon to the atmosphere from changes in land use 1850â€“1990*. Tellus, Series B: Chemical and Physical Meteorology, 2022, 51, 298.	0.8	363
3	Revised estimates of the annual net flux of carbon to the atmosphere from changes in land use and land management 1850â€“2000. Tellus, Series B: Chemical and Physical Meteorology, 2022, 55, 378.	0.8	226
4	How well do we know the flux of CO₂ from land-use change?. Tellus, Series B: Chemical and Physical Meteorology, 2022, 62, 337.	0.8	175
5	Are Landâ€Use Change Emissions in Southeast Asia Decreasing or Increasing?. Global Biogeochemical Cycles, 2022, 36, .	1.9	7
6	Carbon fluxes from contemporary forest disturbances in North Carolina evaluated using a grid-based carbon accounting model and fine resolution remote sensing products. Science of Remote Sensing, 2022, 5, 100042.	2.2	3
7	Global Carbon Budget 2021. Earth System Science Data, 2022, 14, 1917-2005.	3.7	663
8	Bottom-up approaches for estimating terrestrial GHG budgets: Bookkeeping, process-based modeling, and data-driven methods. , 2022, , 59-85.		0
9	The global potential for increased storage of carbon on land. Proceedings of the National Academy of Sciences of the United States of America, 2022, 119, .	3.3	54
10	Global maps of twenty-first century forest carbon fluxes. Nature Climate Change, 2021, 11, 234-240.	8.1	425
11	Evaluating nature-based solutions for climate mitigation and conservation requires comprehensive carbon accounting. Science of the Total Environment, 2021, 769, 144341.	3.9	88
12	The consolidated European synthesis of CO₂ emissions and removals for the European Union and United Kingdom: 1990â€“2018. Earth System Science Data, 2021, 13, 2363-2406.	3.7	23
13	Comparison of uncertainties in land-use change fluxes from bookkeeping model parameterisation. Earth System Dynamics, 2021, 12, 745-762.	2.7	22
14	Comment on â€˜Carbon Intensity of corn ethanol in the United States: state of the scienceâ€™. Environmental Research Letters, 2021, 16, 118001.	2.2	11
15	Negative Emissions From Stopping Deforestation and Forest Degradation. , 2020, , 226-236.		0
16	Mapping carbon accumulation potential from global natural forest regrowth. Nature, 2020, 585, 545-550.	13.7	278
17	Contribution of land use to the interannual variability of the land carbon cycle. Nature Communications, 2020, 11, 3170.	5.8	57
18	Understanding the importance of primary tropical forest protection as a mitigation strategy. Mitigation and Adaptation Strategies for Global Change, 2020, 25, 763-787.	1.0	109

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19	Terrestrial fluxes of carbon in GCP carbon budgets. Global Change Biology, 2020, 26, 3006-3014.	4.2	32
20	Historical CO₂ emissions from land use and land cover change and their uncertainty. Biogeosciences, 2020, 17, 4075-4101.	1.3	112
21	Global Carbon Budget 2020. Earth System Science Data, 2020, 12, 3269-3340.	3.7	1,477
22	Large greenhouse gas savings due to changes in the post-Soviet food systems. Environmental Research Letters, 2019, 14, 065009.	2.2	38
23	Response to Comment on â€œTropical forests are a net carbon source based on aboveground measurements of gain and lossâ€ Science, 2019, 363, .	6.0	17
24	Global Carbon Budget 2019. Earth System Science Data, 2019, 11, 1783-1838.	3.7	1,159
25	The exceptional value of intact forest ecosystems. Nature Ecology and Evolution, 2018, 2, 599-610.	3.4	681
26	Interactions Between Land-Use Change and Climate-Carbon Cycle Feedbacks. Current Climate Change Reports, 2018, 4, 115-127.	2.8	23
27	Negative emissions from stopping deforestation and forest degradation, globally. Global Change Biology, 2018, 24, 350-359.	4.2	119
28	Climate, economic, and environmental impacts of producing wood for bioenergy. Environmental Research Letters, 2018, 13, 050201.	2.2	47
29	Natural climate solutions for the United States. Science Advances, 2018, 4, eaat1869.	4.7	333
30	Reconciling global-model estimates and country reporting of anthropogenic forest CO2 sinks. Nature Climate Change, 2018, 8, 914-920.	8.1	101
31	Where is the residual terrestrial carbon sink?. Global Change Biology, 2018, 24, 3277-3279.	4.2	17
32	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
33	Global Carbon Budget 2018. Earth System Science Data, 2018, 10, 2141-2194.	3.7	1,167
34	Gross and net land cover changes in the main plant functional types derived from the annual ESA CCI land cover maps (1992â€“2015). Earth System Science Data, 2018, 10, 219-234.	3.7	193
35	Global Carbon Budget 2017. Earth System Science Data, 2018, 10, 405-448.	3.7	801
36	Accelerating net terrestrial carbon uptake during the warming hiatus due to reduced respiration. Nature Climate Change, 2017, 7, 148-152.	8.1	151

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37	Fire and deforestation dynamics in Amazonia (1973â€“2014). Global Biogeochemical Cycles, 2017, 31, 24-38.	1.9	66
38	Global and regional fluxes of carbon from land use and land cover change 1850â€“2015. Global Biogeochemical Cycles, 2017, 31, 456-472.	1.9	362
39	Tropical forests are a net carbon source based on aboveground measurements of gain and loss. Science, 2017, 358, 230-234.	6.0	539
40	Natural climate solutions. Proceedings of the National Academy of Sciences of the United States of America, 2017, 114, 11645-11650.	3.3	1,709
41	Seeing Forests for More than Carbon in the Trees: Incentivizing Actions beyond Carbon Storage to Mitigate Climate Change. Journal of Forestry, 2017, 115, 329-331.	0.5	2
42	Multi-gas and multi-source comparisons of six land use emission datasets and AFOLU estimates in the Fifth Assessment Report, for the tropics for 2000â€“2005. Biogeosciences, 2016, 13, 5799-5819.	1.3	8
43	Deforestation. , 2016, , 313-315.		1
44	The terrestrial carbon budget of South and Southeast Asia. Environmental Research Letters, 2016, 11, 105006.	2.2	39
45	Global Carbon Budget 2016. Earth System Science Data, 2016, 8, 605-649.	3.7	905
46	Hidden carbon sink beneath desert. Geophysical Research Letters, 2015, 42, 5880-5887.	1.5	89
47	Measurement and monitoring needs, capabilities and potential for addressing reduced emissions from deforestation and forest degradation under REDD+. Environmental Research Letters, 2015, 10, 123001.	2.2	115
48	Audit of the global carbon budget: estimate errors and their impact on uptake uncertainty. Biogeosciences, 2015, 12, 2565-2584.	1.3	96
49	Tropical nighttime warming as a dominant driver of variability in the terrestrial carbon sink. Proceedings of the National Academy of Sciences of the United States of America, 2015, 112, 15591-15596.	3.3	92
50	Aboveground carbon loss in natural and managed tropical forests from 2000 to 2012. Environmental Research Letters, 2015, 10, 074002.	2.2	142
51	A role for tropical forests in stabilizing atmospheric CO2. Nature Climate Change, 2015, 5, 1022-1023.	8.1	243
52	Global Carbon Budget 2015. Earth System Science Data, 2015, 7, 349-396.	3.7	616
53	Global carbon budget 2014. Earth System Science Data, 2015, 7, 47-85.	3.7	463
54	The declining uptake rate of atmospheric CO₂ by land and ocean sinks. Biogeosciences, 2014, 11, 3453-3475.	1.3	62

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55	Terminology as a key uncertainty in net land use and land cover change carbon flux estimates. Earth System Dynamics, 2014, 5, 177-195.	2.7	152
56	A full greenhouse gases budget of Africa: synthesis, uncertainties, and vulnerabilities. Biogeosciences, 2014, 11, 381-407.	1.3	162
57	Evidence for environmentally enhanced forest growth. Proceedings of the National Academy of Sciences of the United States of America, 2014, 111, 9527-9532.	3.3	116
58	Global carbon budget 2013. Earth System Science Data, 2014, 6, 235-263.	3.7	311
59	Land management and land-cover change haveÂimpacts of similar magnitude on surfaceÂtemperature. Nature Climate Change, 2014, 4, 389-393.	8.1	404
60	Keeping management effects separate from environmental effects in terrestrial carbon accounting. Global Change Biology, 2013, 19, 2609-2612.	4.2	37
61	Bias in the attribution of forest carbon sinks. Nature Climate Change, 2013, 3, 854-856.	8.1	129
62	Sustainable landscapes in a world of change: tropical forests, land use and implementation of REDD+: Part I. Carbon Management, 2013, 4, 465-468.	1.2	4
63	The global carbon budget 1959â€“2011. Earth System Science Data, 2013, 5, 165-185.	3.7	527
64	National-scale estimation of gross forest aboveground carbon loss: a case study of the Democratic Republic of the Congo. Environmental Research Letters, 2013, 8, 044039.	2.2	49
65	The emissions of carbon from deforestation and degradation in the tropics: past trends and future potential. Carbon Management, 2013, 4, 539-546.	1.2	86
66	Sustainable landscapes in a world of change: tropical forests, land use and implementation of REDD+: Part II. Carbon Management, 2013, 4, 567-569.	1.2	4
67	Joint CO ₂ and CH ₄ accountability for global warming. Proceedings of the National Academy of Sciences of the United States of America, 2013, 110, E2865-74.	3.3	37
68	The carbon budget of South Asia. Biogeosciences, 2013, 10, 513-527.	1.3	94
69	Carbon emissions from land use and land-cover change. Biogeosciences, 2012, 9, 5125-5142.	1.3	839
70	Estimated carbon dioxide emissions from tropical deforestation improved by carbon-density maps. Nature Climate Change, 2012, 2, 182-185.	8.1	1,326
71	Observations and assessment of forest carbon dynamics following disturbance in North America. Journal of Geophysical Research, 2012, 117, .	3.3	112
72	Carbon emissions and the drivers of deforestation and forest degradation in the tropics. Current Opinion in Environmental Sustainability, 2012, 4, 597-603.	3.1	253

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73	Historic Changes in Terrestrial Carbon Storage. , 2012, , 59-82.		16
74	The carbon balance of South America: a review of the status, decadal trends and main determinants. Biogeosciences, 2012, 9, 5407-5430.	1.3	78
75	The Effects of Land Use and Management on the Global Carbon Cycle. Remote Sensing and Digital Image Processing, 2012, , 237-256.	0.7	2
76	A Large and Persistent Carbon Sink in the Worldâ€™s Forests. Science, 2011, 333, 988-993.	6.0	5,393
77	Recent rates of forest harvest and conversion in North America. Journal of Geophysical Research, 2011, 116, .	3.3	92
78	A synthesis of current knowledge on forests and carbon storage in the United States. , 2011, 21, 1902-1924.		354
79	Characterizing 3D vegetation structure from space: Mission requirements. Remote Sensing of Environment, 2011, 115, 2753-2775.	4.6	228
80	Post-Soviet farmland abandonment, forest recovery, and carbon sequestration in western Ukraine. Global Change Biology, 2011, 17, 1335-1349.	4.2	159
81	Harmonization of land-use scenarios for the period 1500â€“2100: 600Âyears of global gridded annual land-use transitions, wood harvest, and resulting secondary lands. Climatic Change, 2011, 109, 117-161.	1.7	1,080
82	Carbon implications of forest restitution in post-socialist Romania. Environmental Research Letters, 2011, 6, 045202.	2.2	47
83	Policy Update: Towards results-based REDD+ mechanisms. Carbon Management, 2011, 2, 513-515.	1.2	1
84	Update on CO2 emissions. Nature Geoscience, 2010, 3, 811-812.	5.4	561
85	Fixing a flawed approach to forest accounting in the next round of the Kyoto Protocol. Carbon Management, 2010, 1, 179-182.	1.2	6
86	Welcome toCarbon Management. Carbon Management, 2010, 1, 1-3.	1.2	2
87	The role of science in Reducing Emissions from Deforestation and Forest Degradation (REDD). Carbon Management, 2010, 1, 253-259.	1.2	26
88	Anthropogenic CO₂ emissions in Africa. Biogeosciences, 2009, 6, 463-468.	1.3	58
89	Mapping and monitoring carbon stocks with satellite observations: a comparison of methods. Carbon Balance and Management, 2009, 4, 2.	1.4	274
90	Trends in the sources and sinks of carbon dioxide. Nature Geoscience, 2009, 2, 831-836.	5.4	1,746

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91	Importance of biomass in the global carbon cycle. Journal of Geophysical Research, 2009, 114, .	3.3	447
92	Ecosystem responses to recent climate change and fire disturbance at northern high latitudes: observations and model results contrasting northern Eurasia and North America. Environmental Research Letters, 2007, 2, 045031.	2.2	160
93	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
94	Emissions of carbon from land use change in sub-Saharan Africa. Journal of Geophysical Research, 2006, 111, n/a-n/a.	3.3	66
95	The underpinnings of land-use history: three centuries of global gridded land-use transitions, wood-harvest activity, and resulting secondary lands. Global Change Biology, 2006, 12, 1208-1229.	4.2	449
96	Invasive grass reduces aboveground carbon stocks in shrublands of the Western US. Global Change Biology, 2006, 12, 1815-1822.	4.2	174
97	Reconciling Carbon-cycle Concepts, Terminology, and Methods. Ecosystems, 2006, 9, 1041-1050.	1.6	904
98	Aboveground Forest Biomass and the Global Carbon Balance. Global Change Biology, 2005, 11, 945-958.	4.2	909
99	Typological responses of ecosystems to land use change. Geophysical Monograph Series, 2004, , 337-344.	0.1	2
100	Effects of land-use change on the carbon balance of terrestrial ecosystems. Geophysical Monograph Series, 2004, , 85-98.	0.1	92
101	Trade-offs in land-use decisions: Towards a framework for assessing multiple ecosystem responses to land-use change. Geophysical Monograph Series, 2004, , 1-9.	0.1	18
102	Revised estimates of the annual net flux of carbon to the atmosphere from changes in land use and land management 1850-2000. Tellus, Series B: Chemical and Physical Meteorology, 2003, 55, 378-390.	0.8	669
103	Why are estimates of the terrestrial carbon balance so different?. Global Change Biology, 2003, 9, 500-509.	4.2	339
104	Sources and sinks of carbon from land-use change in China. Global Biogeochemical Cycles, 2003, 17, n/a-n/a.	1.9	179
105	Carbon emissions from tropical deforestation and regrowth based on satellite observations for the 1980s and 1990s. Proceedings of the National Academy of Sciences of the United States of America, 2002, 99, 14256-14261.	3.3	562
106	Terrestrial carbon sinks--uncertain explanations. Biologist, 2002, 49, 155-60.	2.0	17
107	Annual fluxes of carbon from deforestation and regrowth in the Brazilian Amazon. Nature, 2000, 403, 301-304.	13.7	613
108	The annual net flux of carbon to the atmosphere from changes in land use 1850-1990*. Tellus, Series B: Chemical and Physical Meteorology, 1999, 51, 298-313.	0.8	392

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109	The U.S. Carbon Budget: Contributions from Land-Use Change. Science, 1999, 285, 574-578.	6.0	934
110	Land-use change in the Soviet Union between 1850 and 1980: causes of a net release of CO₂to the atmosphere. Tellus, Series B: Chemical and Physical Meteorology, 1988, 40B, 116-128.	0.8	37
111	Changes in the Carbon Content of Terrestrial Biota and Soils between 1860 and 1980: A Net Release of CO"2 to the Atmosphere. Ecological Monographs, 1983, 53, 235-262.	2.4	807
112	Measurement and Monitoring for REDD+: The Needs, Current Technological Capabilities, and Future Potential. SSRN Electronic Journal, 0, , .	0.4	5
113	The Role of the Worldâ€™s Forests in Global Warming. , 0, , 21-58.		31