



BLUE CARBON INITIATIVE PUBLICATION REPORT 2011 — 2018

Prepared November 2018

TABLE OF CONTENTS: BLUE CARBON INITIATIVE

Using Metrics Responsibly.....	2
Glossary.....	2
Contact Details.....	2
Overview of Blue Carbon Initiative Publications 2011 – 2018	3
Blue Carbon Initiative Publications by Document Type.....	3
Blue Carbon initiative Publications per Year.....	3
Top 31 Authors represented in Blue Carbon Initiative Publications by Productivity.....	4
Authors Represented in Blue Carbon Initiative Publications (Data Visualisation)	5
Top 10 Countries Represented in Blue Carbon Initiative Publications by Productivity	6
Top 16 Institutions Represented in Blue Carbon Initiative Publications.....	7
Institutions Represented in Blue Carbon Initiative Publications (Data Visualisation).....	8
Top 16 Funding Agencies Represented in Blue Carbon Initiative Publications.....	9
Top 14 Web of Science Research Areas Represented in Blue Carbon Initiative Publications.....	10
Top Journals represented in Blue Carbon Initiative Publications.....	11
Blue Carbon Initiative Highly Cited Papers.....	12
Citations per Year for Blue Carbon Initiative Publications 2011 – 2018	15
Top 10 Countries Citing Blue Carbon Initiative Publications by Productivity.....	15
Top 15 Institutions Citing Blue Carbon Initiative Publications.....	16
Top 14 Web of Science Research Areas Represented in Publications Citing Blue Carbon Initiative Publications.....	17
Patents Citing Blue Carbon Initiative Publications.....	18
Blue Carbon Initiative Publications Cited in Policy.....	18
Appendix 1: Blue Carbon Initiative Publications Indexed in Web of Science.....	21



USING METRICS RESPONSIBLY

The information presented in this report is provided with reference to The 2015 Leiden Manifesto¹. The databases used to provide this information have inherent subject area and geographical biases. Some disciplines in the humanities and social sciences are poorly represented, as is research produced in non-English languages.

¹Hicks et al., Bibliometrics: The Leiden Manifesto for Research Metrics, Nature 520,429–431 (23 April 2015) doi: [10.1038/520429a](https://doi.org/10.1038/520429a)

GLOSSARY

Category Normalized Citation Impact (CNCI): Calculated by dividing the actual count of citing items by the expected citation rate for publications with the same document type, year of publication and subject area. A CNCI of 1 is equal to world average.

Highly Cited Papers: Articles or reviews that rank in the top 1% by citations for field and year.

h-index: Index based on a list of publications ranked in descending order by the times cited. The value of h is equal to the number of papers (N) in the list that have N or more citations.

ESI (Essential Science Indicator): The Essential Science Indicators schema comprises 22 subject areas (including multidisciplinary) in science and social sciences and is based on journal assignments. Arts & Humanities journals are not included. There is no overlap between categories.

CONTACT DETAILS

Report prepared by staff from the University of Queensland Library.



OVERVIEW OF BLUE CARBON INITIATIVE PUBLICATIONS 2011 – 2018

All document types for the period 2011 – August 2018. InCites updated November 2018.

- ❖ Since 2011, the Blue Carbon Initiative has published **198** documents which are indexed in Web of Science. Of these, **196** are available for analysis in InCites.
- ❖ Of these **196** documents, **118** (60.2%) have international co-authors, and **0** have industry collaborations.

Essential metrics on the 196 WoS indexed publications	
Total citations	5,521
Average citations per publication	28.17
Category Normalized Citation Impact	2.93
h-index	33
Highly Cited Papers	15

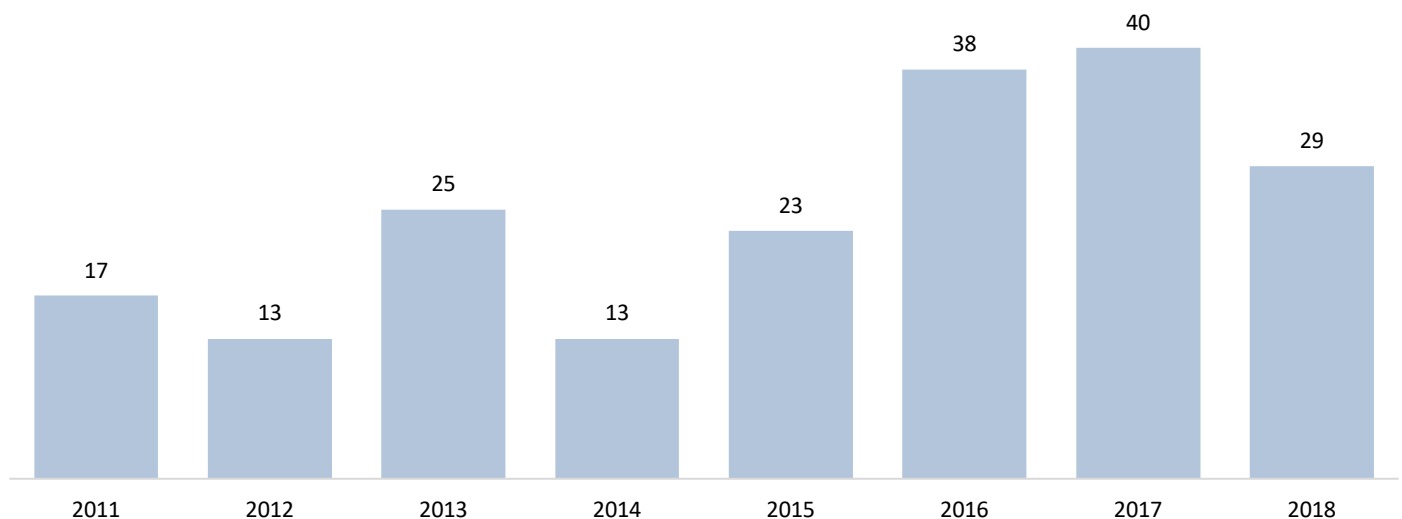
BLUE CARBON INITIATIVE PUBLICATIONS BY DOCUMENT TYPE

198 publications indexed in Web of Science between 2011 and 2018, by document type. Web of Science accessed November 2018.



BLUE CARBON INITIATIVE PUBLICATIONS PER YEAR

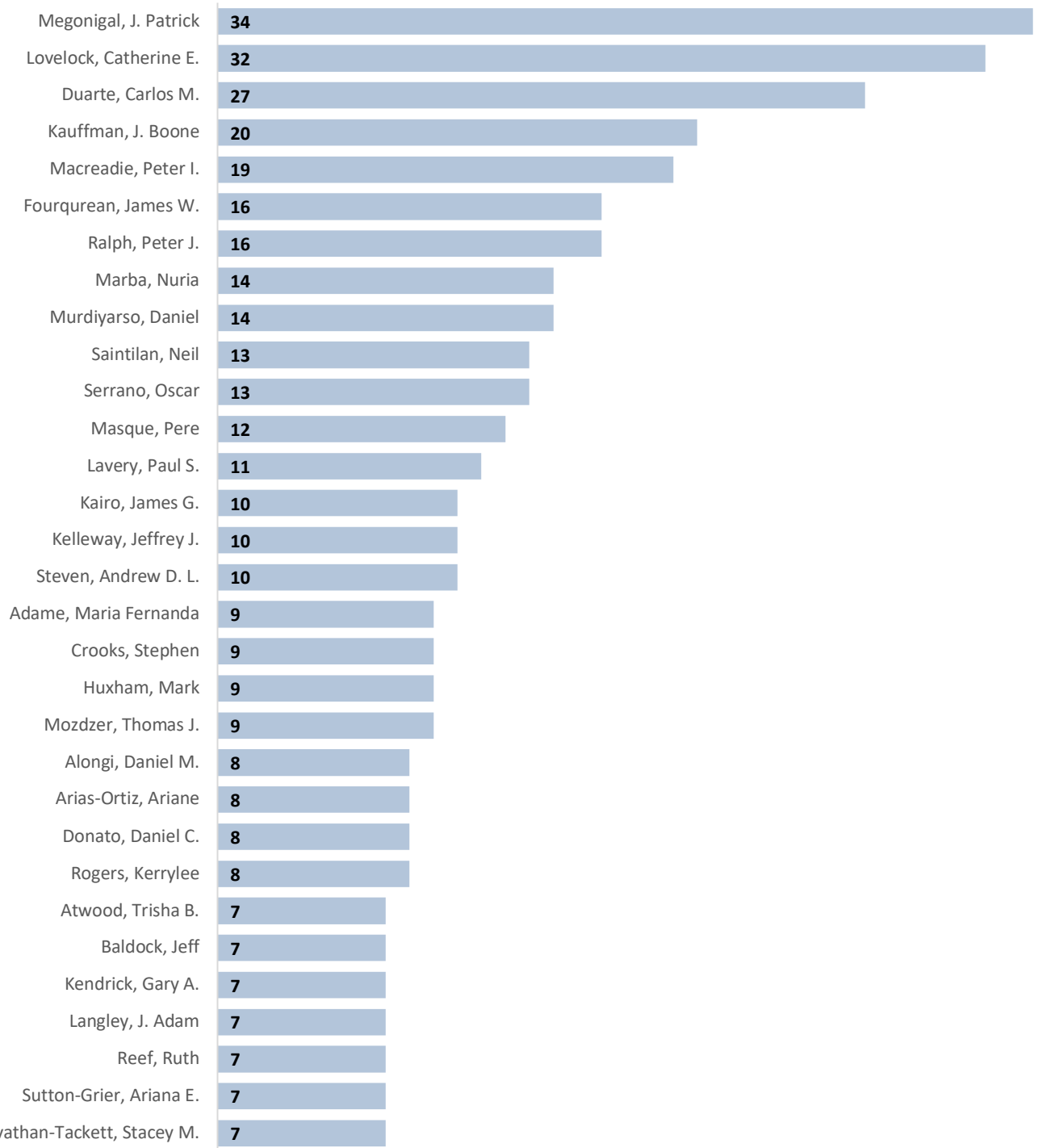
Number of publications (all document types) published per year, 2011 – August 2018. InCites updated November 2018.





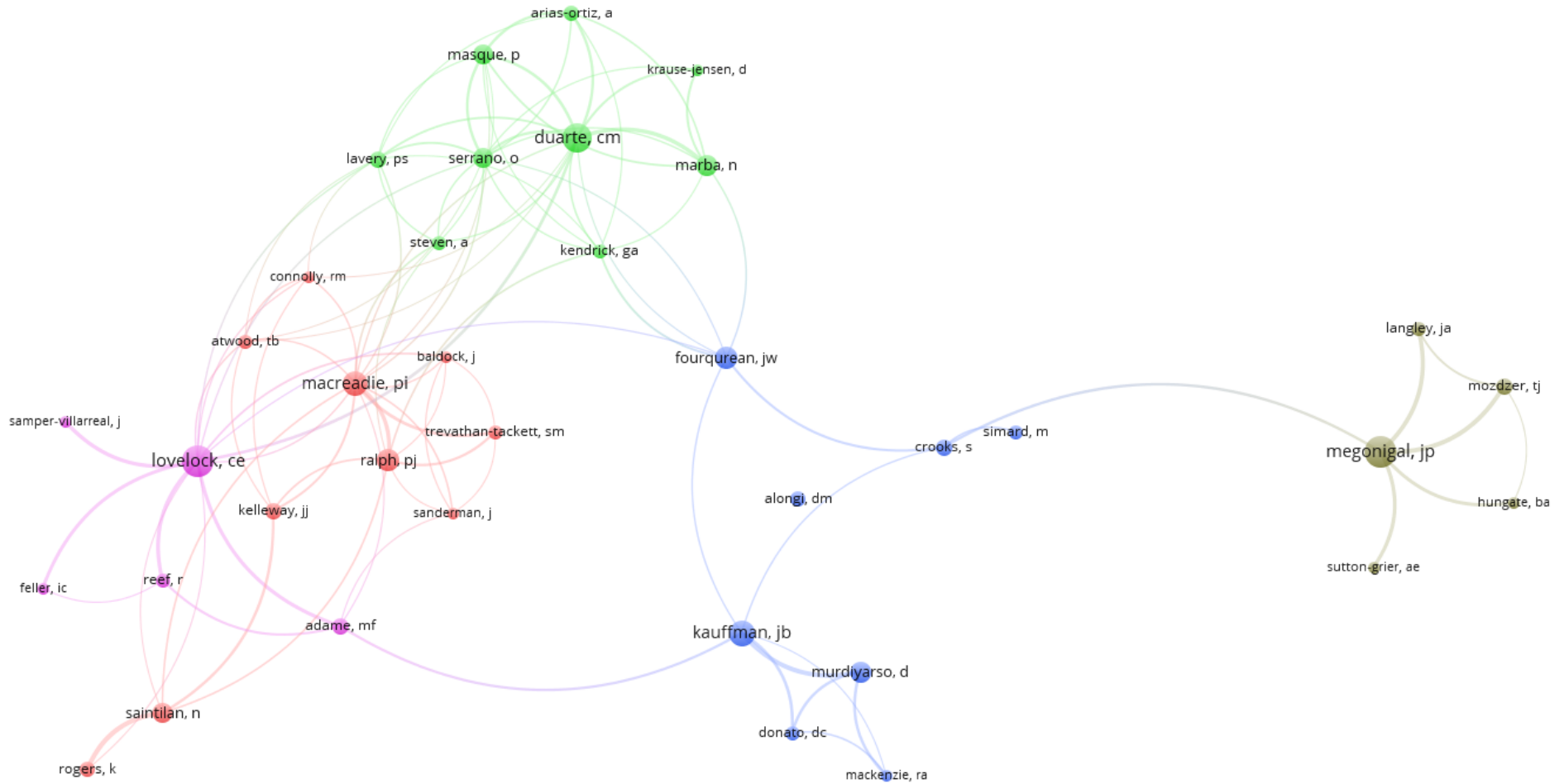
TOP 31 AUTHORS REPRESENTED IN BLUE CARBON INITIATIVE PUBLICATIONS BY PRODUCTIVITY

Number of publications (all document types) per author for the period 2011 – August 2018. InCites accessed November 2018. Includes Blue Carbon Initiative authors and collaborators.



AUTHORS REPRESENTED IN BLUE CARBON INITIATIVE PUBLICATIONS (DATA VISUALISATION)

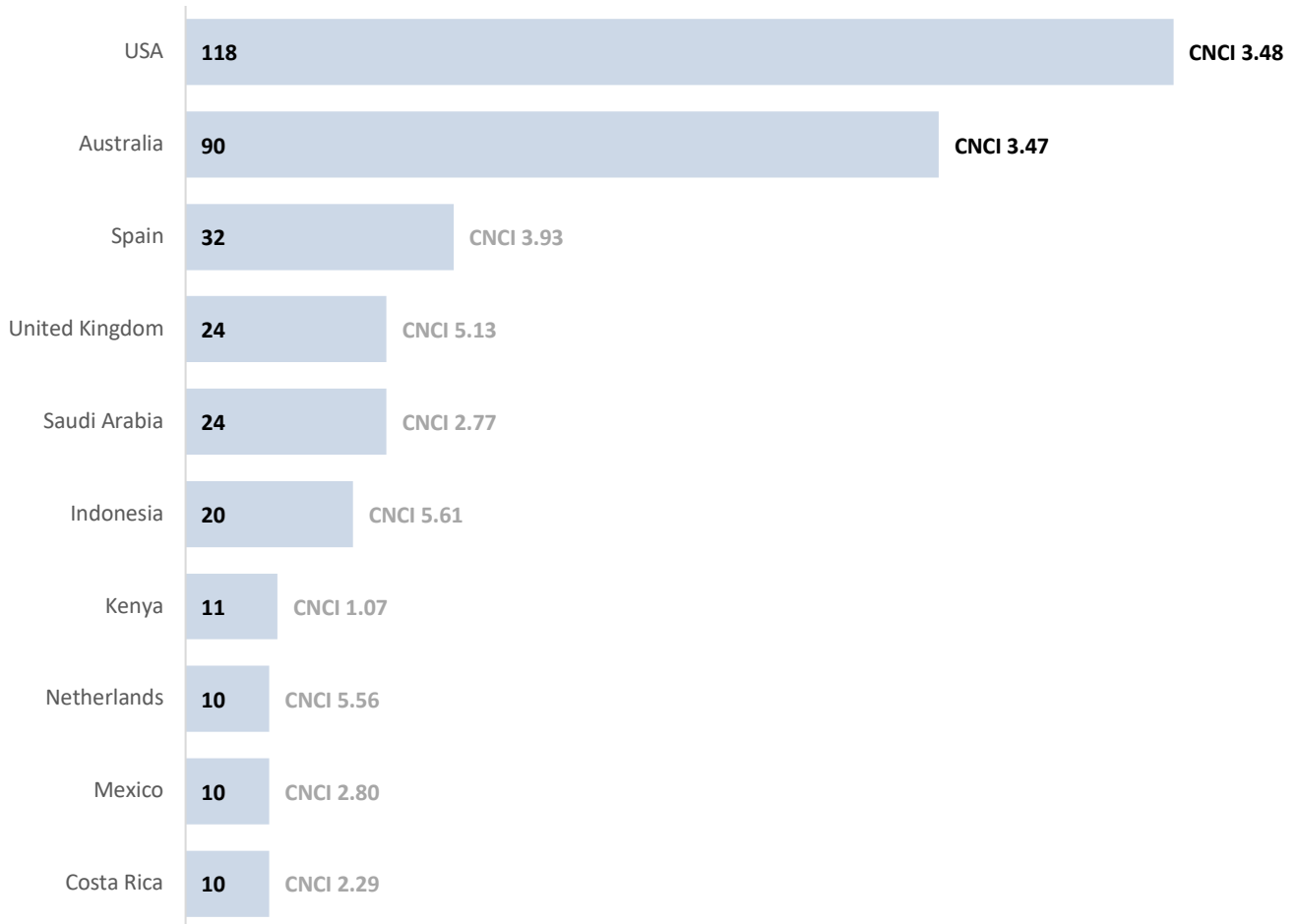
Each author is represented by a node. The size of each node is relative to the number of publications for the respective author. Visualisation limited to authors with a minimum of 5 publications who are connected via collaborations. The lines between nodes represent collaborations. Created with VOS Viewer using Web of Science publication data, accessed November 2018.





TOP 10 COUNTRIES REPRESENTED IN BLUE CARBON INITIATIVE PUBLICATIONS BY PRODUCTIVITY

All document types for the period 2011 – August 2018. InCites updated November 2018. Take care not to infer too much from the CNCI when publication numbers are low, i.e. <50.





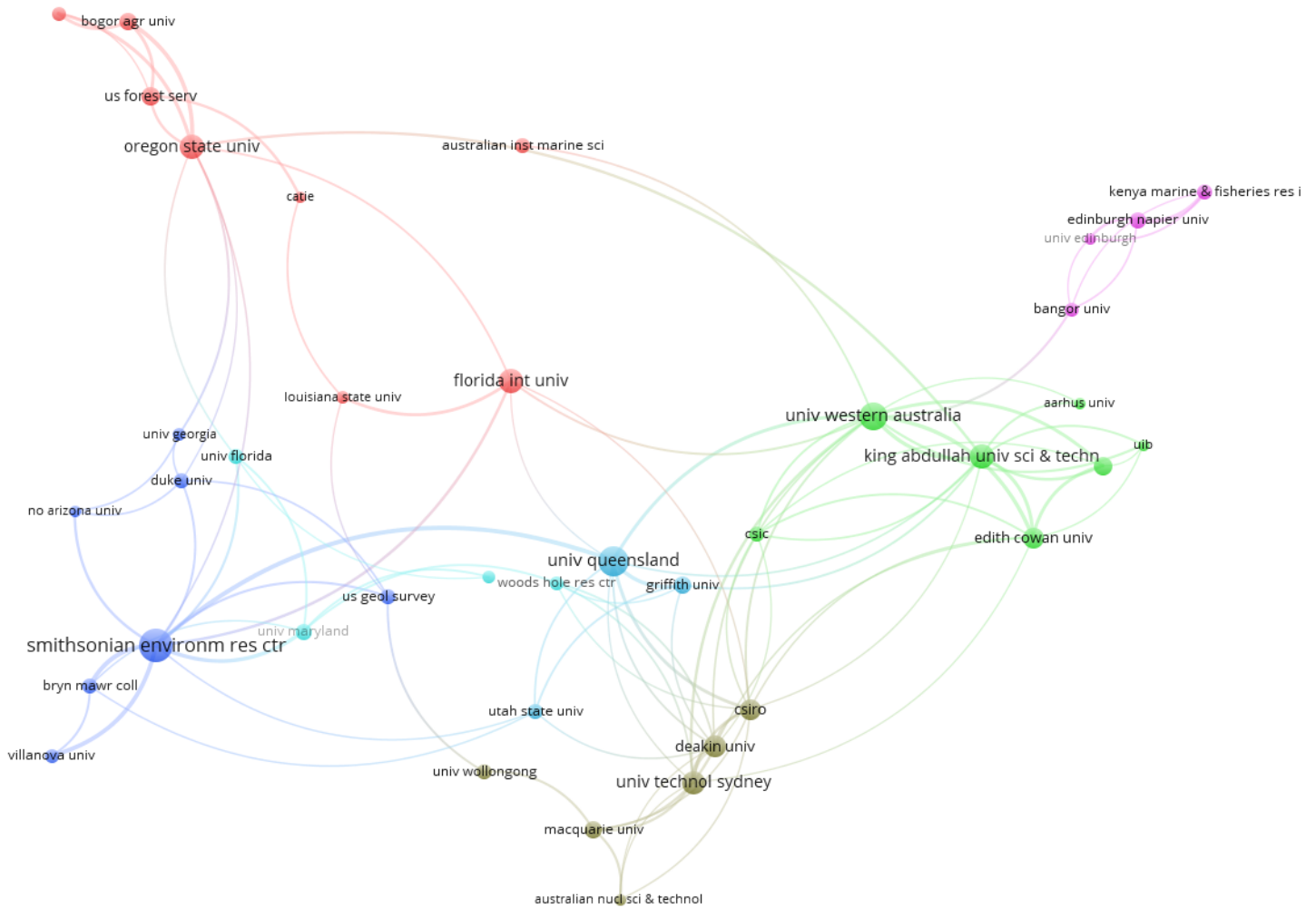
TOP 16 INSTITUTIONS REPRESENTED IN BLUE CARBON INITIATIVE PUBLICATIONS

All document types for the period 2011 – August 2018. Excludes Academic Systems. InCites updated November 2018.
 Australian Institutions are coloured green.

	Institution	Web of Science Documents	Category Normalized Citation Impact
1	Smithsonian Institution	48	2.20
2	University of Queensland	32	2.56
3	University of Western Australia	27	3.73
4	Consejo Superior de Investigaciones Cientificas (CSIC)	26	4.69
5	King Abdullah University of Science & Technology	22	2.94
6	Florida International University	21	3.83
7	Oregon State University	21	3.43
8	University of Technology Sydney	20	3.03
9	Center for International Forestry Research (CIFOR)	18	5.72
10	Deakin University	18	3.39
11	Commonwealth Scientific & Industrial Research Organisation (CSIRO)	18	3.35
12	United States Department of Agriculture (USDA)	16	4.15
13	Edith Cowan University	16	2.81
14	CSIC - Instituto Mediterraneo de Estudios Avanzados (IMEDEA)	15	4.71
15	United States Forest Service	15	4.29
16	United States Department of the Interior	15	1.96

INSTITUTIONS REPRESENTED IN BLUE CARBON INITIATIVE PUBLICATIONS (DATA VISUALISATION)

Each institution is represented by a node. The size of each node is relative to the number of publications for the respective institution. Visualisation limited to institutions with a minimum of 5 publications. The lines between nodes represent collaborations. Created with VOS Viewer using Web of Science publication data, accessed November 2018.





TOP 16 FUNDING AGENCIES REPRESENTED IN BLUE CARBON INITIATIVE PUBLICATIONS

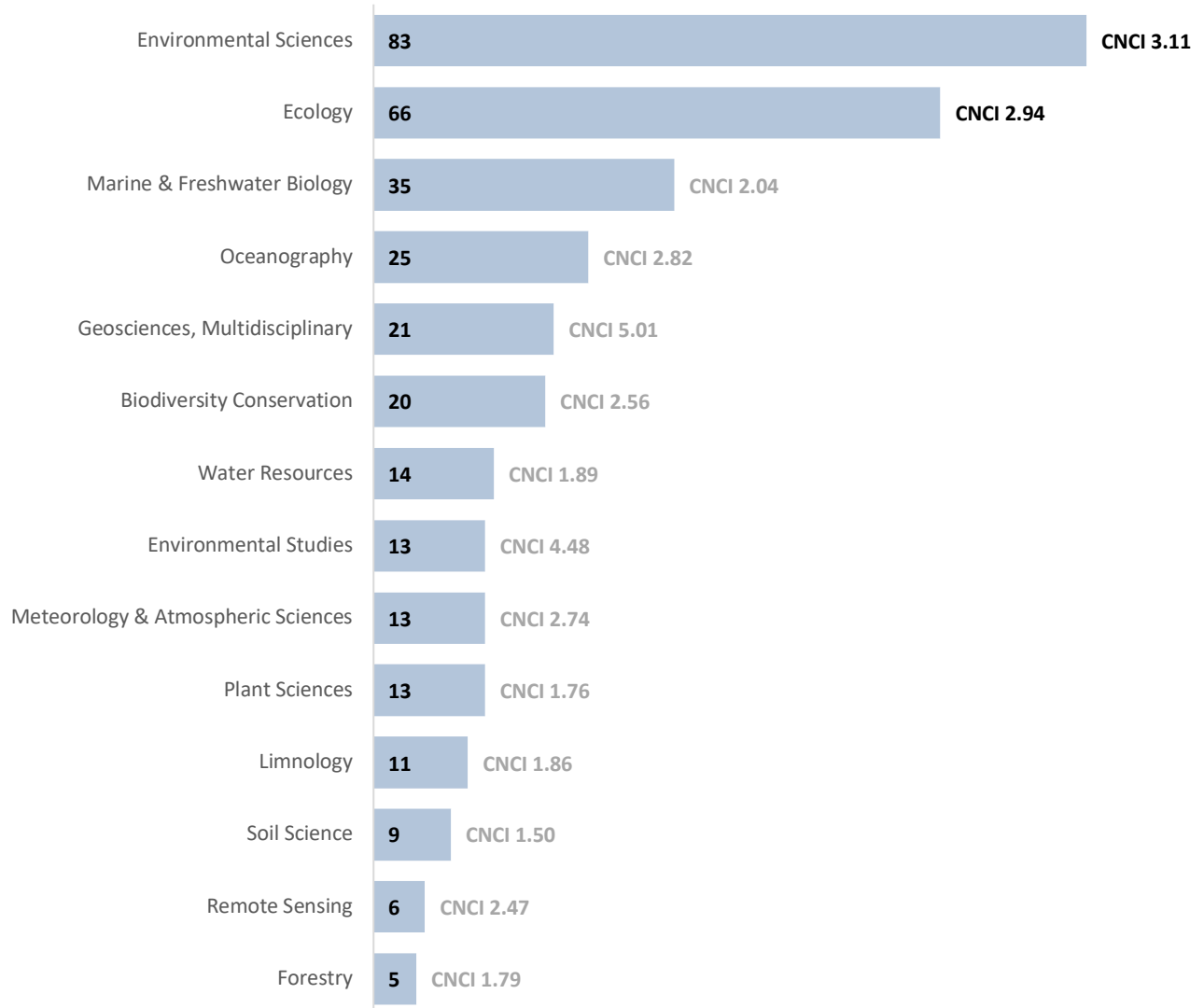
All document types for the period 2011 – August 2018. InCites updated November 2018.

	Institution	Web of Science Documents	Country
1	Australian Research Council	39	Australia
2	National Science Foundation (NSF)	22	USA
3	Smithsonian Inst	14	USA
4	Commonwealth Scientific & Industrial Research Organisation (CSIRO)	9	Australia
5	NERC Natural Environment Research Council	9	UK
6	United States Agency for International Development (USAID)	9	USA
7	Economic & Social Research Council (ESRC)	7	UK
8	United States Department of Energy (DOE)	6	USA
9	National Aeronautics & Space Administration (NASA)	6	USA
10	Australian Government	6	Australia
11	Generalitat de Catalunya	5	Spain
12	United States Forest Service	4	USA
13	Ministry of Science and Innovation (MICINN)	4	Spain
14	King Abdullah University of Science & Technology	4	Saudi Arabia
15	European Union (EU)	4	Europe
16	National Council for Scientific and Technological Development (CNPq)	4	Brazil



TOP 14 WEB OF SCIENCE RESEARCH AREAS REPRESENTED IN BLUE CARBON INITIATIVE PUBLICATIONS

All document types for the period 2011 – August 2018. InCites updated November 2018. Take care not to infer too much from the CNCI when publication numbers are low, i.e. <50.





TOP JOURNALS REPRESENTED IN BLUE CARBON INITIATIVE PUBLICATIONS

All document types for the period 2011 – August 2018. InCites updated November 2018.

Journal Title	Publications	Impact Factor	Journal Quartile in WoS Subject Category	
Global Change Biology	12	8.997	Q1 Q1 Q1	Environmental Sciences Biodiversity Conservation Ecology
PLoS One	10	2.766	Q1	Multidisciplinary Sciences
Scientific Reports	8	4.122	Q1	Multidisciplinary Sciences
Biogeosciences	8	3.441	Q2 Q1	Ecology Geosciences, Multidisciplinary
Estuaries and Coasts	8	2.421	Q1 Q2	Marine & Freshwater Biology Environmental Sciences
Limnology and Oceanography	7	3.595	Q1 Q1	Limnology Oceanography
Wetlands Ecology and Management	7	1.581	Q3 Q3	Water Resources Environmental Sciences
Nature Climate Change	6	19.181	Q1 Q1 Q1	Environmental Sciences Meteorology & Atmospheric Sciences Environmental Studies
Frontiers in Ecology and the Environment	6	8.302	Q1 Q1	Environmental Sciences Ecology

BLUE CARBON INITIATIVE HIGHLY CITED PAPERS

There are 15 Highly Cited Papers among the publications for the Blue Carbon Initiative 2011 – November 2018. Data from Web of Science, accessed November 2018. Highly Cited Papers have received enough citations to place them in the top 1% of their subject area based on a set threshold for the subject area and year of publication.

Citation Count	Title	Authors	Journal	ESI Subject Area
587	A blueprint for blue carbon: toward an improved understanding of the role of vegetated coastal habitats in sequestering CO ₂	McLeod, E; Chmura, GL; Bouillon, S; Salm, R; Bjork, M; Duarte, CM; Lovelock, CE; Schlesinger, WH; Silliman, BR	Frontiers in Ecology and the Environment	Environment/ Ecology
555	Mangroves among the most carbon-rich forests in the tropics	Donato, DC; Kauffman, JB; Murdiyarto, D; Kurnianto, S; Stidham, M; Kanninen, M	Nature Geoscience	Geosciences
406	Seagrass ecosystems as a globally significant carbon stock	Fourqurean, JW; Duarte, CM; Kennedy, H; Marba, N; Holmer, M; Mateo, MA; Apostolaki, ET; Kendrick, GA; Krause-Jensen, D; McGlathery, KJ; Serrano, O	Nature Geoscience	Geosciences
307	Tidal wetland stability in the face of human impacts and sea-level rise	Kirwan, ML; Megonigal, JP	Nature	Environment/ Ecology
284	Estimating global "blue carbon" emissions from conversion and degradation of vegetated coastal ecosystems	Pendleton, L; Donato, DC; Murray, BC; Crooks, S; Jenkins, WA; Sifleet, S; Craft, C; Fourqurean, JW; Kauffman, JB; Marba, N; Megonigal, P; Pidgeon, E; Herr, D; Gordon, D; Baldera, A	PLoS One	Environment/ Ecology
277	Mapping forest canopy height globally with spaceborne lidar	Simard, M; Pinto, N; Fisher, JB; Baccini, A	Journal of Geophysical Research - Biogeosciences	Geosciences
178	Carbon cycling and storage in mangrove forests	Alongi, DM	Annual Review of Marine Science	Geosciences

Citation Count	Title	Authors	Journal	ESI Subject Area
129	Mangrove expansion and salt marsh decline at mangrove poleward limits	Saintilan, N; Wilson, NC; Rogers, K; Rajkaran, A; Krauss, KW	Global Change Biology	Environment/ Ecology
119	Quantifying global soil carbon losses in response to warming	Crowther, TW; Todd-Brown, KEO; Rowe, CW; Wieder, WR; Carey, JC; Machmuller, MB; Snoek, BL; Fang, S; Zhou, G; Allison, SD; Blair, JM; Bridgham, SD; Burton, AJ; Carrillo, Y; Reich, PB; Clark, JS; Classen, AT; Dijkstra, FA; Elberling, B; Emmett, BA; Estiarte, M; Frey, SD; Guo, J; Harte, J; Jiang, L; Johnson, BR; Kroel-Dulay, G; Larsen, KS; Laudon, H; Lavallee, JM; Luo, Y; Lupascu, M; Ma, LN; Marhan, S; Michelsen, A; Mohan, J; Niu, S; Pendall, E; Penuelas, J; Pfeifer-Meister, L; Poll, C; Reinsch, S; Reynolds, LL; Schmidt, IK; Sistla, S; Sokol, NW; Templer, PH; Treseder, KK; Welker, JM; Bradford, MA	Nature	Environment/ Ecology
80	Moving beyond global warming potentials to quantify the climatic role of ecosystems	Neubauer, SC; Megonigal, JP	Ecosystems	Environment/ Ecology
46	Trees, forests and water: cool insights for a hot world	Ellison, D; Morris, CE; Locatelli, B; Sheil, D; Cohen, J; Murdiyarso, D; Gutierrez, V; van Noordwijk, M; Creed, IF; Pokorny, J; Gaveau, D; Spracklen, DV; Tobella, AB; Ilstedt, U; Teuling, AJ; Gebrehiwot, SG; Sands, DC; Muys, B; Verbist, B; Springgay, E; Sugandi, Y; Sullivan, CA	Global Environmental Change - Human and Policy Dimensions	Social Sciences, general
38	Mangrove sedimentation and response to relative sea-level rise	Woodroffe, CD; Rogers, K; McKee, KL; Lovelock, CE; Mendelsohn, IA; Saintilan, N	Annual Review of Marine Science	Geosciences

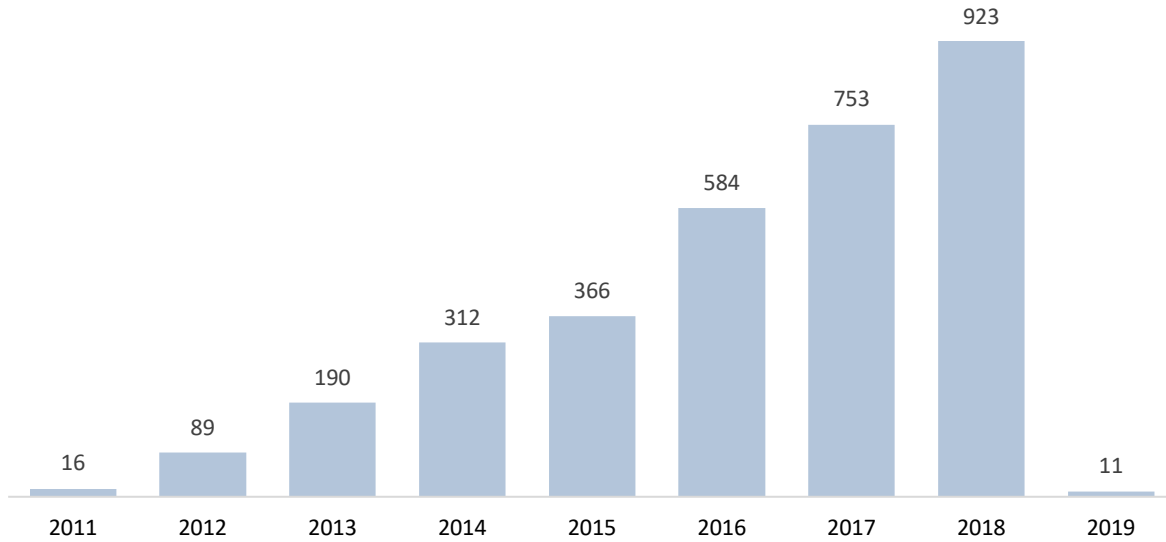


Citation Count	Title	Authors	Journal	ESI Subject Area
33	Natural climate solutions	Griscom, BW; Adams, J; Ellis, PW; Houghton, RA; Lomax, G; Miteva, DA; Schlesinger, WH; Shoch, D; Siikamaki, JV; Smith, P; Woodbury, P; Zganjar, C; Blackman, A; Campari, J; Conant, RT; Delgado, C; Elias, P; Gopalakrishna, T; Hamsik, MR; Herrero, M; Kiesecker, J; Landis, E; Laestadius, L; Leavitt, SM; Minnemeyer, S; Polasky, S; Potapov, P; Putz, FE; Sanderman, J; Silvius, M; Wollenberg, E; Fargione, J	Proceedings of the National Academy of Sciences of the United States of America	Environment/ Ecology
24	Clarifying the role of coastal and marine systems in climate mitigation	Howard, J; Sutton-Grier, A; Herr, D; Kleypas, J; Landis, E; Mcleod, E; Pidgeon, E; Simpson, S	Frontiers in Ecology and the Environment	Environment/ Ecology
17	Marine reserves can mitigate and promote adaptation to climate change	Roberts, CM; O'Leary, BC; McCauley, DJ; Cury, PM; Duarte, CM; Lubchenco, J; Pauly, D; Saenz-Arroyo, A; Sumaila, UR; Wilson, RW; Worm, B; Castilla, JC	Proceedings of the National Academy of Sciences of the United States of America	Environment/ Ecology



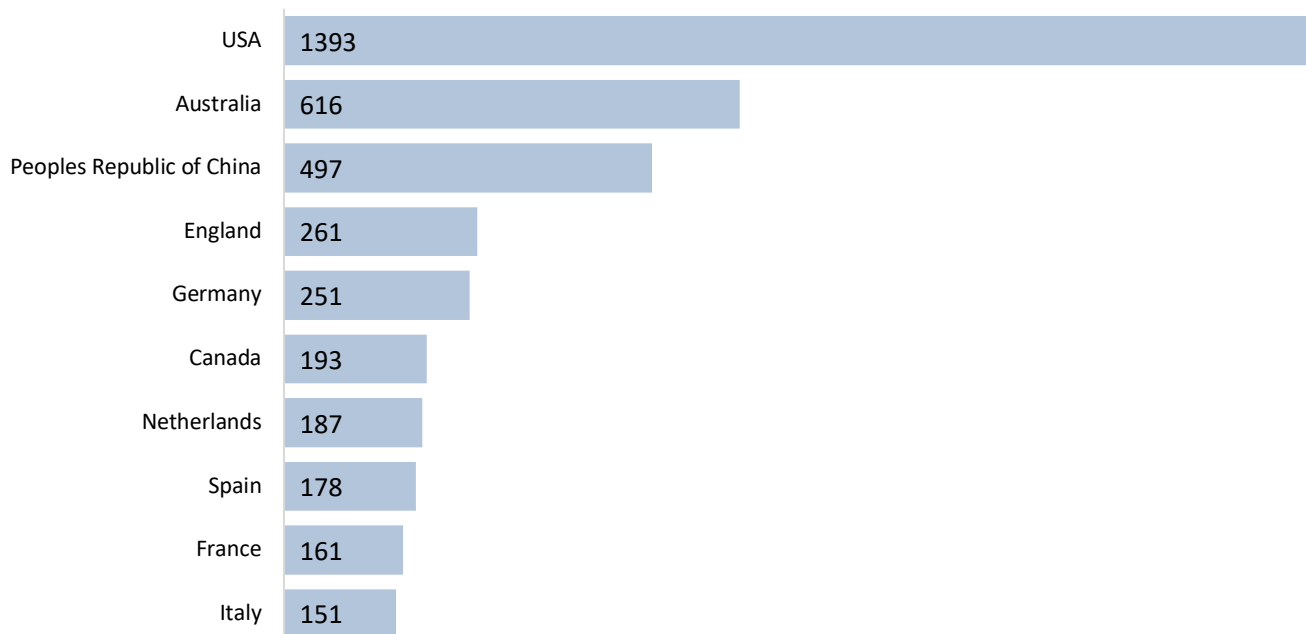
CITATIONS PER YEAR FOR BLUE CARBON INITIATIVE PUBLICATIONS 2011 – 2018

All document types for the period 2011 – 2018. Total number of citations in Web of Science: 6,074. Web of Science accessed November 2018.



TOP 10 COUNTRIES CITING BLUE CARBON INITIATIVE PUBLICATIONS BY PRODUCTIVITY

All document types for the period 2011 – 2018. Web of Science accessed November 2018.





TOP 15 INSTITUTIONS CITING BLUE CARBON INITIATIVE PUBLICATIONS

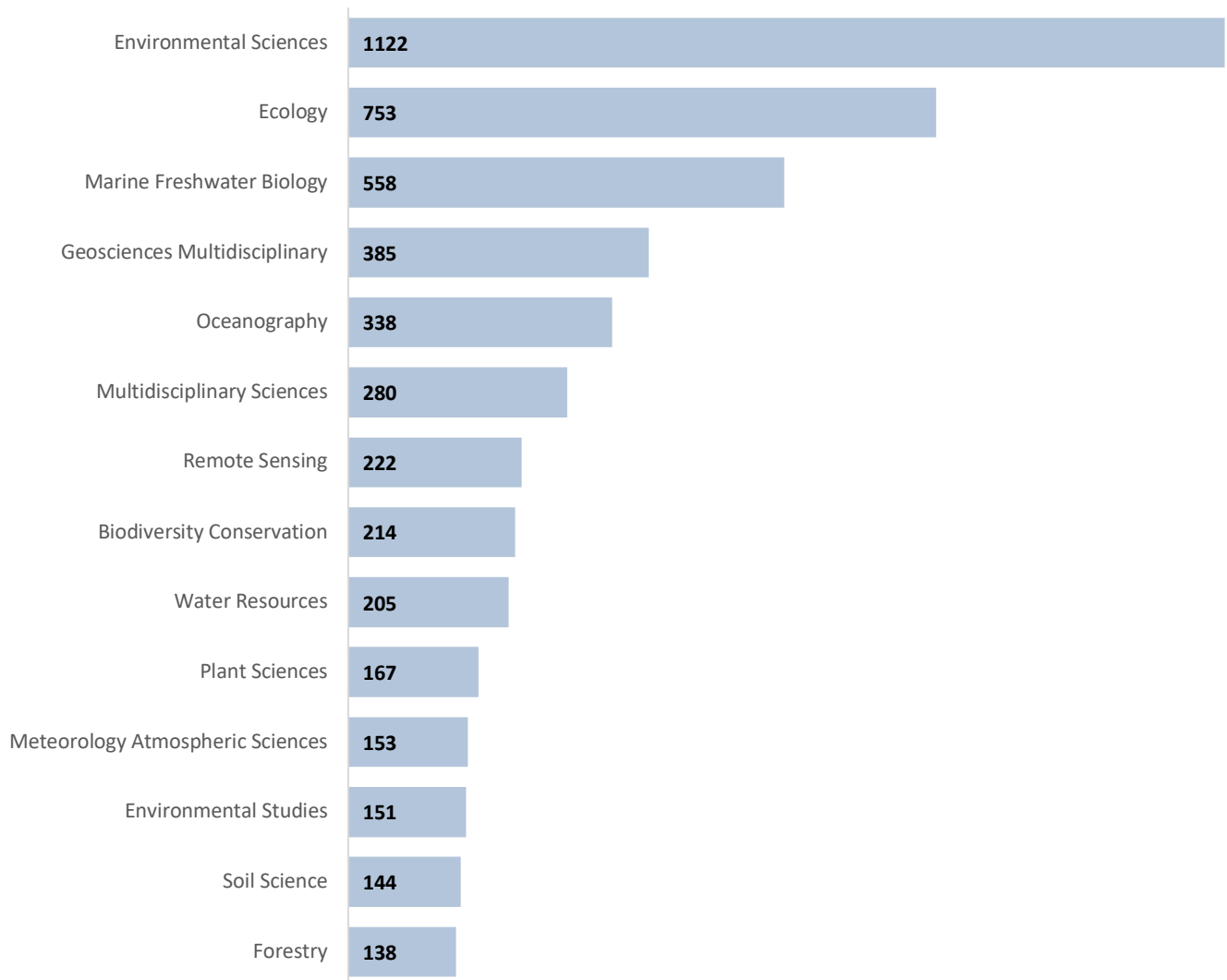
All document types for the period 2011 – 2018. Web of Science accessed November 2018.

	Institution	Web of Science Documents	Country
1	Chinese Academy of Sciences	196	China
2	State University System of Florida	180	USA
3	United States Department of the Interior	171	USA
4	United States Geological Survey	155	USA
5	University of California System	154	USA
6	University of Queensland	119	Australia
7	Centre National De La Recherche Scientifique CNRS	111	France
8	Smithsonian Institution	102	USA
9	United States Department of Agriculture USDA	93	USA
10	University System of Maryland	91	USA
11	University of Western Australia	90	Australia
12	National Aeronautics Space Administration NASA	84	USA
13	Smithsonian Environmental Research Center	83	USA
14	Consejo Superior de Investigaciones Cientificas CSIC	82	Spain
15	Florida International University	79	USA



TOP 14 WEB OF SCIENCE RESEARCH AREAS REPRESENTED IN PUBLICATIONS CITING BLUE CARBON INITIATIVE PUBLICATIONS

All document types for the period 2011 – 2018. Web of Science accessed November 2018.





PATENTS CITING BLUE CARBON INITIATIVE PUBLICATIONS

Patent data from SciVal and PatCite. Accessed November 2018.

There are no patents citing Blue Carbon Initiative publications published between 2011 and 2018.

BLUE CARBON INITIATIVE PUBLICATIONS CITED IN POLICY

Data from Altmetric.com. Accessed November 2018.

Times mentioned by Policy	Title of Publication	Journal Name	DOI	Cited by
10	Indonesia's blue carbon: a globally significant and vulnerable sink for seagrass and mangrove carbon	Wetlands Ecology & Management	10.1007/s11273-015-9446-y	Food and Agriculture Organization of the United Nations
9	Trees, forests and water: cool insights for a hot world	Global Environmental Change Part A: Human & Policy Dimensions	10.1016/j.gloenvcha.2017.01.002	Food and Agriculture Organization of the United Nations
7	Mangroves among the most carbon-rich forests in the tropics	Nature Geoscience	10.1038/ngeo1123	Food and Agriculture Organization of the United Nations; Institute for Environment and Sustainability (Joint Research Centre)
4	Quantifying global soil carbon losses in response to warming	Nature	10.1038/nature20150	Food and Agriculture Organization of the United Nations; National Academies of Sciences, Engineering & Medicine
4	Estimating global "blue carbon" emissions from conversion and degradation of vegetated coastal ecosystems	PLoS ONE	10.1371/journal.pone.0043542	Food and Agriculture Organization of the United Nations; World Bank
4	Carbon cycling and storage in mangrove forests.	Annual Review of Marine Science	10.1146/annurev-marine-010213-135020	Food and Agriculture Organization of the United Nations



Times mentioned in Policy	Title of Publication	Journal Title	DOI	Cited by
4	A blueprint for blue carbon: toward an improved understanding of the role of vegetated coastal habitats in sequestering CO ₂	Frontiers in Ecology & the Environment	10.1890/110004	Food and Agriculture Organization of the United Nations; Climate Council of Australia; The International Fund for Agricultural Development; National Research Council
2	Ecosystem carbon stocks of mangrove forests along the Pacific and Caribbean coasts of Honduras	Wetlands Ecology & Management	10.1007/s11273-016-9483-1	Food and Agriculture Organization of the United Nations; World Bank
2	Natural climate solutions	Proceedings of the National Academy of Sciences of the United States of America	10.1073/pnas.1710465114	Global Commission on the Economy and Climate; Climate Change Authority
1	Carbon stocks in artificially and naturally regenerated mangrove ecosystems in the Mekong Delta	Wetlands Ecology & Management	10.1007/s11273-015-9479-2	Food and Agriculture Organization of the United Nations
1	Carbon stocks of mangroves and losses arising from their conversion to cattle pastures in the Pantanos de Centla, Mexico	Wetlands Ecology & Management	10.1007/s11273-015-9453-z	Food and Agriculture Organization of the United Nations
1	Predators help protect carbon stocks in blue carbon ecosystems	Nature Climate Change	10.1038/nclimate2763	Food and Agriculture Organization of the United Nations
1	The role of economic, policy, and ecological factors in estimating the value of carbon stocks in Everglades mangrove forests, South Florida, USA	Environmental Science & Policy	10.1016/j.envsci.2016.09.005	Food and Agriculture Organization of the United Nations
1	Whole-island carbon stocks in the tropical Pacific: implications for mangrove conservation and upland restoration	Journal of Environmental Management	10.1016/j.jenvman.2011.12.004	Food and Agriculture Organization of the United Nations
1	Contribution of mangroves to coastal carbon cycling in low latitude seas	Agricultural & Forest Meteorology	10.1016/j.agrfor.2014.10.005	Food and Agriculture Organization of the United Nations



Times mentioned in Policy	Title of Publication	Journal Title	DOI	Cited by
1	Exploring different forest definitions and their impact on developing REDD+ reference emission levels: a case study for Indonesia	Environmental Science & Policy	10.1016/j.envsci.2013.06.002	Food and Agriculture Organization of the United Nations
1	The use of mixed effects models for obtaining low-cost ecosystem carbon stock estimates in mangroves of the Asia-Pacific	PLoS ONE	10.1371/journal.pone.0169096	Food and Agriculture Organization of the United Nations
1	A cost-efficient method to assess carbon stocks in tropical peat soil	Biogeosciences	10.5194/bg-9-4477-2012	Food and Agriculture Organization of the United Nations
1	Impacts of land use on Indian mangrove forest carbon stocks: implications for conservation and management	Ecological Applications	10.1890/15-2143	Food and Agriculture Organization of the United Nations



APPENDIX 1: BLUE CARBON INITIATIVE PUBLICATIONS INDEXED IN WEB OF SCIENCE

- Adame, M. F., Brown, C. J., Bejarano, M., Herrera-Silveira, J. A., Ezcurra, P., Kauffman, J. B., & Birdsey, R. (2018). The undervalued contribution of mangrove protection in Mexico to carbon emission targets. *Conservation Letters*, *11*(4), 9. doi:10.1111/conl.12445
- Adame, M. F., Hermoso, V., Perhans, K., Lovelock, C. E., & Herrera-Silveira, J. A. (2015). Selecting cost-effective areas for restoration of ecosystem services. *Conservation Biology*, *29*(2), 493-502. doi:10.1111/cobi.12391
- Adame, M. F., Kauffman, J. B., Medina, I., Gamboa, J. N., Torres, O., Caamal, J. P., . . . Herrera-Silveira, J. A. (2013). Carbon Stocks of Tropical Coastal Wetlands within the Karstic Landscape of the Mexican Caribbean. *Plos One*, *8*(2), 13. doi:10.1371/journal.pone.0056569
- Adame, M. F., & Lovelock, C. E. (2011). Carbon and nutrient exchange of mangrove forests with the coastal ocean. *Hydrobiologia*, *663*(1), 23-50. doi:10.1007/s10750-010-0554-7
- Adame, M. F., Reef, R., Herrera-Silveira, J. A., & Lovelock, C. E. (2012). Sensitivity of dissolved organic carbon exchange and sediment bacteria to water quality in mangrove forests. *Hydrobiologia*, *691*(1), 239-253. doi:10.1007/s10750-012-1071-7
- Almahasheer, H., Serrano, O., Duarte, C. M., Arias-Ortiz, A., Masque, P., & Irigoien, X. (2017). Low Carbon sink capacity of Red Sea mangroves. *Scientific Reports*, *7*, 10. doi:10.1038/s41598-017-10424-9
- Alongi, D. M. (2011). Carbon payments for mangrove conservation: ecosystem constraints and uncertainties of sequestration potential. *Environmental Science & Policy*, *14*(4), 462-470. doi:10.1016/j.envsci.2011.02.004
- Alongi, D. M. (2012). Carbon sequestration in mangrove forests. *Carbon Management*, *3*(3), 313-322. doi:10.4155/cmt.12.20
- Alongi, D. M. (2013). Icarus revisited: tropical forests, REDD plus and ecosystem dynamics. *Carbon Management*, *4*(5), 469-472. doi:10.4155/cmt.13.48
- Alongi, D. M. (2014). Carbon Cycling and Storage in Mangrove Forests. In C. A. Carlson & S. J. Giovannoni (Eds.), *Annual Review of Marine Science*, Vol 6 (Vol. 6, pp. 195-219). Palo Alto: Annual Reviews.
- Alongi, D. M., de Carvalho, N. A., Amaral, A. L., da Costa, A., Trott, L., & Tirendi, F. (2012). Uncoupled surface and below-ground soil respiration in mangroves: implications for estimates of dissolved inorganic carbon export. *Biogeochemistry*, *109*(1-3), 151-162. doi:10.1007/s10533-011-9616-9
- Alongi, D. M., & Mukhopadhyay, S. K. (2015). Contribution of mangroves to coastal carbon cycling in low latitude seas. *Agricultural and Forest Meteorology*, *213*, 266-272. doi:10.1016/j.agrformet.2014.10.005
- Alongi, D. M., Murdiyarsa, D., Fourqurean, J. W., Kauffman, J. B., Hutahaean, A., Crooks, S., . . . Wagey, T. (2016). Indonesia's blue carbon: a globally significant and vulnerable sink for seagrass and mangrove carbon. *Wetlands Ecology and Management*, *24*(1), 3-13. doi:10.1007/s11273-015-9446-y
- Apostolaki, E. T., Holmer, M., Mara, N., & Karakassis, I. (2011). Reduced carbon sequestration in a Mediterranean seagrass (*Posidonia oceanica*) ecosystem impacted by fish farming. *Aquaculture Environment Interactions*, *2*(1), 49-59. doi:10.3354/aei00031
- Apostolaki, E. T., Holmer, M., Marba, N., & Karakassis, I. (2011). Epiphyte dynamics and carbon metabolism in a nutrient enriched Mediterranean seagrass (*Posidonia oceanica*) ecosystem. *Journal of Sea Research*, *66*(2), 135-142. doi:10.1016/j.seares.2011.05.007
- Arias-Ortiz, A., Serrano, O., Masque, P., Lavery, P. S., Mueller, U., Kendrick, G. A., . . . Duarte, C. M. (2018). A marine heatwave drives massive losses from the world's largest seagrass carbon stocks. *Nature Climate Change*, *8*(4), 338-+. doi:10.1038/s41558-018-0096-y
- Armitage, A. R., & Fourqurean, J. W. (2016). Carbon storage in seagrass soils: long-term nutrient history exceeds the effects of near-term nutrient enrichment. *Biogeosciences*, *13*(1), 313-321. doi:10.5194/bg-13-313-2016
- Atwood, T. B., Connolly, R. M., Almahasheer, H., Carnell, P. E., Duarte, C. M., Lewis, C. J. E., . . . Lovelock, C. E. (2017). Global patterns in mangrove soil carbon stocks and losses. *Nature Climate Change*, *7*(7), 523-+. doi:10.1038/nclimate3326
- Atwood, T. B., Connolly, R. M., Almahasheer, H., Carnell, P. E., Duarte, C. M., Lewis, C. J. E., . . . Lovelock, C. E. (2018). Global patterns in mangrove soil carbon stocks and losses (vol 7, pg 523, 2017). *Nature Climate Change*, *8*(3), 257-257. doi:10.1038/s41558-017-0019-3
- Atwood, T. B., Connolly, R. M., Ritchie, E. G., Lovelock, C. E., Heithaus, M. R., Hays, G. C., . . . Macreadie, P. I. (2015). Predators help protect carbon stocks in blue carbon ecosystems. *Nature Climate Change*, *5*(12), 1038-1045. doi:10.1038/nclimate2763



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