Eta Mitchard

List of Publications by Year
in descending order

75 papers	8,972 citations	87888 38 h-index	88630 70 g-index
87 all docs	87 docs citations	87 times ranked	10843 citing authors

#	Article	IF	Citations
1	Benchmark map of forest carbon stocks in tropical regions across three continents. Proceedings of the National Academy of Sciences of the United States of America, 2011, 108, 9899-9904.	7.1	1,659
2	Restoring natural forests is the best way to remove atmospheric carbon. Nature, 2019, 568, 25-28.	27.8	508
3	An integrated panâ€tropical biomass map using multiple reference datasets. Global Change Biology, 2016, 22, 1406-1420.	9.5	469
4	A Review of the Application of Optical and Radar Remote Sensing Data Fusion to Land Use Mapping and Monitoring. Remote Sensing, 2016, 8, 70.	4.0	459
5	Asynchronous carbon sink saturation in African and Amazonian tropical forests. Nature, 2020, 579, 80-87.	27.8	439
6	Age, extent and carbon storage of the central Congo Basin peatland complex. Nature, 2017, 542, 86-90.	27.8	428
7	The tropical forest carbon cycle and climate change. Nature, 2018, 559, 527-534.	27.8	425
8	Height-diameter allometry of tropical forest trees. Biogeosciences, 2011, 8, 1081-1106.	3.3	396
9	Tree height integrated into pantropical forest biomass estimates. Biogeosciences, 2012, 9, 3381-3403.	3.3	373
10	Markedly divergent estimates of <scp>A</scp>mazon forest carbon density from ground plots and satellites. Global Ecology and Biogeography, 2014, 23, 935-946.	5.8	248
11	Changing Ecology of Tropical Forests: Evidence and Drivers. Annual Review of Ecology, Evolution, and Systematics, 2009, 40, 529-549.	8.3	229
12	Measuring biomass changes due to woody encroachment and deforestation/degradation in a forestâ€“savanna boundary region of central Africa using multi-temporal L-band radar backscatter. Remote Sensing of Environment, 2011, 115, 2861-2873.	11.0	226
13	Using satellite radar backscatter to predict aboveâ€ground woody biomass: A consistent relationship across four different African landscapes. Geophysical Research Letters, 2009, 36, .	4.0	222
14	Long-term thermal sensitivity of Earthâ€™s tropical forests. Science, 2020, 368, 869-874.	12.6	198
15	Mapping tropical forest biomass with radar and spaceborne LiDAR in LopÃ© National Park, Gabon: overcoming problems of high biomass and persistent cloud. Biogeosciences, 2012, 9, 179-191.	3.3	165
16	Uncertainty in the spatial distribution of tropical forest biomass: a comparison of pan-tropical maps. Carbon Balance and Management, 2013, 8, 10.	3.2	162
17	The distribution and amount of carbon in the largest peatland complex in Amazonia. Environmental Research Letters, 2014, 9, 124017.	5.2	155
18	Perturbations in the carbon budget of the tropics. Global Change Biology, 2014, 20, 3238-3255.	9.5	145

#	Article	IF	Citations
19	Quantifying smallâ€scale deforestation and forest degradation in African woodlands using radar imagery. Global Change Biology, 2012, 18, 243-257.	9.5	131
20	State of the Climate in 2012. Bulletin of the American Meteorological Society, 2013, 94, S1-S258.	3.3	129
21	Pervasive Rise of Small-scale Deforestation in Amazonia. Scientific Reports, 2018, 8, 1600.	3.3	127
22	The global forest above-ground biomass pool for 2010 estimated from high-resolution satellite observations. Earth System Science Data, 2021, 13, 3927-3950.	9.9	123
23	Woody encroachment and forest degradation in sub-Saharan Africa's woodlands and savannas 1982â€"2006. Philosophical Transactions of the Royal Society B: Biological Sciences, 2013, 368, 20120406.	4.0	104
24	Measuring Woody Encroachment along a Forestâ€"Savanna Boundary in Central Africa. Earth Interactions, 2009, 13, 1-29.	1.5	83
25	Carbon losses from deforestation and widespread degradation offset by extensive growth in African woodlands. Nature Communications, 2018, 9, 3045.	12.8	83
26	Threats to intact tropical peatlands and opportunities for their conservation. Conservation Biology, 2017, 31, 1283-1292.	4.7	70
27	Mapping dynamics of deforestation and forest degradation in tropical forests using radar satellite data. Environmental Research Letters, 2015, 10, 034014.	5.2	68
28	Radar backscatter is not a 'direct measure' of forest biomass. Nature Climate Change, 2012, 2, 556-557.	18.8	66
29	High aboveground carbon stock of African tropical montane forests. Nature, 2021, 596, 536-542.	27.8	65
30	Congo Basin peatlands: threats and conservation priorities. Mitigation and Adaptation Strategies for Global Change, 2019, 24, 669-686.	2.1	64
31	Understanding â€˜saturationâ€™ of radar signals over forests. Scientific Reports, 2017, 7, 3505.	3.3	61
32	Comment on â€œThe global tree restoration potentialâ€. Science, 2019, 366, .	12.6	55
33	Mapping tropical disturbed forests using multi-decadal 30â€¯m optical satellite imagery. Remote Sensing of Environment, 2019, 221, 474-488.	11.0	52
34	Are Inventory Based and Remotely Sensed Above-Ground Biomass Estimates Consistent?. PLoS ONE, 2013, 8, e74170.	2.5	52
35	A comprehensive framework for assessing the accuracy and uncertainty of global above-ground biomass maps. Remote Sensing of Environment, 2022, 272, 112917.	11.0	48
36	Extending the baseline of tropical dry forest loss in Ghana (1984â€"2015) reveals drivers of major deforestation inside a protected area. Biological Conservation, 2018, 218, 163-172.	4.1	47

#	Article	IF	Citations
37	L-Band SAR Backscatter Related to Forest Cover, Height and Aboveground Biomass at Multiple Spatial Scales across Denmark. Remote Sensing, 2015, 7, 4442-4472.	4.0	43
38	More Than Meets the Eye: Using Sentinel-2 to Map Small Plantations in Complex Forest Landscapes. Remote Sensing, 2018, 10, 1693.	4.0	42
39	Erosion rates as a potential bottomâ€up control of forest structural characteristics in the Sierra Nevada Mountains. Ecology, 2015, 96, 31-38.	3.2	40
40	Topographic roughness as a signature of the emergence of bedrock in eroding landscapes. Earth Surface Dynamics, 2015, 3, 483-499.	2.4	35
41	Predicting alpha diversity of African rain forests: models based on climate and satellite-derived data do not perform better than a purely spatial model. Journal of Biogeography, 2011, 38, 1164-1176.	3.0	30
42	PHENOTYPIC PLASTICITY OF HERMAPHRODITE SEX ALLOCATION PROMOTES THE EVOLUTION OF SEPARATE SEXES: AN EXPERIMENTAL TEST OF THE SEX-DIFFERENTIAL PLASTICITY HYPOTHESIS USING<i>SAGITTARIA LATIFOLIA</i>(ALISMATACEAE). Evolution; International Journal of Organic Evolution, 2008, 62, 971-978.	2.3	28
43	A novel application of satellite radar data: measuring carbon sequestration and detecting degradation in a community forestry project in Mozambique. Plant Ecology and Diversity, 2013, 6, 159-170.	2.4	27
44	Relationships of S-Band Radar Backscatter and Forest Aboveground Biomass in Different Forest Types. Remote Sensing, 2017, 9, 1116.	4.0	27
45	Pantropical variability in tree crown allometry. Global Ecology and Biogeography, 2021, 30, 459-475.	5.8	27
46	Oil palm concessions in southern Myanmar consist mostly of unconverted forest. Scientific Reports, 2019, 9, 11931.	3.3	25
47	Risks to carbon storage from land-use change revealed by peat thickness maps of Peru. Nature Geoscience, 2022, 15, 369-374.	12.9	25
48	A small subset of protected areas are a highly significant source of carbon emissions. Scientific Reports, 2017, 7, 41902.	3.3	24
49	Aboveground forest biomass varies across continents, ecological zones and successional stages: refined IPCC default values for tropical and subtropical forests. Environmental Research Letters, 2022, 17, 014047.	5.2	21
50	Old growth Afrotropical forests critical for maintaining forest carbon. Global Ecology and Biogeography, 2020, 29, 1785-1798.	5.8	19
51	Rapid Mangrove Forest Loss and Nipa Palm (Nypa fruticans) Expansion in the Niger Delta, 2007â€"2017. Remote Sensing, 2020, 12, 2344.	4.0	18
52	First Evidence of Peat Domes in the Congo Basin using LiDAR from a Fixed-Wing Drone. Remote Sensing, 2020, 12, 2196.	4.0	18
53	Assessing Forest/Non-Forest Separability Using Sentinel-1 C-Band Synthetic Aperture Radar. Remote Sensing, 2020, 12, 1899.	4.0	17
54	Structural diversity and tree density drives variation in the biodiversityâ€"ecosystem function relationship of woodlands andÂsavannas. New Phytologist, 2021, 232, 579-594.	7.3	16

#	Article	IF	Citations
55	Material flows accounting for Scotland shows the merits of a circular economy and the folly of territorial carbon reporting. Carbon Balance and Management, 2016, 11, 21.	3.2	15
56	Inter-Seasonal Time Series Imagery Enhances Classification Accuracy of Grazing Resource and Land Degradation Maps in a Savanna Ecosystem. Remote Sensing, 2020, 12, 198.	4.0	15
57	Constraining pollen-based estimates of forest cover in the Amazon: A simulation approach. Holocene, 2019, 29, 262-270.	1.7	13
58	Mapping native and non-native vegetation in the Brazilian Cerrado using freely available satellite products. Scientific Reports, 2022, 12, 1588.	3.3	13
59	Wavelet Based Analysis of TanDEM-X and LiDAR DEMs across a Tropical Vegetation Heterogeneity Gradient Driven by Fire Disturbance in Indonesia. Remote Sensing, 2016, 8, 641.	4.0	11
60	To What Extent Can UAV Photogrammetry Replicate UAV LiDAR to Determine Forest Structure? A Test in Two Contrasting Tropical Forests. Journal of Geophysical Research G: Biogeosciences, 2021, 126, .	3.0	11
61	Human Impacts Flatten Rainforest-Savanna Gradient and Reduce Adaptive Diversity in a Rainforest Bird. PLoS ONE, 2010, 5, e13088.	2.5	9
62	Spatial Wavelet Statistics of SAR Backscatter for Characterizing Degraded Forest: A Case Study From Cameroon. IEEE Journal of Selected Topics in Applied Earth Observations and Remote Sensing, 2015, 8, 3572-3584.	4.9	7
63	Missed carbon emissions from forests: comparing countriesâ€™ estimates submitted to UNFCCC to biophysical estimates. Environmental Research Letters, 2019, 14, 024015.	5.2	7
64	Integrated radar and lidar analysis reveals extensive loss of remaining intact forest on Sumatra 2007â€“2010. Biogeosciences, 2015, 12, 6637-6653.	3.3	6
65	The mesic savannas of the Bateke Plateau: carbon stocks and floristic composition. Biotropica, 2018, 50, 868-880.	1.6	6
66	Potentially harmful World Bank projects are proximate to areas of biodiversity conservation importance. Global Environmental Change, 2021, 70, 102364.	7.8	6
67	Monitoring Mega-Crown Leaf Turnover from Space. Remote Sensing, 2020, 12, 429.	4.0	5
68	An Effective Method for InSAR Mapping of Tropical Forest Degradation in Hilly Areas. Remote Sensing, 2022, 14, 452.	4.0	5
69	Implications of the World Bank's environmental and social framework for biodiversity. Conservation Letters, 2021, 14, e12759.	5.7	4
70	Fusing radar and optical remote sensing for biomass prediction in mountainous tropical forests. , 2013, , .		3
71	A New Field Protocol for Monitoring Forest Degradation. Frontiers in Forests and Global Change, 2021, 4, .	2.3	3
72	Using Experimental Sites in Tropical Forests to Test the Ability of Optical Remote Sensing to Detect Forest Degradation at 0.3 - 30 M Resolutions. , 2021, , .		1

#	Article	IF	Citations
73	Analysis of TanDEM-X InSAR data aimed at the characterisation of vegetation vertical structure: A case study in injune (Queensland, Australia). , 2013, , .		0
74	Spatio-temporal wavelet statistics of SAR backscatter for the characterization of forest degradation in Cameroon. , 2014, , .		0
75	A webmapping platform for publishing, sharing, and managing EO-derived data for forest protection. Proceedings of SPIE, 2016, , .	0.8	0