Matthew C Hansen

List of Publications by Year
in descending order

86 papers	16,127 citations	34105 52 h-index	62596 80 g-index
88 all docs	88 docs citations	88 times ranked	15839 citing authors

#	Article	IF	Citations
1	Classifying drivers of global forest loss. Science, 2018, 361, 1108-1111.	12.6	1,233
2	Global land change from 1982 to 2016. Nature, 2018, 560, 639-643.	27.8	1,213
3	Deforestation driven by urban population growth and agricultural trade in the twenty-first century. Nature Geoscience, 2010, 3, 178-181.	12.9	1,070
4	A review of large area monitoring of land cover change using Landsat data. Remote Sensing of Environment, 2012, 122, 66-74.	11.0	781
5	Quantification of global gross forest cover loss. Proceedings of the National Academy of Sciences of the United States of America, 2010, 107, 8650-8655.	7.1	709
6	Primary forest cover loss in Indonesia over 2000â€"2012. Nature Climate Change, 2014, 4, 730-735.	18.8	695
7	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.	7.1	562
8	INCREASING ISOLATION OF PROTECTED AREAS IN TROPICAL FORESTS OVER THE PAST TWENTY YEARS. , 2005, 15, 19-26.		558
9	The last frontiers of wilderness: Tracking loss of intact forest landscapes from 2000 to 2013. Science Advances, 2017, 3, e1600821.	10.3	543
10	Web-enabled Landsat Data (WELD): Landsat ETM+ composited mosaics of the conterminous United States. Remote Sensing of Environment, 2010, 114, 35-49.	11.0	439
11	Mapping global forest canopy height through integration of GEDI and Landsat data. Remote Sensing of Environment, 2021, 253, 112165.	11.0	436
12	The Global Ecosystem Dynamics Investigation: High-resolution laser ranging of the Earthâ€™s forests and topography. Science of Remote Sensing, 2020, 1, 100002.	4.8	429
13	Global maps of twenty-first century forest carbon fluxes. Nature Climate Change, 2021, 11, 234-240.	18.8	425
14	A method for integrating MODIS and Landsat data for systematic monitoring of forest cover and change in the Congo Basin. Remote Sensing of Environment, 2008, 112, 2495-2513.	11.0	393
15	Quantifying forest cover loss in Democratic Republic of the Congo, 2000â€"2010, with Landsat ETM+ data. Remote Sensing of Environment, 2012, 122, 106-116.	11.0	303
16	Global discrimination of land cover types from metrics derived from AVHRR pathfinder data. Remote Sensing of Environment, 1995, 54, 209-222.	11.0	288
17	Wetland mapping in the Congo Basin using optical and radar remotely sensed data and derived topographical indices. Remote Sensing of Environment, 2010, 114, 73-86.	11.0	278
18	Mapping and monitoring deforestation and forest degradation in Sumatra (Indonesia) using Landsat time series data sets from 1990 to 2010. Environmental Research Letters, 2012, 7, 034010.	5.2	278

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19	Framing the concept of satellite remote sensing essential biodiversity variables: challenges and future directions. Remote Sensing in Ecology and Conservation, 2016, 2, 122-131.	4.3	243
20	Global maps of cropland extent and change show accelerated cropland expansion in the twenty-first century. Nature Food, 2022, 3, 19-28.	14.0	238
21	Mapping and sampling to characterize global inland water dynamics from 1999 to 2018 with full Landsat time-series. Remote Sensing of Environment, 2020, 243, 111792.	11.0	221
22	Estimating Global Cropland Extent with Multi-year MODIS Data. Remote Sensing, 2010, 2, 1844-1863.	4.0	219
23	Monitoring Global Croplands with Coarse Resolution Earth Observations: The Global Agriculture Monitoring (GLAM) Project. Remote Sensing, 2010, 2, 1589-1609.	4.0	203
24	Detecting Long-term Global Forest Change Using Continuous Fields of Tree-Cover Maps from 8-km Advanced Very High Resolution Radiometer (AVHRR) Data for the Years 1982?99. Ecosystems, 2004, 7, 695-716.	3.4	190
25	Humid tropical forest disturbance alerts using Landsat data. Environmental Research Letters, 2016, 11, 034008.	5.2	185
26	Estimation of tree cover using MODIS data at global, continental and regional/local scales. International Journal of Remote Sensing, 2005, 26, 4359-4380.	2.9	174
27	Quantifying changes in the rates of forest clearing in Indonesia from 1990 to 2005 using remotely sensed data sets. Environmental Research Letters, 2009, 4, 034001.	5.2	173
28	Congo Basin forest loss dominated by increasing smallholder clearing. Science Advances, 2018, 4, eaat2993.	10.3	171
29	National-scale soybean mapping and area estimation in the United States using medium resolution satellite imagery and field survey. Remote Sensing of Environment, 2017, 190, 383-395.	11.0	168
30	Reductions in emissions from deforestation from Indonesiaâ€™s moratorium on new oil palm, timber, and logging concessions. Proceedings of the National Academy of Sciences of the United States of America, 2015, 112, 1328-1333.	7.1	159
31	Regional-scale boreal forest cover and change mapping using Landsat data composites for European Russia. Remote Sensing of Environment, 2011, 115, 548-561.	11.0	155
32	Time-series analysis of multi-resolution optical imagery for quantifying forest cover loss in Sumatra and Kalimantan, Indonesia. International Journal of Applied Earth Observation and Geoinformation, 2011, 13, 277-291.	2.8	154
33	Corn and Soybean Mapping in the United States Using MODIS Timeâ€Series Data Sets. Agronomy Journal, 2007, 99, 1654-1664.	1.8	153
34	Massive soybean expansion in South America since 2000 and implications for conservation. Nature Sustainability, 2021, 4, 784-792.	23.7	153
35	Ongoing primary forest loss in Brazil, Democratic Republic of the Congo, and Indonesia. Environmental Research Letters, 2018, 13, 074028.	5.2	150
36	Types and rates of forest disturbance in Brazilian Legal Amazon, 2000â€“2013. Science Advances, 2017, 3, e1601047.	10.3	147

#	Article	IF	Citations
37	The fate of tropical forest fragments. Science Advances, 2020, 6, eaax8574.	10.3	146
38	Near doubling of Braziliâ€™s intensive row crop area since 2000. Proceedings of the National Academy of Sciences of the United States of America, 2019, 116, 428-435.	7.1	139
39	Landsat Analysis Ready Data for Global Land Cover and Land Cover Change Mapping. Remote Sensing, 2020, 12, 426.	4.0	130
40	Reconciling Forest Conservation and Logging in Indonesian Borneo. PLoS ONE, 2013, 8, e69887.	2.5	116
41	Continuous fields of land cover for the conterminous United States using Landsat data: first results from the Web-Enabled Landsat Data (WELD) project. Remote Sensing Letters, 2011, 2, 279-288.	1.4	112
42	Can carbon emissions from tropical deforestation drop by 50% in 5Âyears?. Global Change Biology, 2016, 22, 1336-1347.	9.5	109
43	Mapping tree height distributions in Sub-Saharan Africa using Landsat 7 and 8 data. Remote Sensing of Environment, 2016, 185, 221-232.	11.0	107
44	The Global 2000-2020 Land Cover and Land Use Change Dataset Derived From the Landsat Archive: First Results. Frontiers in Remote Sensing, 2022, 3, .	3.5	102
45	Wheat Yield Forecasting for Punjab Province from Vegetation Index Time Series and Historic Crop Statistics. Remote Sensing, 2014, 6, 9653-9675.	4.0	92
46	Global Trends of Forest Loss Due to Fire From 2001 to 2019. Frontiers in Remote Sensing, 2022, 3, .	3.5	91
47	Securing tropical forest carbon: the contribution of protected areas to REDD. Oryx, 2010, 44, 352-357.	1.0	86
48	Impacts of civil conflict on primary forest habitat in northern Democratic Republic of the Congo, 1990â€“2010. Biological Conservation, 2014, 170, 321-328.	4.1	85
49	Rapid expansion of human impact on natural land in South America since 1985. Science Advances, 2021, 7, .	10.3	71
50	Remotely sensed forest cover loss shows high spatial and temporal variation across Sumatera and Kalimantan, Indonesia 2000â€“2008. Environmental Research Letters, 2011, 6, 014010.	5.2	65
51	A comparison of sampling designs for estimating deforestation from Landsat imagery: A case study of the Brazilian Legal Amazon. Remote Sensing of Environment, 2009, 113, 2448-2454.	11.0	57
52	Global bare ground gain from 2000 to 2012 using Landsat imagery. Remote Sensing of Environment, 2017, 194, 161-176.	11.0	56
53	A multi-resolution approach to national-scale cultivated area estimation of soybean. Remote Sensing of Environment, 2017, 195, 13-29.	11.0	55
54	Analysis of stable states in global savannas: is the <scp>CART</scp> pulling the horse? â€“ a comment. Global Ecology and Biogeography, 2015, 24, 985-987.	5.8	51

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55	A policy-driven framework for conserving the best of Earthâ€™s remaining moist tropical forests. Nature Ecology and Evolution, 2020, 4, 1377-1384.	7.8	50
56	Detecting vulnerability of humid tropical forests to multiple stressors. One Earth, 2021, 4, 988-1003.	6.8	41
57	An Assessment of Global Forest Change Datasets for National Forest Monitoring and Reporting. Remote Sensing, 2020, 12, 1790.	4.0	39
58	Monitoring Water-Related Ecosystems with Earth Observation Data in Support of Sustainable Development Goal (SDG) 6 Reporting. Remote Sensing, 2020, 12, 1634.	4.0	38
59	Global land use extent and dispersion within natural land cover using Landsat data. Environmental Research Letters, 2022, 17, 034050.	5.2	38
60	Demonstration of Percent Tree Cover Mapping Using Landsat Analysis Ready Data (ARD) and Sensitivity with Respect to Landsat ARD Processing Level. Remote Sensing, 2018, 10, 209.	4.0	34
61	Contextualizing Landscape-Scale Forest Cover Loss in the Democratic Republic of Congo (DRC) between 2000 and 2015. Land, 2020, 9, 23.	2.9	31
62	Landsat ETM+ and SRTM Data Provide Near Real-Time Monitoring of Chimpanzee (Pan troglodytes) Habitats in Africa. Remote Sensing, 2016, 8, 427.	4.0	28
63	Comment on â€œTropical forests are a net carbon source based on aboveground measurements of gain and lossâ€. Science, 2019, 363, .	12.6	28
64	Evaluating Landsat and RapidEye Data for Winter Wheat Mapping and Area Estimation in Punjab, Pakistan. Remote Sensing, 2018, 10, 489.	4.0	24
65	Definition and measurement of tree cover: A comparative analysis of field-, lidar- and landsat-based tree cover estimations in the Sierra national forests, USA. Agricultural and Forest Meteorology, 2019, 268, 258-268.	4.8	24
66	MODIS Vegetative Cover Conversion and Vegetation Continuous Fields. Remote Sensing and Digital Image Processing, 2010, , 725-745.	0.7	21
67	Landsat-based wheat mapping in the heterogeneous cropping system of Punjab, Pakistan. International Journal of Remote Sensing, 2016, 37, 1391-1410.	2.9	19
68	Global seasonal dynamics of inland open water and ice. Remote Sensing of Environment, 2022, 272, 112963.	11.0	18
69	Potential Vegetation and Carbon Redistribution in Northern North America from Climate Change. Climate, 2016, 4, 2.	2.8	17
70	Using Multi-Resolution Satellite Data to Quantify Land Dynamics: Applications of PlanetScope Imagery for Cropland and Tree-Cover Loss Area Estimation. Remote Sensing, 2021, 13, 2191.	4.0	17
71	Quantifying the trade-off between cost and precision in estimating area of forest loss and degradation using probability sampling in Guyana. Remote Sensing of Environment, 2019, 221, 122-135.	11.0	15
72	Identifying nascent wetland forest conversion in the Democratic Republic of the Congo. Wetlands Ecology and Management, 2013, 21, 29-43.	1.5	13

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73	A Sample-Based Forest Monitoring Strategy Using Landsat, AVHRR and MODIS Data to Estimate Gross Forest Cover Loss in Malaysia between 1990 and 2005. Remote Sensing, 2013, 5, 1842-1855.	4.0	13
74	Patterns of tree-cover loss along the Indonesiaâ€“Malaysia border on Borneo. International Journal of Remote Sensing, 2013, 34, 5748-5760.	2.9	11
75	Biophysical and socioeconomic drivers of oil palm expansion in Indonesia. Environmental Research Letters, 2021, 16, 034048.	5.2	9
76	REDDcalculator.com: a webâ€based decisionâ€support tool for implementing Indonesiaâ€™s forest moratorium. Methods in Ecology and Evolution, 2012, 3, 310-316.	5.2	8
77	An operational automated mapping algorithm for in-season estimation of wheat area for Punjab, Pakistan. International Journal of Remote Sensing, 2021, 42, 3833-3849.	2.9	6
78	THE MODIS 500 METER GLOBAL VEGETATION CONTINUOUS FIELD PRODUCTS. , 2004, , .		5
79	Satellite-detected gain in built-up area as a leading economic indicator. Environmental Research Letters, 2019, 14, 114015.	5.2	4
80	Potential Transient Response of Terrestrial Vegetation and Carbon in Northern North America from Climate Change. Climate, 2019, 7, 113.	2.8	4
81	A Method for Selecting Training Data and its Effect on Automated Land Cover Mapping of Large Areas. , 2008, , .		3
82	Forest cover dynamics of shifting cultivation in the Democratic Republic of the Congo 2000â€“2010 (2015 Environ. Res. Lett. 10 094009). Environmental Research Letters, 2017, 12, 089501.	5.2	3
83	MODIS 250m AND 500m TIME SERIES DATA FOR CHANGE DETECTION AND CONTINUOUS REPRESENTATION OF VEGETATION CHARACTERISTICS. , 2002, , .		2
84	Sample-Based Estimation of Tree Cover Change in Haiti Using Aerial Photography: Substantial Increase in Tree Cover between 2002 and 2010. Forests, 2021, 12, 1243.	2.1	1
85	Coupled forest zoning and agricultural intervention yields conflicting outcomes for tropical forest conservation in the Democratic Republic of the Congo (DRC). Environmental Research Letters, 0, , .	5.2	1
86	Tropical Forest Canopy Structure and Change Assessment Using Landsat, GEDI, and Airborne Lidar Data. , 2021, , .		0