Martin Stefan Brandt

List of Publications by Year
in descending order

70 papers	4,817 citations	81743 39 h-index	98622 67 g-index
76 all docs	76 docs citations	76 times ranked	4351 citing authors

#	Article	IF	Citations
1	Increased vegetation growth and carbon stock in China karst via ecological engineering. Nature Sustainability, 2018, 1, 44-50.	11.5	460
2	Forest management in southern China generates short term extensive carbon sequestration. Nature Communications, 2020, 11, 129.	5.8	259
3	An unexpectedly large count of trees in the West African Sahara and Sahel. Nature, 2020, 587, 78-82.	13.7	212
4	Remote sensing of vegetation dynamics in drylands: Evaluating vegetation optical depth (VOD) using AVHRR NDVI and in situ green biomass data over West African Sahel. Remote Sensing of Environment, 2016, 177, 265-276.	4.6	174
5	Quantifying the effectiveness of ecological restoration projects on long-term vegetation dynamics in the karst regions of Southwest China. International Journal of Applied Earth Observation and Geoinformation, 2017, 54, 105-113.	1.4	167
6	Carbon loss from forest degradation exceeds that from deforestation in the Brazilian Amazon. Nature Climate Change, 2021, 11, 442-448.	8.1	166
7	Satellite passive microwaves reveal recent climate-induced carbon losses in African drylands. Nature Ecology and Evolution, 2018, 2, 827-835.	3.4	160
8	Human population growth offsets climate-driven increase in woody vegetation in sub-Saharan Africa. Nature Ecology and Evolution, 2017, 1, 81.	3.4	156
9	Satellite‐Observed Major Greening and Biomass Increase in South China Karst During Recent Decade. Earth's Future, 2018, 6, 1017-1028.	2.4	143
10	Satellite-observed pantropical carbon dynamics. Nature Plants, 2019, 5, 944-951.	4.7	141
11	A large but transient carbon sink from urbanization and rural depopulation in China. Nature Sustainability, 2022, 5, 321-328.	11.5	130
12	Tropical forests did not recover from the strong 2015–2016 El Niño event. Science Advances, 2020, 6, eaay4603.	4.7	127
13	Ecological restoration enhances ecosystem health in the karst regions of southwest China. Ecological Indicators, 2018, 90, 416-425.	2.6	120
14	Ground‐and satellite‐based evidence of the biophysical mechanisms behind the greening Sahel. Global Change Biology, 2015, 21, 1610-1620.	4.2	114
15	Coupling of ecosystem-scale plant water storage and leaf phenology observed by satellite. Nature Ecology and Evolution, 2018, 2, 1428-1435.	3.4	114
16	Assessing Future Vegetation Trends and Restoration Prospects in the Karst Regions of Southwest China. Remote Sensing, 2016, 8, 357.	1.8	99
17	An evaluation of SMOS L-band vegetation optical depth (L-VOD) data sets: high sensitivity of L-VOD to above-ground biomass in Africa. Biogeosciences, 2018, 15, 4627-4645.	1.3	97
18	Reduction of tree cover in West African woodlands and promotion in semi-arid farmlands. Nature Geoscience, 2018, 11, 328-333.	5.4	94

#	Article	IF	Citations
19	Recent divergence in the contributions of tropical and boreal forests to the terrestrial carbon sink. Nature Ecology and Evolution, 2020, 4, 202-209.	3.4	93
20	Woody plant cover estimation in drylands from Earth Observation based seasonal metrics. Remote Sensing of Environment, 2016, 172, 28-38.	4.6	89
21	Assessing woody vegetation trends in Sahelian drylands using MODIS based seasonal metrics. Remote Sensing of Environment, 2016, 183, 215-225.	4.6	87
22	Mapping gains and losses in woody vegetation across global tropical drylands. Global Change Biology, 2017, 23, 1748-1760.	4.2	77
23	Ecological engineering projects increased vegetation cover, production, and biomass in semiarid and subhumid Northern China. Land Degradation and Development, 2019, 30, 1620-1631.	1.8	71
24	What Four Decades of Earth Observation Tell Us about Land Degradation in the Sahel?. Remote Sensing, 2015, 7, 4048-4067.	1.8	70
25	How conflict affects land use: agricultural activity in areas seized by the Islamic State. Environmental Research Letters, 2017, 12, 054004.	2.2	70
26	Environmental change in time series â€“ An interdisciplinary study in the Sahel of Mali and Senegal. Journal of Arid Environments, 2014, 105, 52-63.	1.2	69
27	Eco-engineering controls vegetation trends in southwest China karst. Science of the Total Environment, 2021, 770, 145160.	3.9	64
28	Revisiting the coupling between NDVI trends and cropland changes in the Sahel drylands: A case study in western Niger. Remote Sensing of Environment, 2017, 191, 286-296.	4.6	60
29	From woody cover to woody canopies: How Sentinel-1 and Sentinel-2 data advance the mapping of woody plants in savannas. Remote Sensing of Environment, 2019, 234, 111465.	4.6	60
30	Accelerating land cover change in West Africa over four decades as population pressure increased. Communications Earth & Environment, 2020, 1, .	2.6	58
31	Global-scale assessment and inter-comparison of recently developed/reprocessed microwave satellite vegetation optical depth products. Remote Sensing of Environment, 2021, 253, 112208.	4.6	58
32	Woody Vegetation Die off and Regeneration in Response to Rainfall Variability in the West African Sahel. Remote Sensing, 2017, 9, 39.	1.8	51
33	Fodder Biomass Monitoring in Sahelian Rangelands Using Phenological Metrics from FAPAR Time Series. Remote Sensing, 2015, 7, 9122-9148.	1.8	49
34	Changes in rainfall distribution promote woody foliage production in the Sahel. Communications Biology, 2019, 2, 133.	2.0	49
35	The forgotten land use class: Mapping of fallow fields across the Sahel using Sentinel-2. Remote Sensing of Environment, 2020, 239, 111598.	4.6	48
36	Impacts of the seasonal distribution of rainfall on vegetation productivity across the Sahel. Biogeosciences, 2018, 15, 319-330.	1.3	47

#	Article	IF	Citations
37	Large scale reforestation of farmlands on sloping hills in South China karst. Landscape Ecology, 2020, 35, 1445-1458.	1.9	47
38	Local Vegetation Trends in the Sahel of Mali and Senegal Using Long Time Series FAPAR Satellite Products and Field Measurement (1982â€"2010). Remote Sensing, 2014, 6, 2408-2434.	1.8	44
39	Trends of land surface phenology derived from passive microwave and optical remote sensing systems and associated drivers across the dry tropics 1992â€"2012. Remote Sensing of Environment, 2019, 232, 111307.	4.6	43
40	Ecosystem structural changes controlled by altered rainfall climatology in tropical savannas. Nature Communications, 2019, 10, 671.	5.8	39
41	Do Red Edge and Texture Attributes from High-Resolution Satellite Data Improve Wood Volume Estimation in a Semi-Arid Mountainous Region?. Remote Sensing, 2016, 8, 540.	1.8	37
42	Do afforestation projects increase core forests? Evidence from the Chinese Loess Plateau. Ecological Indicators, 2020, 117, 106558.	2.6	35
43	Socio-economic and climatic changes lead to contrasting global urban vegetation trends. Global Environmental Change, 2021, 71, 102385.	3.6	35
44	Major forest increase on the Loess Plateau, China (2001â€"2016). Land Degradation and Development, 2018, 29, 4080-4091.	1.8	34
45	The confounding effect of snow cover on assessing spring phenology from space: A new look at trends on the Tibetan Plateau. Science of the Total Environment, 2021, 756, 144011.	3.9	34
46	Nonlinear dynamics of fires in Africa over recent decades controlled by precipitation. Global Change Biology, 2020, 26, 4495-4505.	4.2	34
47	Woody vegetation and land cover changes in the Sahel of Mali (1967â€"2011). International Journal of Applied Earth Observation and Geoinformation, 2015, 34, 113-121.	1.4	33
48	Using long-term daily satellite based rainfall data (1983â€"2015) to analyze spatio-temporal changes in the sahelian rainfall regime. Journal of Hydrology, 2017, 550, 427-440.	2.3	33
49	Trees outside of forests as natural climate solutions. Nature Climate Change, 2021, 11, 1013-1016.	8.1	29
50	Towards improved remote sensing based monitoring of dryland ecosystem functioning using sequential linear regression slopes (SeRGS). Remote Sensing of Environment, 2019, 224, 317-332.	4.6	27
51	Global quantification of the bidirectional dependency between soil moisture and vegetation productivity. Agricultural and Forest Meteorology, 2022, 313, 108735.	1.9	26
52	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
53	Do Agrometeorological Data Improve Optical Satellite-Based Estimations of the Herbaceous Yield in Sahelian Semi-Arid Ecosystems?. Remote Sensing, 2016, 8, 668.	1.8	24
54	Does grazing cause land degradation? Evidence from the sandy *Ferlo* in Northern Senegal. Land Degradation and Development, 2018, 29, 4337-4347.	1.8	21

#	Article	IF	Citations
55	Large scale rocky desertification reversal in South China karst. Progress in Physical Geography, 2022, 46, 661-675.	1.4	17
56	Responses and feedbacks of African dryland ecosystems to environmental changes. Current Opinion in Environmental Sustainability, 2021, 48, 29-35.	3.1	16
57	Uncovering Dryland Woody Dynamics Using Optical, Microwave, and Field Dataâ€"Prolonged Above-Average Rainfall Paradoxically Contributes to Woody Plant Die-Off in the Western Sahel. Remote Sensing, 2020, 12, 2332.	1.8	12
58	Modeling Soil and Woody Vegetation in the Senegalese Sahel in the Context of Environmental Change. Land, 2014, 3, 770-792.	1.2	11
59	50 years of woody vegetation changes in the Ferlo (Senegal) assessed by high-resolution imagery and field surveys. Regional Environmental Change, 2020, 20, 1.	1.4	10
60	Mapping the Dynamics of Winter Wheat in the North China Plain from Dense Landsat Time Series (1999) Tj ETQq0 0 0 rgBT /Overlock 1	1.8	10
61	Satellite Remote Sensing of Savannas: Current Status and Emerging Opportunities. Journal of Remote Sensing, 2022, 2022, .	3.2	8
62	Climatic and non-climatic vegetation cover changes in the rangelands of Africa. Global and Planetary Change, 2021, 202, 103516.	1.6	7
63	Mapping the Abundance of Multipurpose Agroforestry Faidherbia albida Trees in Senegal. Remote Sensing, 2022, 14, 662.	1.8	6
64	Annual Maps of Forests in Australia from Analyses of Microwave and Optical Images with FAO Forest Definition. Journal of Remote Sensing, 2021, 2021, .	3.2	3
65	A global increase in tree cover extends the growing season length as observed from satellite records. Science of the Total Environment, 2022, 806, 151205.	3.9	3
66	Woody plant decline in the Sahel of western Niger (1996â€"2017):is it driven by climate or land use changes?. Journal of Arid Environments, 2022, 200, 104719.	1.2	3
67	Agricultural suitability of dune system and Limpopo Basin soils near Xai-Xai, Mozambique. South African Journal of Plant and Soil, 2009, 26, 206-212.	0.4	1
68	Improved Characterization of Dryland Degradation Using Trends in Vegetation/ Rainfall Sequential Linear Regression (Sergs-Trend). , 2018, , .		0
69	Response to concerns about the African fire trends controlled by precipitation over recent decades. Global Change Biology, 2022, 28, .	4.2	0
70	Vegetation Optical Depth Retrieval from AMSR-E/AMSR2 Observations Using L-MEB Inversion. , 2020, , .		0