Matthias Forkel

List of Publications by Year
in descending order

43 papers	4,423 citations	185998 28 h-index	264894 42 g-index
85 all docs	85 docs citations	85 times ranked	6466 citing authors

#	Article	IF	Citations
1	ESA CCI Soil Moisture for improved Earth system understanding: State-of-the art and future directions. Remote Sensing of Environment, 2017, 203, 185-215.	4.6	781
2	Global covariation of carbon turnover times with climate in terrestrial ecosystems. Nature, 2014, 514, 213-217.	13.7	648
3	Trend Change Detection in NDVI Time Series: Effects of Inter-Annual Variability and Methodology. Remote Sensing, 2013, 5, 2113-2144.	1.8	354
4	Enhanced seasonal CO ₂ exchange caused by amplified plant productivity in northern ecosystems. Science, 2016, 351, 696-699.	6.0	319
5	Widespread seasonal compensation effects of spring warming on northern plant productivity. Nature, 2018, 562, 110-114.	13.7	240
6	Global and Regional Trends and Drivers of Fire Under Climate Change. Reviews of Geophysics, 2022, 60, .	9.0	182
7	Codominant water control on global interannual variability and trends in land surface phenology and greenness. Global Change Biology, 2015, 21, 3414-3435.	4.2	165
8	LPJmL4 â€“ a dynamic global vegetation model with managed land â€“ PartÂ1: Model description. Geoscientific Model Development, 2018, 11, 1343-1375.	1.3	140
9	Phenopix: A R package for image-based vegetation phenology. Agricultural and Forest Meteorology, 2016, 220, 141-150.	1.9	136
10	The global long-term microwave Vegetation Optical Depth Climate Archive (VODCA). Earth System Science Data, 2020, 12, 177-196.	3.7	129
11	The three major axes of terrestrial ecosystem function. Nature, 2021, 598, 468-472.	13.7	99
12	The response of ecosystem waterâ€use efficiency to rising atmospheric <scp>CO</scp>₂ concentrations: sensitivity and largeâ€scale biogeochemical implications. New Phytologist, 2017, 213, 1654-1666.	3.5	92
13	Emergent relationships with respect to burned area in global satellite observations and fire-enabled vegetation models. Biogeosciences, 2019, 16, 57-76.	1.3	85
14	A novel bias correction methodology for climate impact simulations. Earth System Dynamics, 2016, 7, 71-88.	2.7	75
15	Widespread increasing vegetation sensitivity to soil moisture. Nature Communications, 2022, 13, .	5.8	69
16	Identifying environmental controls on vegetation greenness phenology through modelâ€“data integration. Biogeosciences, 2014, 11, 7025-7050.	1.3	68
17	Extreme fire events are related to previous-year surface moisture conditions in permafrost-underlain larch forests of Siberia. Environmental Research Letters, 2012, 7, 044021.	2.2	57
18	LPJmL4 â€“ a dynamic global vegetation model with managed land â€“ PartÂ2: Model evaluation. Geoscientific Model Development, 2018, 11, 1377-1403.	1.3	57

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19	Recent global and regional trends in burned area and their compensating environmental controls. Environmental Research Communications, 2019, 1, 051005.	0.9	55
20	Global ecosystems and fire: Multiâ€model assessment of fireâ€induced treeâ€cover and carbon storage reduction. Global Change Biology, 2020, 26, 5027-5041.	4.2	55
21	A data-driven approach to identify controls on global fire activity from satellite and climate observations (SOFIA V1). Geoscientific Model Development, 2017, 10, 4443-4476.	1.3	51
22	Assessing the relationship between microwave vegetation optical depth and gross primary production. International Journal of Applied Earth Observation and Geoinformation, 2018, 65, 79-91.	1.4	50
23	Human and climate drivers of global biomass burning variability. Science of the Total Environment, 2021, 779, 146361.	3.9	39
24	Largeâ€scale variation in boreal and temperate forest carbon turnover rate related to climate. Geophysical Research Letters, 2016, 43, 4576-4585.	1.5	38
25	Earth Observation for agricultural drought monitoring in the Pannonian Basin (southeastern) Tj ETQq1 1 0.784314 rgBT /Overlock 10	1.4	38
26	A carbon sink-driven approach to estimate gross primary production from microwave satellite observations. Remote Sensing of Environment, 2019, 229, 100-113.	4.6	36
27	Understanding and modelling wildfire regimes: an ecological perspective. Environmental Research Letters, 2021, 16, 125008.	2.2	34
28	Contrasting and interacting changes in simulated spring and summer carbon cycle extremes in European ecosystems. Environmental Research Letters, 2017, 12, 075006.	2.2	32
29	Deriving Field Scale Soil Moisture from Satellite Observations and Ground Measurements in a Hilly Agricultural Region. Remote Sensing, 2019, 11, 2596.	1.8	31
30	Revisiting Global Vegetation Controls Using Multiâ€Layer Soil Moisture. Geophysical Research Letters, 2021, 48, e2021GL092856.	1.5	30
31	Pan-Arctic Climate and Land Cover Trends Derived from Multi-Variate and Multi-Scale Analyses (1981â€“2012). Remote Sensing, 2014, 6, 2296-2316.	1.8	29
32	Constraining modelled global vegetation dynamics and carbon turnover using multiple satellite observations. Scientific Reports, 2019, 9, 18757.	1.6	28
33	Global quantification of the bidirectional dependency between soil moisture and vegetation productivity. Agricultural and Forest Meteorology, 2022, 313, 108735.	1.9	26
34	VODCA2GPP â€“ a new, global, long-term (1988â€“2020) gross primary production dataset from microwave remote sensing. Earth System Science Data, 2022, 14, 1063-1085.	3.7	24
35	The importance of antecedent vegetation and drought conditions as global drivers of burnt area. Biogeosciences, 2021, 18, 3861-3879.	1.3	18
36	Improving the LPJmL4-SPITFIRE vegetationâ€“fire model for South America using satellite data. Geoscientific Model Development, 2019, 12, 5029-5054.	1.3	16

#	Article	IF	Citations
37	Isotope labeling reveals contribution of newly fixed carbon to carbon storage and monoterpenes production under water deficit and carbon limitation. Environmental and Experimental Botany, 2019, 162, 333-344.	2.0	15
38	Detecting immediate wildfire impact on runoff in a poorly-gauged mountainous permafrost basin. Hydrological Sciences Journal, 2015, 60, 1225-1241.	1.2	13
39	CM2Mc-LPJmL v1.0: biophysical coupling of a process-based dynamic vegetation model with managed land to a general circulation model. Geoscientific Model Development, 2021, 14, 4117-4141.	1.3	13
40	Impact of temperature and water availability on microwave-derived gross primary production. Biogeosciences, 2021, 18, 3285-3308.	1.3	12
41	Does ASCAT observe the spring reactivation in temperate deciduous broadleaf forests?. Remote Sensing of Environment, 2020, 250, 112042.	4.6	11
42	Identification of land surface temperature and albedo trends in AVHRR Pathfinder data from 1982 to 2005 for northern Siberia. International Journal of Remote Sensing, 2013, 34, 4491-4507.	1.3	6
43	Novel Long-Term Global Indicators of Plant Productivity from Microwave Satellites. , 2019, , .		0