Teja Kattenborn

List of Publications by Year
in descending order

32 papers	3,406 citations	331670 21 h-index	501196 28 g-index
33 all docs	33 docs citations	33 times ranked	5858 citing authors

#	Article	IF	Citations
1	TRY plant trait database â€" enhanced coverage and open access. Global Change Biology, 2020, 26, 119-188.	9.5	1,038
2	Review on Convolutional Neural Networks (CNN) in vegetation remote sensing. ISPRS Journal of Photogrammetry and Remote Sensing, 2021, 173, 24-49.	11.1	653
3	Previsual symptoms of Xylella fastidiosa infection revealed in spectral plant-trait alterations. Nature Plants, 2018, 4, 432-439.	9.3	212
4	Mapping forest tree species in high resolution UAV-based RGB-imagery by means of convolutional neural networks. ISPRS Journal of Photogrammetry and Remote Sensing, 2020, 170, 205-215.	11.1	175
5	UAV data as alternative to field sampling to map woody invasive species based on combined Sentinel-1 and Sentinel-2 data. Remote Sensing of Environment, 2019, 227, 61-73.	11.0	151
6	Convolutional Neural Networks enable efficient, accurate and fine-grained segmentation of plant species and communities from high-resolution UAV imagery. Scientific Reports, 2019, 9, 17656.	3.3	146
7	Building a hybrid land cover map with crowdsourcing and geographically weighted regression. ISPRS Journal of Photogrammetry and Remote Sensing, 2015, 103, 48-56.	11.1	117
8	Chlorophyll content estimation in an open-canopy conifer forest with Sentinel-2A and hyperspectral imagery in the context of forest decline. Remote Sensing of Environment, 2019, 223, 320-335.	11.0	112
9	Convolutional Neural Networks accurately predict cover fractions of plant species and communities in Unmanned Aerial Vehicle imagery. Remote Sensing in Ecology and Conservation, 2020, 6, 472-486.	4.3	82
10	Mapping plant species in mixed grassland communities using close range imaging spectroscopy. Remote Sensing of Environment, 2017, 201, 12-23.	11.0	70
11	Differentiating plant functional types using reflectance: which traits make the difference?. Remote Sensing in Ecology and Conservation, 2019, 5, 5-19.	4.3	69
12	Mapping forest biomass from space â€" Fusion of hyperspectral EO1-hyperion data and Tandem-X and WorldView-2 canopy height models. International Journal of Applied Earth Observation and Geoinformation, 2015, 35, 359-367.	2.8	58
13	Detection of Xylella fastidiosa infection symptoms with airborne multispectral and thermal imagery: Assessing bandset reduction performance from hyperspectral analysis. ISPRS Journal of Photogrammetry and Remote Sensing, 2020, 162, 27-40.	11.1	55
14	Automatic Single Tree Detection in Plantations using UAV-based Photogrammetric Point clouds. International Archives of the Photogrammetry, Remote Sensing and Spatial Information Sciences - ISPRS Archives, 0, XL-3, 139-144.	0.2	55
15	How canopy shadow affects invasive plant species classification in high spatial resolution remote sensing. Remote Sensing in Ecology and Conservation, 2019, 5, 302-317.	4.3	52
16	Linking plant strategies and plant traits derived by radiative transfer modelling. Journal of Vegetation Science, 2017, 28, 717-727.	2.2	43
17	Modeling forest biomass using Very-High-Resolution dataâ€"Combining textural, spectral and photogrammetric predictors derived from spaceborne stereo images. European Journal of Remote Sensing, 2015, 48, 245-261.	3.5	40
18	Estimating stand density, biomass and tree species from very high resolution stereo-imagery â€" towards an all-in-one sensor for forestry applications?. Forestry, 2017, 90, 613-631.	2.3	39

#	Article	IF	Citations
19	Advantages of retrieving pigment content [Î¼g/cm2] versus concentration [%] from canopy reflectance. Remote Sensing of Environment, 2019, 230, 111195.	11.0	38
20	A Landsat-based vegetation trend product of the Tibetan Plateau for the time-period 1990â€"2018. Scientific Data, 2019, 6, 78.	5.3	33
21	Using aboveground vegetation attributes as proxies for mapping peatland belowground carbon stocks. Remote Sensing of Environment, 2019, 231, 111217.	11.0	27
22	The retrieval of plant functional traits from canopy spectra through RTM-inversions and statistical models are both critically affected by plant phenology. Ecological Indicators, 2021, 121, 107062.	6.3	23
23	Segmentation of Forest to Tree Objects. Managing Forest Ecosystems, 2014, , 89-112.	0.9	22
24	Explaining Sentinel 2-based dNBR and RdNBR variability with reference data from the birdâ€™s eye (UAS) perspective. International Journal of Applied Earth Observation and Geoinformation, 2021, 95, 102262.	2.8	21
25	Spatially autocorrelated training and validation samples inflate performance assessment of convolutional neural networks. ISPRS Open Journal of Photogrammetry and Remote Sensing, 2022, 5, 100018.	3.1	19
26	Radiative transfer modelling reveals why canopy reflectance follows function. Scientific Reports, 2019, 9, 6541.	3.3	18
27	Unmanned aerial vehicleâ€‐based mapping of turfâ€‐banked solifluction lobe movement and its relation to material, geomorphometric, thermal and vegetation properties. Permafrost and Periglacial Processes, 2020, 31, 97-109.	3.4	17
28	Proximal VIS-NIR spectrometry to retrieve substance concentrations in surface waters using partial least squares modelling. Water Science and Technology: Water Supply, 2019, 19, 1204-1211.	2.1	7
29	PILOT STUDY ON THE RETRIEVAL OF DBH AND DIAMETER DISTRIBUTION OF DECIDUOUS FOREST STANDS USING CAST SHADOWS IN UAV-BASED ORTHOMOSAICS. ISPRS Annals of the Photogrammetry, Remote Sensing and Spatial Information Sciences, 0, IV-1, 93-99.	0.0	7
30	Detecting the spread of invasive species in central Chile with a Sentinel-2 time-series. , 2017, , .		6
31	Linking plant strategies (CSR) and remotely sensed plant traits. , 2016, , .		0
32	Modis-Based Grassland Trends Within and Around the Kekexili Core Protection Zone of the Sanjiangyuan Nature Reserve. , 2018, , .		0