Martin Schlerf

List of Publications by Year
in descending order

57 papers	3,904 citations	159585 30 h-index	175258 52 g-index
57 all docs	57 docs citations	57 times ranked	3894 citing authors

#	Article	IF	Citations
1	Inversion of a radiative transfer model for estimating vegetation LAI and chlorophyll in a heterogeneous grassland. Remote Sensing of Environment, 2008, 112, 2592-2604.	11.0	459
2	LAI and chlorophyll estimation for a heterogeneous grassland using hyperspectral measurements. ISPRS Journal of Photogrammetry and Remote Sensing, 2008, 63, 409-426.	11.1	328
3	Remote sensing of forest biophysical variables using HyMap imaging spectrometer data. Remote Sensing of Environment, 2005, 95, 177-194.	11.0	260
4	Inversion of a forest reflectance model to estimate structural canopy variables from hyperspectral remote sensing data. Remote Sensing of Environment, 2006, 100, 281-294.	11.0	230
5	Mapping grassland leaf area index with airborne hyperspectral imagery: A comparison study of statistical approaches and inversion of radiative transfer models. ISPRS Journal of Photogrammetry and Remote Sensing, 2011, 66, 894-906.	11.1	170
6	The fourth phase of the radiative transfer model intercomparison (RAMI) exercise: Actual canopy scenarios and conformity testing. Remote Sensing of Environment, 2015, 169, 418-437.	11.0	170
7	Challenges and Future Perspectives of Multi-/Hyperspectral Thermal Infrared Remote Sensing for Crop Water-Stress Detection: A Review. Remote Sensing, 2019, 11, 1240.	4.0	149
8	Identifying plant species using mid-wave infrared (2.5â€“6Î¼m) and thermal infrared (8â€“14Î¼m) emissivity spectra. Remote Sensing of Environment, 2012, 118, 95-102.	11.0	127
9	Retrieval of chlorophyll and nitrogen in Norway spruce (Picea abies L. Karst.) using imaging spectroscopy. International Journal of Applied Earth Observation and Geoinformation, 2010, 12, 17-26.	2.8	119
10	Comparative analysis of different retrieval methods for mapping grassland leaf area index using airborne imaging spectroscopy. International Journal of Applied Earth Observation and Geoinformation, 2015, 43, 19-31.	2.8	111
11	Simple and robust methods for remote sensing of canopy chlorophyll content: a comparative analysis of hyperspectral data for different types of vegetation. Plant, Cell and Environment, 2016, 39, 2609-2623.	5.7	109
12	The fourth radiation transfer model intercomparison (RAMIâ€IV): Proficiency testing of canopy reflectance models with ISOâ€13528. Journal of Geophysical Research D: Atmospheres, 2013, 118, 6869-6890.	3.3	102
13	Mapping spatio-temporal variation of grassland quantity and quality using MERIS data and the PROSAIL model. Remote Sensing of Environment, 2012, 121, 415-425.	11.0	100
14	Water-removed spectra increase the retrieval accuracy when estimating savanna grass nitrogen and phosphorus concentrations. ISPRS Journal of Photogrammetry and Remote Sensing, 2011, 66, 408-417.	11.1	95
15	Hyperspectral analysis of mangrove foliar chemistry using PLSR and support vector regression. International Journal of Remote Sensing, 2013, 34, 1724-1743.	2.9	91
16	Shifts in regional water availability due to global tree restoration. Nature Geoscience, 2022, 15, 363-368.	12.9	90
17	Non-linear partial least square regression increases the estimation accuracy of grass nitrogen and phosphorus using in situ hyperspectral and environmental data. ISPRS Journal of Photogrammetry and Remote Sensing, 2013, 82, 27-40.	11.1	83
18	An accurate retrieval of leaf water content from mid to thermal infrared spectra using continuous wavelet analysis. Science of the Total Environment, 2012, 437, 145-152.	8.0	81

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19	Water stress detection in potato plants using leaf temperature, emissivity, and reflectance. International Journal of Applied Earth Observation and Geoinformation, 2016, 53, 27-39.	2.8	78
20	Estimation of grassland biomass and nitrogen using MERIS data. International Journal of Applied Earth Observation and Geoinformation, 2012, 19, 196-204.	2.8	66
21	Analysis of Airborne Optical and Thermal Imagery for Detection of Water Stress Symptoms. Remote Sensing, 2018, 10, 1139.	4.0	64
22	Using a Genetic Algorithm as an Optimal Band Selector in the Mid and Thermal Infrared (2.5â€“14 Âµm) to Discriminate Vegetation Species. Sensors, 2012, 12, 8755-8769.	3.8	62
23	Canopy-scale biophysical controls of transpiration and evaporation in the Amazon Basin. Hydrology and Earth System Sciences, 2016, 20, 4237-4264.	4.9	62
24	Evaluation of three proposed indices for the retrieval of leaf water content from the mid-wave infrared (2â€“6Î¼m) spectra. Agricultural and Forest Meteorology, 2013, 171-172, 65-71.	4.8	60
25	Predicting foliar biochemistry of tea (Camellia sinensis) using reflectance spectra measured at powder, leaf and canopy levels. ISPRS Journal of Photogrammetry and Remote Sensing, 2013, 78, 148-156.	11.1	52
26	Suitability and adaptation of PROSAIL radiative transfer model for hyperspectral grassland studies. Remote Sensing Letters, 2013, 4, 55-64.	1.4	48
27	Enhanced biomass prediction by assimilating satellite data into a crop growth model. Environmental Modelling and Software, 2014, 62, 437-453.	4.5	44
28	Vegetation Structure Retrieval in Beech and Spruce Forests Using Spectrodirectional Satellite Data. IEEE Journal of Selected Topics in Applied Earth Observations and Remote Sensing, 2012, 5, 8-17.	4.9	43
29	A Hyperspectral Thermal Infrared Imaging Instrument for Natural Resources Applications. Remote Sensing, 2012, 4, 3995-4009.	4.0	38
30	Distribution of Barnacle GeeseBranta leucopsisin Relation to Food Resources, Distance to Roosts, and the Location of Refuges. Ardea, 2011, 99, 217-226.	0.6	37
31	Estimation of leaf water content from far infrared (2.5–14 µm) spectra using continuous wavelet analysis. , 2012, , .		30
32	Savanna grass nitrogen to phosphorous ratio estimation using field spectroscopy and the potential for estimation with imaging spectroscopy. International Journal of Applied Earth Observation and Geoinformation, 2013, 23, 334-343.	2.8	29
33	A body temperature model for lizards as estimated from the thermal environment. Journal of Thermal Biology, 2012, 37, 56-64.	2.5	28
34	Comparison of Crop Trait Retrieval Strategies Using UAV-Based VNIR Hyperspectral Imaging. Remote Sensing, 2021, 13, 1748.	4.0	26
35	Plant species discrimination using emissive thermal infrared imaging spectroscopy. International Journal of Applied Earth Observation and Geoinformation, 2016, 53, 16-26.	2.8	25
36	Reflectance Spectroscopy of Biochemical Components as Indicators of Tea (<I>Camellia) Tj ETQq0 0 0 rgBT /Overlock 10 Tf 50 62 T	0.6	22

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37	Photosynthetic bark: Use of chlorophyll absorption continuum index to estimate Boswellia papyrifera bark chlorophyll content. International Journal of Applied Earth Observation and Geoinformation, 2013, 23, 71-80.	2.8	20
38	Hyperspectral reflectance of leaves and flowers of an outbreak species discriminates season and successional stage of vegetation. International Journal of Applied Earth Observation and Geoinformation, 2013, 24, 32-41.	2.8	19
39	CropGIS â€“ A web application for the spatial and temporal visualization of past, present and future crop biomass development. Computers and Electronics in Agriculture, 2019, 161, 185-193.	7.7	18
40	Examining the link between vegetation leaf area and landâ€“atmosphere exchange of water, energy, and carbon fluxes using FLUXNET data. Biogeosciences, 2020, 17, 4443-4457.	3.3	18
41	Thermal infrared remote sensing of vegetation: Current status and perspectives. International Journal of Applied Earth Observation and Geoinformation, 2021, 102, 102415.	2.8	15
42	Changes in plant defense chemistry (pyrrolizidine alkaloids) revealed through high-resolution spectroscopy. ISPRS Journal of Photogrammetry and Remote Sensing, 2013, 80, 51-60.	11.1	14
43	Shrimp pond effluent dominates foliar nitrogen in disturbed mangroves as mapped using hyperspectral imagery. Marine Pollution Bulletin, 2013, 76, 42-51.	5.0	14
44	Soil biotic impact on plant species shoot chemistry and hyperspectral reflectance patterns. New Phytologist, 2012, 196, 1133-1144.	7.3	13
45	Retrieving the Bioenergy Potential from Maize Crops Using Hyperspectral Remote Sensing. Remote Sensing, 2013, 5, 254-273.	4.0	13
46	A Satellite-Based Imaging Instrumentation Concept for Hyperspectral Thermal Remote Sensing. Sensors, 2017, 17, 1542.	3.8	13
47	Does the Normalized Difference Vegetation Index explain spatial and temporal variability in sap velocity in temperate forest ecosystems?. Hydrology and Earth System Sciences, 2019, 23, 2077-2091.	4.9	11
48	Revisiting crop water stress index based on potato field experiments in Northern Germany. Agricultural Water Management, 2022, 269, 107664.	5.6	11
49	Estimation of canopy nitrogen content in winter wheat from Sentinel-2 images for operational agricultural monitoring. Precision Agriculture, 2022, 23, 2229-2252.	6.0	11
50	Eutrophication of mangroves linked to depletion of foliar and soil base cations. Environmental Monitoring and Assessment, 2014, 186, 8487-8498.	2.7	9
51	Assessing MODIS GPP in Non-Forested Biomes in Water Limited Areas Using EC Tower Data. Remote Sensing, 2015, 7, 3274-3292.	4.0	5
52	Foreword to the Special Issue on Hyperspectral Remote Sensing and Imaging Spectroscopy. IEEE Journal of Selected Topics in Applied Earth Observations and Remote Sensing, 2016, 9, 3904-3908.	4.9	4
53	Introduction of Variable Correlation for the Improved Retrieval of Crop Traits Using Canopy Reflectance Model Inversion. Remote Sensing, 2019, 11, 2681.	4.0	4
54	A thermal infrared imaging spectrometer for natural resources applications â€” First results. , 2013, , .		2

#	Article	IF	Citations
55	Water stress detection using hyperspectral thermal infrared remote sensing. , 2015, , .		1
56	Thermal and Shortwave Infrared Remote Sensing of Ecosystem Processes: Opportunities, Synergies, and Challenges. , 2021, , .		1
57	Species discrimination using emissive thermal infrared imaging spectroscopy. , 2014, , .		0