Lammert Kooistra

List of Publications by Year
in descending order

106	5,681	66234	79541
papers	citations	42 h-index	73 g-index

107	107	107	7142
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Using Sentinel-2 Data for Retrieving LAI and Leaf and Canopy Chlorophyll Content of a Potato Crop. Remote Sensing, 2017, 9, 405.	1.8	232
2	Using Hyperspectral Remote Sensing Data for Retrieving Canopy Chlorophyll and Nitrogen Content. IEEE Journal of Selected Topics in Applied Earth Observations and Remote Sensing, 2012, 5, 574-583.	2.3	228
3	Generation of Spectralâ€“Temporal Response Surfaces by Combining Multispectral Satellite and Hyperspectral UAV Imagery for Precision Agriculture Applications. IEEE Journal of Selected Topics in Applied Earth Observations and Remote Sensing, 2015, 8, 3140-3146.	2.3	225
4	Robust monitoring of small-scale forest disturbances in a tropical montane forest using Landsat time series. Remote Sensing of Environment, 2015, 161, 107-121.	4.6	212
5	Possibilities of visibleâ€“near-infrared spectroscopy for the assessment of soil contamination in river floodplains. Analytica Chimica Acta, 2001, 446, 97-105.	2.6	202
6	Identification of soil heavy metal sources and improvement in spatial mapping based on soil spectral information: A case study in northwest China. Science of the Total Environment, 2016, 565, 155-164.	3.9	177
7	Integrating remote sensing in Natura 2000 habitat monitoring: Prospects on the way forward. Journal for Nature Conservation, 2011, 19, 116-125.	0.8	160
8	Comparing RIEGL RiCOPTER UAV LiDAR Derived Canopy Height and DBH with Terrestrial LiDAR. Sensors, 2017, 17, 2371.	2.1	160
9	Spectral reflectance based indices for soil organic carbon quantification. Geoderma, 2008, 145, 28-36.	2.3	159
10	Exploring field vegetation reflectance as an indicator of soil contamination in river floodplains. Environmental Pollution, 2004, 127, 281-290.	3.7	156
11	Estimating canopy water content using hyperspectral remote sensing data. International Journal of Applied Earth Observation and Geoinformation, 2010, 12, 119-125.	1.4	148
12	Assessing capacities of non-Annex I countries for national forest monitoring in the context of REDD+. Environmental Science and Policy, 2012, 19-20, 33-48.	2.4	141
13	The potential of field spectroscopy for the assessment of sediment properties in river floodplains. Analytica Chimica Acta, 2003, 484, 189-200.	2.6	129
14	A Lightweight Hyperspectral Mapping System and Photogrammetric Processing Chain for Unmanned Aerial Vehicles. Remote Sensing, 2014, 6, 11013-11030.	1.8	127
15	Non-destructive tree volume estimation through quantitative structure modelling: Comparing UAV laser scanning with terrestrial LIDAR. Remote Sensing of Environment, 2019, 233, 111355.	4.6	125
16	Improved estimation of leaf area index and leaf chlorophyll content of a potato crop using multi-angle spectral data â€“ potential of unmanned aerial vehicle imagery. International Journal of Applied Earth Observation and Geoinformation, 2018, 66, 14-26.	1.4	123
17	Soil Organic Carbon mapping of partially vegetated agricultural fields with imaging spectroscopy. International Journal of Applied Earth Observation and Geoinformation, 2011, 13, 81-88.	1.4	106
18	Estimating Plant Traits of Grasslands from UAV-Acquired Hyperspectral Images: A Comparison of Statistical Approaches. ISPRS International Journal of Geo-Information, 2015, 4, 2792-2820.	1.4	106

#	Article	IF	Citations
19	Rapid identification of soil cadmium pollution risk at regional scale based on visible and near-infrared spectroscopy. Environmental Pollution, 2015, 206, 217-226.	3.7	105
20	Study of heavy metal contamination in river floodplains using the red-edge position in spectroscopic data. International Journal of Remote Sensing, 2004, 25, 3883-3895.	1.3	103
21	Mapping Vegetation Density in a Heterogeneous River Floodplain Ecosystem Using Pointable CHRIS/PROBA Data. Remote Sensing, 2012, 4, 2866-2889.	1.8	101
22	Using spectral information from the NIR water absorption features for the retrieval of canopy water content. International Journal of Applied Earth Observation and Geoinformation, 2008, 10, 388-397.	1.4	99
23	Environmental risk mapping of pollutants: State of the art and communication aspects. Science of the Total Environment, 2010, 408, 3899-3907.	3.9	99
24	Revisiting land cover observation to address the needs of the climate modeling community. Biogeosciences, 2012, 9, 2145-2157.	1.3	98
25	Biomass and Crop Height Estimation of Different Crops Using UAV-Based Lidar. Remote Sensing, 2020, 12, 17.	1.8	96
26	Review of yield gap explaining factors and opportunities for alternative data collection approaches. European Journal of Agronomy, 2017, 82, 206-222.	1.9	92
27	Monitoring forest cover loss using multiple data streams, a case study of a tropical dry forest in Bolivia. ISPRS Journal of Photogrammetry and Remote Sensing, 2015, 107, 112-125.	4.9	91
28	What are the prospects for citizen science in agriculture? Evidence from three continents on motivation and mobile telephone use of resource-poor farmers. PLoS ONE, 2017, 12, e0175700.	1.1	70
29	Characterizing Forest Change Using Community-Based Monitoring Data and Landsat Time Series. PLoS ONE, 2016, 11, e0147121.	1.1	69
30	Exploring farmersâ€™ intentions to adopt mobile Short Message Service (SMS) for citizen science in agriculture. Computers and Electronics in Agriculture, 2018, 151, 295-310.	3.7	58
31	Feasibility of Unmanned Aerial Vehicle Optical Imagery for Early Detection and Severity Assessment of Late Blight in Potato. Remote Sensing, 2019, 11, 224.	1.8	56
32	Automated crop plant counting from very high-resolution aerial imagery. Precision Agriculture, 2020, 21, 1366-1384.	3.1	56
33	Predicting leaf traits of herbaceous species from their spectral characteristics. Ecology and Evolution, 2014, 4, 706-719.	0.8	55
34	Predictions of soil surface and topsoil organic carbon content through the use of laboratory and field spectroscopy in the Albany Thicket Biome of Eastern Cape Province of South Africa. Geoderma, 2011, 167-168, 295-302.	2.3	52
35	Biodiversity in species, traits, and structure determines carbon stocks and uptake in tropical forests. Biotropica, 2017, 49, 593-603.	0.8	52
36	Reconstructing land use history from Landsat time-series. International Journal of Applied Earth Observation and Geoinformation, 2016, 47, 112-124.	1.4	51

#	Article	IF	Citations
37	Orchard management with small unmanned aerial vehicles: a survey of sensing and analysis approaches. Precision Agriculture, 2021, 22, 2007-2052.	3.1	51
38	Deep learning for automated detection of Drosophila suzukii: potential for <scp>UAV</scp>â€based monitoring. Pest Management Science, 2020, 76, 2994-3002.	1.7	50
39	A comparison of methods to relate grass reflectance to soil metal contamination. International Journal of Remote Sensing, 2003, 24, 4995-5010.	1.3	49
40	Citizen Sensing for Improved Urban Environmental Monitoring. Journal of Sensors, 2016, 2016, 1-9.	0.6	49
41	Estimating potato leaf chlorophyll content using ratio vegetation indices. Remote Sensing Letters, 2016, 7, 611-620.	0.6	49
42	A Procedure for Incorporating Spatial Variability in Ecological Risk Assessment of Dutch River Floodplains. Environmental Management, 2001, 28, 359-373.	1.2	48
43	Assessing the effect of Faidherbia albida based land use systems on barley yield at field and regional scale in the highlands of Tigray, Northern Ethiopia. Food Security, 2009, 1, 337-350.	2.4	45
44	Spatial Variability and Uncertainty in Ecological Risk Assessment:Â A Case Study on the Potential Risk of Cadmium for the Little Owl in a Dutch River Flood Plain. Environmental Science & Technology, 2005, 39, 2177-2187.	4.6	42
45	Agriculture-driven deforestation in the tropics from 1990â€“2015: emissions, trends and uncertainties. Environmental Research Letters, 2018, 13, 014002.	2.2	42
46	Combining Satellite Data and Community-Based Observations for Forest Monitoring. Forests, 2014, 5, 2464-2489.	0.9	39
47	Intercomparison of Unmanned Aerial Vehicle and Ground-Based Narrow Band Spectrometers Applied to Crop Trait Monitoring in Organic Potato Production. Sensors, 2017, 17, 1428.	2.1	39
48	Mapping invasive woody species in coastal dunes in the <scp>N</scp>etherlands: a remote sensing approach using <scp>LIDAR</scp> and highâ€resolution aerial photographs. Applied Vegetation Science, 2012, 15, 536-547.	0.9	38
49	Mapping Reflectance Anisotropy of a Potato Canopy Using Aerial Images Acquired with an Unmanned Aerial Vehicle. Remote Sensing, 2017, 9, 417.	1.8	38
50	Spatial early warning signals for impending regime shifts: A practical framework for application in realâ€world landscapes. Global Change Biology, 2019, 25, 1905-1921.	4.2	36
51	A Comprehensive Study of the Potential Application of Flying Ethylene-Sensitive Sensors for Ripeness Detection in Apple Orchards. Sensors, 2019, 19, 372.	2.1	34
52	Geosensors to Support Crop Production: Current Applications and User Requirements. Sensors, 2011, 11, 6656-6684.	2.1	32
53	Remote sensing of plant trait responses to field-based plantâ€“soil feedback using UAV-based optical sensors. Biogeosciences, 2017, 14, 733-749.	1.3	32
54	Quantifying structure of Natura 2000 heathland habitats using spectral mixture analysis and segmentation techniques on hyperspectral imagery. Ecological Indicators, 2013, 33, 71-81.	2.6	30

#	Article	IF	Citations
55	Assessing and predicting biodiversity in a floodplain ecosystem: Assimilation of net primary production derived from imaging spectrometer data into a dynamic vegetation model. Remote Sensing of Environment, 2008, 112, 2118-2130.	4.6	28
56	Spatial variation in biodiversity, soil degradation and productivity in agricultural landscapes in the highlands of Tigray, northern Ethiopia. Food Security, 2009, 1, 83-97.	2.4	27
57	Habitat Mapping and Quality Assessment of NATURA 2000 Heathland Using Airborne Imaging Spectroscopy. Remote Sensing, 2017, 9, 266.	1.8	27
58	A novel approach for detecting agricultural terraced landscapes from historical and contemporaneous photogrammetric aerial photos. International Journal of Applied Earth Observation and Geoinformation, 2018, 73, 800-810.	1.4	26
59	The role of soils in habitat creation, maintenance and restoration. Philosophical Transactions of the Royal Society B: Biological Sciences, 2021, 376, 20200170.	1.8	23
60	Biodiversity Monitoring in Changing Tropical Forests: A Review of Approaches and New Opportunities. Remote Sensing, 2017, 9, 1059.	1.8	22
61	Development of a Dynamic Web Mapping Service for Vegetation Productivity Using Earth Observation and in situ Sensors in a Sensor Web Based Approach. Sensors, 2009, 9, 2371-2388.	2.1	21
62	Trait Estimation in Herbaceous Plant Assemblages from in situ Canopy Spectra. Remote Sensing, 2013, 5, 6323-6345.	1.8	21
63	Mapping a priori defined plant associations using remotely sensed vegetation characteristics. Remote Sensing of Environment, 2014, 140, 639-651.	4.6	21
64	An evaluation of remote sensing derived soil pH and average spring groundwater table for ecological assessments. International Journal of Applied Earth Observation and Geoinformation, 2015, 43, 149-159.	1.4	20
65	Assessing the structural differences between tropical forest types using Terrestrial Laser Scanning. Forest Ecology and Management, 2018, 429, 327-335.	1.4	20
66	Object-Based Image Analysis Applied to Low Altitude Aerial Imagery for Potato Plant Trait Retrieval and Pathogen Detection. Sensors, 2019, 19, 5477.	2.1	20
67	Managing Soil Variability at Different Spatial Scales as a Basis for Precision Agriculture. Advances in Soil Science, 2015, , 37-72.	0.1	20
68	Factors Influencing Temperature Measurements from Miniaturized Thermal Infrared (TIR) Cameras: A Laboratory-Based Approach. Sensors, 2021, 21, 8466.	2.1	20
69	Mitigation of agricultural emissions in the tropics: comparing forest land-sparing options at the national level. Biogeosciences, 2015, 12, 4809-4825.	1.3	18
70	Emerging forestâ€“peatland bistability and resilience of European peatland carbon stores. Proceedings of the National Academy of Sciences of the United States of America, 2021, 118, .	3.3	18
71	Predicting within-field soybean yield variability by coupling Sentinel-2 leaf area index with a crop growth model. Agricultural and Forest Meteorology, 2021, 308-309, 108553.	1.9	18
72	Comparing methods to estimate perennial ryegrass biomass: canopy height and spectral vegetation indices. Precision Agriculture, 2021, 22, 205-225.	3.1	17

#	Article	IF	Citations
73	River Floodplain Vegetation Scenario Development Using Imaging Spectroscopy Derived Products as Input Variables in a Dynamic Vegetation Model. Photogrammetric Engineering and Remote Sensing, 2007, 73, 1179-1188.	0.3	15
74	Satellite-based herbicide rate recommendation for potato haulm killing. European Journal of Agronomy, 2012, 43, 49-57.	1.9	13
75	Linking Terrestrial LiDAR Scanner and Conventional Forest Structure Measurements with Multi-Modal Satellite Data. Forests, 2019, 10, 291.	0.9	13
76	Potential of UAV-based sun-induced chlorophyll fluorescence to detect water stress in sugar beet. Agricultural and Forest Meteorology, 2022, 323, 109033.	1.9	13
77	Combining hyperspectral UAV and multispectral Formosat-2 imagery for precision agriculture applications. , 2014, , .		12
78	Using Unmanned Aerial Systems (UAS) and Object-Based Image Analysis (OBIA) for Measuring Plant-Soil Feedback Effects on Crop Productivity. Drones, 2019, 3, 54.	2.7	12
79	Experimental Flight Patterns Evaluation for a UAV-Based Air Pollutant Sensor. Micromachines, 2020, 11, 768.	1.4	12
80	Possibilities of soil spectroscopy for the classification of contaminated areas in river floodplains. International Journal of Applied Earth Observation and Geoinformation, 2001, 3, 337-344.	1.4	11
81	The integration of empirical, remote sensing and modelling approaches enhances insight in the role of biodiversity in climate change mitigation by tropical forests. Current Opinion in Environmental Sustainability, 2017, 26-27, 69-76.	3.1	11
82	Formal and informal environmental sensing data and integration potential: Perceptions of citizens and experts. Science of the Total Environment, 2018, 619-620, 1133-1142.	3.9	11
83	ASSESSING CHANGES IN POTATO CANOPY CAUSED BY LATE BLIGHT IN ORGANIC PRODUCTION SYSTEMS THROUGH UAV-BASED PUSHBROOM IMAGING SPECTROMETER. International Archives of the Photogrammetry, Remote Sensing and Spatial Information Sciences - ISPRS Archives, 0, XLII-2/W6, 109-112.	0.2	11
84	Perennial ryegrass biomass retrieval through multispectral UAV data. Computers and Electronics in Agriculture, 2022, 193, 106574.	3.7	9
85	Quantification of Grassland Biomass and Nitrogen Content through UAV Hyperspectral Imageryâ€"Active Sample Selection for Model Transfer. Drones, 2022, 6, 73.	2.7	9
86	Towards new frontiers for distributed environmental monitoring based on an ecosystem of plant seed-like soft robots. , 2021, , .		8
87	Evaluation of Individual Plant Growth Estimation in an Intercropping Field with UAV Imagery. Agriculture (Switzerland), 2022, 12, 102.	1.4	7
88	Fast Classification of Large Germinated Fields Via High-Resolution UAV Imagery. IEEE Robotics and Automation Letters, 2019, 4, 3216-3223.	3.3	6
89	Retrieval of Crude Protein in Perennial Ryegrass Using Spectral Data at the Canopy Level. Remote Sensing, 2020, 12, 2958.	1.8	6
90	Sen2Grass: A Cloud-Based Solution to Generate Field-Specific Grassland Information Derived from Sentinel-2 Imagery. AgriEngineering, 2021, 3, 118-137.	1.7	6

#	Article	IF	Citations
91	Validation of a small flying e-nose system for air pollutants control: A plume detection case study from an agricultural machine. , 2018, , .		5
92	High-Resolution Multisensor Remote Sensing to Support Date Palm Farm Management. Agriculture (Switzerland), 2019, 9, 26.	1.4	5
93	Spatial and temporal variation in nematocide leaching, management implications for a Costa Rican banana plantation. Geophysical Monograph Series, 1999, , 281-289.	0.1	4
94	A light-weight hyperspectral mapping system for unmanned aerial vehicles â€" The first results. , 2013, , .		4
95	UAV-based Multispectral & Thermal dataset for exploring the diurnal variability, radiometric & geometric accuracy for precision agriculture. Open Data Journal for Agricultural Research, 0, 6, 1-7.	1.3	4
96	Regional Scale Monitoring of Vegetation Biomass in River Floodplains Using Imaging Spectroscopy and Ecological Modeling. , 2006, , .		3
97	Using hyperspectral remote sensing data for retrieving canopy water content. , 2009, , .		3
98	Sensing a Changing World. Sensors, 2009, 9, 6819-6822.	2.1	3
99	Automated Processing of Sentinel-2 Products for Time-Series Analysis in Grassland Monitoring. IFIP Advances in Information and Communication Technology, 2020, , 48-56.	0.5	3
100	Object-based random forest classification for mapping floodplain vegetation structure from nation-wide CIR AND LiDAR datasets. , 2014, , .		2
101	Retrieval of Hyperspectral Information from Multispectral Data for Perennial Ryegrass Biomass Estimation. Sensors, 2020, 20, 7192.	2.1	2
102	MOOC Drones for Agriculture: The making-of. , 2020, , .		2
103	Near real-time tropical forest disturbance monitoring using Landsat time series and local expert monitoring data. , 2013, , .		1
104	Mapping tree distribution and LAI in peatlands using field methods and imaging spectroscopy: a case study for the Haaksbergerveen, the Netherlands. International Journal of Remote Sensing, 2015, 36, 4535-4549.	1.3	1
105	Inferring ethylene temporal and spatial distribution in an apple orchard (Malus domestica Borkh): a pilot study for optimal sampling with a gas sensor. Horticulture Environment and Biotechnology, 2021, 62, 213-224.	0.7	1
106	User Requirements and Future Expectations for Geosensor Networks â€“ An Assessment. Lecture Notes in Computer Science, 2009, , 149-157.	1.0	1