Stefan Paulus

List of Publications by Year
in descending order

29 papers	1,409 citations	471509 17 h-index	552781 26 g-index
29 all docs	29 docs citations	29 times ranked	1362 citing authors

#	Article	IF	Citations
1	Low-Cost 3D Systems: Suitable Tools for Plant Phenotyping. Sensors, 2014, 14, 3001-3018.	3.8	215
2	High-precision laser scanning system for capturing 3D plant architecture and analysing growth ofAcereal plants. Biosystems Engineering, 2014, 121, 1-11.	4.3	157
3	Surface feature based classification of plant organs from 3D laserscanned point clouds for plant phenotyping. BMC Bioinformatics, 2013, 14, 238.	2.6	145
4	Measuring crops in 3D: using geometry for plant phenotyping. Plant Methods, 2019, 15, 103.	4.3	111
5	Accuracy Analysis of a Multi-View Stereo Approach for Phenotyping of Tomato Plants at the Organ Level. Sensors, 2015, 15, 9651-9665.	3.8	108
6	Fusion of sensor data for the detection and differentiation of plant diseases in cucumber. Plant Pathology, 2014, 63, 1344-1356.	2.4	98
7	Automated Analysis of Barley Organs Using 3D Laser Scanning: An Approach for High Throughput Phenotyping. Sensors, 2014, 14, 12670-12686.	3.8	86
8	Generation and application of hyperspectral 3D plant models: methods and challenges. Machine Vision and Applications, 2016, 27, 611-624.	2.7	72
9	Automated interpretation of 3D laserscanned point clouds for plant organ segmentation. BMC Bioinformatics, 2015, 16, 248.	2.6	66
10	Calibration of hyperspectral close-range pushbroom cameras for plant phenotyping. ISPRS Journal of Photogrammetry and Remote Sensing, 2015, 106, 172-182.	11.1	60
11	Pheno4D: A spatio-temporal dataset of maize and tomato plant point clouds for phenotyping and advanced plant analysis. PLoS ONE, 2021, 16, e0256340.	2.5	39
12	Extending Hyperspectral Imaging for Plant Phenotyping to the UV-Range. Remote Sensing, 2019, 11, 1401.	4.0	33
13	Technical workflows for hyperspectral plant image assessment and processing on the greenhouse and laboratory scale. GigaScience, 2020, 9, .	6.4	33
14	Hyperspectral imaging of symptoms induced by Rhizoctonia solani in sugar beet: comparison of input data and different machine learning algorithms. Journal of Plant Diseases and Protection, 2020, 127, 441-451.	2.9	32
15	Limits of Active Laser Triangulation as an Instrument for High Precision Plant Imaging. Sensors, 2014, 14, 2489-2509.	3.8	27
16	Spatial Referencing of Hyperspectral Images for Tracing of Plant Disease Symptoms. Journal of Imaging, 2018, 4, 143.	3.0	23
17	Automatic UAV-based counting of seedlings in sugar-beet field and extension to maize and strawberry. Computers and Electronics in Agriculture, 2021, 191, 106493.	7.7	22
18	Prediction of the Kiwifruit Decline Syndrome in Diseased Orchards by Remote Sensing. Remote Sensing, 2020, 12, 2194.	4.0	16

#	Article	IF	Citations
19	Spectral signatures in the UV range can be combined with secondary plant metabolites by deep learning to characterize barleyâ€“powdery mildew interaction. Plant Pathology, 2021, 70, 1572-1582.	2.4	16
20	A Multi-Resolution Approach for an Automated Fusion of Different Low-Cost 3D Sensors. Sensors, 2014, 14, 7563-7579.	3.8	12
21	A Hyperspectral Library of Foliar Diseases of Wheat. Phytopathology, 2021, 111, 1583-1593.	2.2	11
22	Digital plant pathology: a foundation and guide to modern agriculture. Journal of Plant Diseases and Protection, 2022, 129, 457-468.	2.9	8
23	Generation and Application of Hyperspectral 3D Plant Models. Lecture Notes in Computer Science, 2015, , 117-130.	1.3	7
24	Disease Incidence and Severity of Cercospora Leaf Spot in Sugar Beet Assessed by Multispectral Unmanned Aerial Images and Machine Learning. Plant Disease, 2023, 107, 188-200.	1.4	6
25	The Impact of different Leaf Surface Tissues on active 3D Laser Triangulation Measurements. Photogrammetrie, Fernerkundung, Geoinformation, 2015, 2015, 437-447.	1.2	4
26	Statistical shape analysis of tap roots: a methodological case study on laser scanned sugar beets. BMC Bioinformatics, 2020, 21, 335.	2.6	1
27	Unlocking the Potential of Hyperspectral Imaging of Plants for Precision Agriculture and Plant Phenotyping. , 2021, , .		1
28	Image processing for bioassays. , 2018, , 263-287.		0
29	Geometrische und spektrale Erfassung von Bestandeseigenschaften zur PhÃnotypisierung von ZuckerrÃ¼ben und Weizen. Zuckerindustrie, 2020, , 53-58.	0.1	0