Udo Seiffert

List of Publications by Year in Descending Order

57 papers	**555** citations	**13** h-index	**20** g-index
63 ext. papers	**720** ext. citations	**3.7** avg, IF	**3.87** L-index

#	Paper	IF	Citations
57	Dynamics and genetic regulation of leaf nutrient concentration in barley based on hyperspectral imaging.. *Plant Science*, **2022**, 315, 111123	5.3	1
56	Evaluation of RGB and Multispectral Unmanned Aerial Vehicle (UAV) Imagery for High-Throughput Phenotyping and Yield Prediction in Barley Breeding. *Remote Sensing*, **2021**, 13, 2670	5	3
55	Genome-wide association study reveals the genetic complexity of fructan accumulation patterns in barley grain. *Journal of Experimental Botany*, **2021**, 72, 2383-2402	7	5
54	Detection of Two Different Grapevine Yellows in Vitis vinifera Using Hyperspectral Imaging. *Remote Sensing*, **2020**, 12, 4151	5	6
53	Detection of Grapevine Leafroll-Associated Virus 1 and 3 in White and Red Grapevine Cultivars Using Hyperspectral Imaging. *Remote Sensing*, **2020**, 12, 1693	5	13
52	Phenotyping and Genotyping of Plants **2020**, 91-104		
51	"Macrobot": An Automated Segmentation-Based System for Powdery Mildew Disease Quantification. *Plant Phenomics*, **2020**, 2020, 5839856	7	8
50	Evaluating the suitability of hyper- and multispectral imaging to detect foliar symptoms of the grapevine trunk disease Esca in vineyards. *Plant Methods*, **2020**, 16, 142	5.8	9
49	Adaptive basis functions for prototype-based classification of functional data. *Neural Computing and Applications*, **2020**, 32, 18213-18223	4.8	2
48	Genetic dissection of grain elements predicted by hyperspectral imaging associated with yield-related traits in a wild barley NAM population. *Plant Science*, **2019**, 285, 151-164	5.3	16
47	Optimizing the procedure of grain nutrient predictions in barley via hyperspectral imaging. *PLoS ONE*, **2019**, 14, e0224491	3.7	10
46	Phäno- und Genotypisierung von Pflanzen **2019**, 95-108		
45	Tree Species Classification Based on Hybrid Ensembles of a Convolutional Neural Network (CNN) and Random Forest Classifiers. *Remote Sensing*, **2019**, 11, 2788	5	12
44	Determination of Fructans in Plants: Current Analytical Means for Extraction, Detection, and Quantification **2019**, 117-156		7
43	Genetic regulation of growth and nutrient content under phosphorus deficiency in the wild barley introgression library S42IL. *Plant Breeding*, **2017**, 136, 892-907	2.4	9
42	Improved classification accuracy of powdery mildew infection levels of wine grapes by spatial-spectral analysis of hyperspectral images. *Plant Methods*, **2017**, 13, 47	5.8	53
41	Adaptive basis functions for prototype-based classification of functional data **2017**,		1

#	Reference	IF	Cit.
40	Phenoliner: A New Field Phenotyping Platform for Grapevine Research. *Sensors*, **2017**, 17,	3.8	36
39	Functional Representation of Prototypes in LVQ and Relevance Learning. *Advances in Intelligent Systems and Computing*, **2016**, 317-327	0.4	6
38	Non-invasive Presymptomatic Detection of Infection and Identification of Early Metabolic Responses in Sugar Beet. *Frontiers in Plant Science*, **2016**, 7, 1377	6.2	40
37	Mass Spectrometry Imaging of Metabolites in Barley Grain Tissues. *Current Protocols in Plant Biology*, **2016**, 1, 574-591	2.8	12
36	Label-free proteome profiling reveals developmental-dependent patterns in young barley grains. *Journal of Proteomics*, **2016**, 143, 106-121	3.9	19
35	Identification and Classification of Contaminations on Wafers Using Hyperspectral Imaging. *Energy Procedia*, **2016**, 92, 232-235	2.3	1
34	Fusion trees for fast and accurate classification of hyperspectral data with ensembles of (gamma)-divergence-based RBF networks. *Neural Computing and Applications*, **2015**, 26, 253-262	4.8	3
33	Produktionssysteme **2015**, 151-243		2
32	Classification in high-dimensional spectral data: Accuracy vs. interpretability vs. model size. *Neurocomputing*, **2014**, 131, 15-22	5.4	17
31	ANNIE Artificial Neural Network-based Image Encoder. *Neurocomputing*, **2014**, 125, 229-235	5.4	6
30	Beyond Standard Metrics On the Selection and Combination of Distance Metrics for an Improved Classification of Hyperspectral Data. *Advances in Intelligent Systems and Computing*, **2014**, 167-177	0.4	3
29	Microphenomics for Interactions of Barley with Fungal Pathogens **2014**, 123-148		10
28	Quantitative Measurements of model interpretability for the analysis of spectral data **2013**,		6
27	A comparison of late fusion methods for object detection **2013**,		3
26	Cascaded Reduction and Growing of Result Sets for Combining Object Detectors. *Lecture Notes in Computer Science*, **2013**, 121-133	0.9	4
25	HyphArea--automated analysis of spatiotemporal fungal patterns. *Journal of Plant Physiology*, **2011**, 168, 72-8	3.6	21
24	A multivariate wavelet-PCA denoising-filter for hyperspectral images **2011**,		2
23	Robust classification of the nutrition state in crop plants by hyperspectral imaging and artificial neural networks **2011**,		15

22	Relevance Learning in Unsupervised Vector Quantization Based on Divergences. *Lecture Notes in Computer Science*, **2011**, 90-100	0.9	3
21	Joint Registration and Segmentation of Histological Volume Data by Diffusion-Based Label Adaption **2010**,		1
20	Clustering of crop phenotypes by means of hyperspectral signatures using artificial neural networks **2010**,		9
19	Barley grain development toward an integrative view. *International Review of Cell and Molecular Biology*, **2010**, 281, 49-89	6	60
18	Three-Dimensional Multimodality Modelling by Integration of High-Resolution Interindividual Atlases and Functional MALDI-IMS Data. *Lecture Notes in Computer Science*, **2009**, 126-138	0.9	3
17	Unleashing Pearson Correlation for Faithful Analysis of Biomedical Data. *Lecture Notes in Computer Science*, **2009**, 70-91	0.9	2
16	A high-throughput screening system for barley/powdery mildew interactions based on automated analysis of light micrographs. *BMC Plant Biology*, **2008**, 8, 6	5.3	14
15	Towards Automatic Generation of 3D Models of Biological Objects Based on Serial Sections. *Mathematics and Visualization*, **2008**, 3-25	0.6	7
14	Correlation-maximizing surrogate gene space for visual mining of gene expression patterns in developing barley endosperm tissue. *BMC Bioinformatics*, **2007**, 8, 165	3.6	10
13	Intuitive Clustering of Biological Data. *Neural Networks (IJCNN), International Joint Conference on*, **2007**,		3
12	Generalized relevance LVQ (GRLVQ) with correlation measures for gene expression analysis. *Neurocomputing*, **2006**, 69, 651-659	5.4	15
11	Perspectives of Self-adapted Self-organizing Clustering in Organic Computing. *Lecture Notes in Computer Science*, **2006**, 141-159	0.9	1
10	Adaptive Feature Selection for Classification of Microscope Images. *Lecture Notes in Computer Science*, **2006**, 215-222	0.9	2
9	Fuzzy Labeled Self-Organizing Map with Label-Adjusted Prototypes. *Lecture Notes in Computer Science*, **2006**, 46-56	0.9	7
8	Towards Automatic Segmentation of Serial High-Resolution Images **2006**, 126-130		4
7	Artificial neural networks on massively parallel computer hardware. *Neurocomputing*, **2004**, 57, 135-150	5.4	32
6	Automating Microscope Colour Image Analysis Using the Expectation Maximisation Algorithm. *Lecture Notes in Computer Science*, **2004**, 536-543	0.9	2
5	Multi-Dimensional Self-Organizing Maps on Massively Parallel Hardware **2001**, 160-166		7

List of Publications

4   Growing 3D-SOMs with 2D-input layer as a classification tool in a motion detection system. *International Journal of Neural Systems*, **1997**, 8, 81-9   6.2   2

3   Estimating motion parameters with three-dimensional self-organizing maps. *Information Sciences*, **1997**, 101, 187-201   7.7   5

2   Macrobot: An automated segmentation-based system for powdery mildew disease quantification   4

1   GWAS reveals the genetic complexity of fructan accumulation patterns in barley grain   1