

Udo Seiffert

List of Publications by Year in descending order

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Version: 2024-02-01

58
papers

826
citations

516710

16
h-index

552781

26
g-index

63
all docs

63
docs citations

63
times ranked

960
citing authors

#	ARTICLE	IF	CITATIONS
1	Barley Grain Development. <i>International Review of Cell and Molecular Biology</i> , 2010, 281, 49-89.	3.2	75
2	Improved classification accuracy of powdery mildew infection levels of wine grapes by spatial-spectral analysis of hyperspectral images. <i>Plant Methods</i> , 2017, 13, 47.	4.3	68
3	Non-invasive Presymptomatic Detection of <i>Cercospora beticola</i> Infection and Identification of Early Metabolic Responses in Sugar Beet. <i>Frontiers in Plant Science</i> , 2016, 07, 1377.	3.6	54
4	Phenoliner: A New Field Phenotyping Platform for Grapevine Research. <i>Sensors</i> , 2017, 17, 1625.	3.8	50
5	Artificial neural networks on massively parallel computer hardware. <i>Neurocomputing</i> , 2004, 57, 135-150.	5.9	41
6	Label-free proteome profiling reveals developmental-dependent patterns in young barley grains. <i>Journal of Proteomics</i> , 2016, 143, 106-121.	2.4	33
7	Tree Species Classification Based on Hybrid Ensembles of a Convolutional Neural Network (CNN) and Random Forest Classifiers. <i>Remote Sensing</i> , 2019, 11, 2788.	4.0	31
8	Detection of Grapevine Leafroll-Associated Virus 1 and 3 in White and Red Grapevine Cultivars Using Hyperspectral Imaging. <i>Remote Sensing</i> , 2020, 12, 1693.	4.0	30
9	Classification in high-dimensional spectral data: Accuracy vs. interpretability vs. model size. <i>Neurocomputing</i> , 2014, 131, 15-22.	5.9	26
10	HyphArea—Automated analysis of spatiotemporal fungal patterns. <i>Journal of Plant Physiology</i> , 2011, 168, 72-78.	3.5	25
11	Genetic dissection of grain elements predicted by hyperspectral imaging associated with yield-related traits in a wild barley NAM population. <i>Plant Science</i> , 2019, 285, 151-164.	3.6	24
12	Generalized relevance LVQ (GRLVQ) with correlation measures for gene expression analysis. <i>Neurocomputing</i> , 2006, 69, 651-659.	5.9	23
13	Detection of Two Different Grapevine Yellows in <i>Vitis vinifera</i> Using Hyperspectral Imaging. <i>Remote Sensing</i> , 2020, 12, 4151.	4.0	21
14	Robust classification of the nutrition state in crop plants by hyperspectral imaging and artificial neural networks. , 2011, , .		19
15	A high-throughput screening system for barley/powdery mildew interactions based on automated analysis of light micrographs. <i>BMC Plant Biology</i> , 2008, 8, 6.	3.6	18
16	Evaluating the suitability of hyper- and multispectral imaging to detect foliar symptoms of the grapevine trunk disease Esca in vineyards. <i>Plant Methods</i> , 2020, 16, 142.	4.3	17
17	Evaluation of RGB and Multispectral Unmanned Aerial Vehicle (UAV) Imagery for High-Throughput Phenotyping and Yield Prediction in Barley Breeding. <i>Remote Sensing</i> , 2021, 13, 2670.	4.0	17
18	Genome-wide association study reveals the genetic complexity of fructan accumulation patterns in barley grain. <i>Journal of Experimental Botany</i> , 2021, 72, 2383-2402.	4.8	17

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19	Optimizing the procedure of grain nutrient predictions in barley via hyperspectral imaging. PLoS ONE, 2019, 14, e0224491.	2.5	15
20	“Macrobot” An Automated Segmentation-Based System for Powdery Mildew Disease Quantification. Plant Phenomics, 2020, 2020, 5839856.	5.9	15
21	Dynamics and genetic regulation of leaf nutrient concentration in barley based on hyperspectral imaging and machine learning. Plant Science, 2022, 315, 111123.	3.6	15
22	Mass Spectrometry Imaging of Metabolites in Barley Grain Tissues. Current Protocols in Plant Biology, 2016, 1, 574-591.	2.8	12
23	Correlation-maximizing surrogate gene space for visual mining of gene expression patterns in developing barley endosperm tissue. BMC Bioinformatics, 2007, 8, 165.	2.6	11
24	Clustering of crop phenotypes by means of hyperspectral signatures using artificial neural networks. , 2010, , .		11
25	Genetic regulation of growth and nutrient content under phosphorus deficiency in the wild barley introgression library S42IL. Plant Breeding, 2017, 136, 892-907.	1.9	11
26	Microphenomics for Interactions of Barley with Fungal Pathogens. , 2014, , 123-148.		10
27	ANNIE”Artificial Neural Network-based Image Encoder. Neurocomputing, 2014, 125, 229-235.	5.9	9
28	Fuzzy Labeled Self-Organizing Map with Label-Adjusted Prototypes. Lecture Notes in Computer Science, 2006, , 46-56.	1.3	9
29	Towards Automatic Generation of 3D Models of Biological Objects Based on Serial Sections. Mathematics and Visualization, 2008, , 3-25.	0.6	9
30	Multi-Dimensional Self-Organizing Maps on Massively Parallel Hardware. , 2001, , 160-166.		8
31	Estimating motion parameters with three-dimensional self-organizing maps. Information Sciences, 1997, 101, 187-201.	6.9	7
32	Quantitative Measurements of model interpretability for the analysis of spectral data. , 2013, , .		7
33	Fusion trees for fast and accurate classification of hyperspectral data with ensembles of γ -divergence-based RBF networks. Neural Computing and Applications, 2015, 26, 253-262.	5.6	7
34	Unleashing Pearson Correlation for Faithful Analysis of Biomedical Data. Lecture Notes in Computer Science, 2009, , 70-91.	1.3	7
35	Adaptive basis functions for prototype-based classification of functional data. Neural Computing and Applications, 2020, 32, 18213-18223.	5.6	5
36	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.	0.6	5

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37	Cascaded Reduction and Growing of Result Sets for Combining Object Detectors. Lecture Notes in Computer Science, 2013, , 121-133.	1.3	5
38	A comparison of late fusion methods for object detection. , 2013, , .		4
39	Towards Automatic Segmentation of Serial High-Resolution Images. , 2006, , 126-130.		4
40	Automating Microscope Colour Image Analysis Using the Expectation Maximisation Algorithm. Lecture Notes in Computer Science, 2004, , 536-543.	1.3	4
41	Growing 3D-SOMs with 2D-Input Layer as a Classification Tool in a Motion Detection System. International Journal of Neural Systems, 1997, 08, 81-89.	5.2	3
42	Intuitive Clustering of Biological Data. Neural Networks (IJCNN), International Joint Conference on, 2007, , .	0.0	3
43	Three-Dimensional Multimodality Modelling by Integration of High-Resolution Interindividual Atlases and Functional MALDI-IMS Data. Lecture Notes in Computer Science, 2009, , 126-138.	1.3	3
44	A multivariate wavelet-PCA denoising-filter for hyperspectral images. , 2011, , .		2
45	Produktionssysteme. , 2015, , 151-243.		2
46	Adaptive Feature Selection for Classification of Microscope Images. Lecture Notes in Computer Science, 2006, , 215-222.	1.3	2
47	Joint Registration and Segmentation of Histological Volume Data by Diffusion-Based Label Adaption. , 2010, , .		1
48	Fractal analysis of resting state functional connectivity of the brain. , 2012, , .		1
49	Fast image segmentation based on boosted random forests, integral images, and features on demand. , 2014, , .		1
50	Identification and Classification of Contaminations on Wafers Using Hyperspectral Imaging. Energy Procedia, 2016, 92, 232-235.	1.8	1
51	Adaptive basis functions for prototype-based classification of functional data. , 2017, , .		1
52	Perspectives of Self-adapted Self-organizing Clustering in Organic Computing. Lecture Notes in Computer Science, 2006, , 141-159.	1.3	1
53	Investigating intensity and transversal drift in hyperspectral imaging data. Neurocomputing, 2022, 505, 68-79.	5.9	1
54	Fuzzy image segmentation by potential fields. , 2008, , .		0

#	ARTICLE	IF	CITATIONS
55	Inter-modality registration of NMRI and histological section images using neural networks regression in Gabor feature space. , 2009, , .		0
56	Evaluation of Fusion Methods for Gamma-Divergence-Based Neural Network Ensembles. , 2015, , .		0
57	PhÄno- und Genotypisierung von Pflanzen. , 2019, , 95-108.		0
58	Phenotyping and Genotyping of Plants. , 2020, , 91-104.		0