David Legland

List of Publications by Year in descending order

Source: https://exaly.com/author-pdf/1175987/publications.pdf

Version: 2024-02-01

39 papers 2,023 citations

361413 20 h-index 315739 38 g-index

41 all docs

41 docs citations

times ranked

41

3485 citing authors

#	Article	IF	CITATIONS
1	MorphoLibJ: integrated library and plugins for mathematical morphology with ImageJ. Bioinformatics, 2016, 32, 3532-3534.	4.1	921
2	COMPUTATION OF MINKOWSKI MEASURES ON 2D AND 3D BINARY IMAGES. Image Analysis and Stereology, 2007, 26, 83.	0.9	152
3	The preprophase band of microtubules controls the robustness of division orientation in plants. Science, 2017, 356, 186-189.	12.6	123
4	Structural mechanisms leading to improved water retention in acid milk gels by use of transglutaminase. Food Hydrocolloids, 2013, 30, 419-427.	10.7	60
5	Pepsin diffusion in dairy gels depends on casein concentration and microstructure. Food Chemistry, 2017, 223, 54-61.	8.2	54
6	Macro-vision and grey level granulometry for quantification of tomato pericarp structure. Postharvest Biology and Technology, 2008, 47, 199-209.	6.0	49
7	<i>Nucleus/</i> : an ImageJ plugin for quantifying 3D images of interphase nuclei. Bioinformatics, 2015, 31, 1144-1146.	4.1	48
8	Robust incremental compensation of the light attenuation with depth in 3D fluorescence microscopy. Journal of Microscopy, 2004, 214, 297-314.	1.8	42
9	Characterization of the microstructure of dairy systems using automated image analysis. Food Hydrocolloids, 2015, 44, 360-371.	10.7	41
10	Automated clustering of lignocellulosic fibres based on morphometric features and using clustering of variables. Industrial Crops and Products, 2013, 45, 253-261.	5.2	39
11	Changing the isoelectric point of the heat-induced whey protein complexes affects the acid gelation of skim milk. International Dairy Journal, 2012, 23, 9-17.	3.0	37
12	Cartography of cell morphology in tomato pericarp at the fruit scale. Journal of Microscopy, 2012, 247, 78-93.	1.8	36
13	Color Quantification of Stained Maize Stem Section Describes Lignin Spatial Distribution within the Whole Stem. Journal of Agricultural and Food Chemistry, 2013, 61, 3186-3192.	5.2	36
14	Use of X-ray micro computed tomography imaging to analyze the morphology of wheat grain through its development. Plant Methods, 2019, 15, 84.	4.3	35
15	KymoRod: a method for automated kinematic analysis of rodâ€shaped plant organs. Plant Journal, 2016, 88, 468-475.	5.7	33
16	Tissue Lignification, Cell Wall <i>p</i> -Coumaroylation and Degradability of Maize Stems Depend on Water Status. Journal of Agricultural and Food Chemistry, 2018, 66, 4800-4808.	5. 2	31
17	Cell geometry determines symmetric and asymmetric division plane selection in Arabidopsis early embryos. PLoS Computational Biology, 2019, 15, e1006771.	3.2	31
18	Efficient N-Dimensional surface estimation using Crofton formula and run-length encoding. The Insight Journal, 2012, , .	0.2	29

#	Article	IF	CITATIONS
19	Changes in cell walls lignification, feruloylation and p-coumaroylation throughout maize internode development. PLoS ONE, 2019, 14, e0219923.	2.5	22
20	Exploring the microstructure of natural fibre composites by confocal Raman imaging and image analysis. Composites Part A: Applied Science and Manufacturing, 2017, 94, 32-40.	7.6	21
21	Histological quantification of maize stem sections from FASGA-stained images. Plant Methods, 2017, 13, 84.	4.3	21
22	Exploring the mechanical performance and in-planta architecture of secondary hemp fibres. Industrial Crops and Products, 2017, 108, 1-5.	5.2	20
23	Statistical Mapping of Maize Bundle Intensity at the Stem Scale Using Spatial Normalisation of Replicated Images. PLoS ONE, 2014, 9, e90673.	2.5	20
24	Microfibril angle of elementary flax fibres investigated with polarised second harmonic generation microscopy. Industrial Crops and Products, 2020, 156, 112847.	5.2	16
25	Esmraldi: efficient methods for the fusion of mass spectrometry and magnetic resonance images. BMC Bioinformatics, 2021, 22, 56.	2.6	16
26	Stereological estimation of cell wall density of DR12 tomato mutant using three-dimensional confocal imaging. Annals of Botany, 2010, 105, 265-276.	2.9	14
27	Beating of hemp bast fibres: an examination of a hydro-mechanical treatment on chemical, structural, and nanomechanical property evolutions. Cellulose, 2019, 26, 5665-5683.	4.9	11
28	Oriented granulometry to quantify fibre orientation distributions in synthetic and plant fibre composite preforms. Industrial Crops and Products, 2020, 152, 112548.	5.2	11
29	Quantitative imaging of plants: multi-scale data for better plant anatomy. Journal of Experimental Botany, 2018, 69, 343-347.	4.8	10
30	Brain virtual histology with X-ray phase-contrast tomography Part II: 3D morphologies of amyloid-β plaques in Alzheimer's disease models. Biomedical Optics Express, 2022, 13, 1640.	2.9	9
31	Quantitative dissection of variations in root growth rate: a matter of cell proliferation or of cell expansion?. Journal of Experimental Botany, 2018, 69, 5157-5168.	4.8	8
32	Impact of Two-Dimensional Particle Size Distribution on Estimation of Water Vapor Diffusivity in Micrometric Size Cellulose Particles. Materials, 2018, 11, 1712.	2.9	5
33	Parametric mapping of cellular morphology in plant tissue sections by gray level granulometry. Plant Methods, 2020, 16, 63.	4.3	5
34	Synchrotron Based X-ray Microtomography Reveals Cellular Morphological Features of Developing Wheat Grain. Applied Sciences (Switzerland), 2022, 12, 3454.	2.5	4
35	Stereological estimation for layered structures based on slabs perpendicular to a surface. Journal of Microscopy, 2008, 232, 44-55.	1.8	3
36	Quantification of Cell Division Angles in the Arabidopsis Root. Methods in Molecular Biology, 2022, 2382, 209-221.	0.9	3

#	Article	IF	CITATIONS
37	Microstructural and Chemical Approach To Highlight How a Simple Methyl Group Affects the Mechanical Properties of a Natural Fibers Composite. ACS Sustainable Chemistry and Engineering, 2017, 5, 10352-10360.	6.7	2
38	Darkfield and Fluorescence Macrovision of a Series of Large Images to Assess Anatomical and Chemical Tissue Variability in Whole Cross-Sections of Maize Stems. Frontiers in Plant Science, 2021, 12, 792981.	3.6	2
39	ImageM: a user-friendly interface for the processing of multi-dimensional images with Matlab. F1000Research, 0, 10, 333.	1.6	0