David Legland

List of Publications by Year
in descending order

39 papers	2,023 citations	361413 20 h-index	315739 38 g-index
41 all docs	41 docs citations	41 times ranked	3485 citing authors

#	Article	IF	Citations
1	Brain virtual histology with X-ray phase-contrast tomography Part II: 3D morphologies of amyloid-Î² plaques in Alzheimerâ€™s disease models. Biomedical Optics Express, 2022, 13, 1640.	2.9	9
2	Quantification of Cell Division Angles in the Arabidopsis Root. Methods in Molecular Biology, 2022, 2382, 209-221.	0.9	3
3	Synchrotron Based X-ray Microtomography Reveals Cellular Morphological Features of Developing Wheat Grain. Applied Sciences (Switzerland), 2022, 12, 3454.	2.5	4
4	Esmraldi: efficient methods for the fusion of mass spectrometry and magnetic resonance images. BMC Bioinformatics, 2021, 22, 56.	2.6	16
5	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
6	Microfibril angle of elementary flax fibres investigated with polarised second harmonic generation microscopy. Industrial Crops and Products, 2020, 156, 112847.	5.2	16
7	Parametric mapping of cellular morphology in plant tissue sections by gray level granulometry. Plant Methods, 2020, 16, 63.	4.3	5
8	Oriented granulometry to quantify fibre orientation distributions in synthetic and plant fibre composite preforms. Industrial Crops and Products, 2020, 152, 112548.	5.2	11
9	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
10	Changes in cell walls lignification, feruloylation and p-coumaroylation throughout maize internode development. PLoS ONE, 2019, 14, e0219923.	2.5	22
11	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
12	Cell geometry determines symmetric and asymmetric division plane selection in Arabidopsis early embryos. PLoS Computational Biology, 2019, 15, e1006771.	3.2	31
13	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
14	Quantitative imaging of plants: multi-scale data for better plant anatomy. Journal of Experimental Botany, 2018, 69, 343-347.	4.8	10
15	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
16	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
17	The preprophase band of microtubules controls the robustness of division orientation in plants. Science, 2017, 356, 186-189.	12.6	123
18	Exploring the mechanical performance and in-planta architecture of secondary hemp fibres. Industrial Crops and Products, 2017, 108, 1-5.	5.2	20

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19	Pepsin diffusion in dairy gels depends on casein concentration and microstructure. Food Chemistry, 2017, 223, 54-61.	8.2	54
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	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
22	Histological quantification of maize stem sections from FASGA-stained images. Plant Methods, 2017, 13, 84.	4.3	21
23	KymoRod: a method for automated kinematic analysis of rodâ€shaped plant organs. Plant Journal, 2016, 88, 468-475.	5.7	33
24	MorphoLibJ: integrated library and plugins for mathematical morphology with ImageJ. Bioinformatics, 2016, 32, 3532-3534.	4.1	921
25	<i>NucleusJ</i>: an ImageJ plugin for quantifying 3D images of interphase nuclei. Bioinformatics, 2015, 31, 1144-1146.	4.1	48
26	Characterization of the microstructure of dairy systems using automated image analysis. Food Hydrocolloids, 2015, 44, 360-371.	10.7	41
27	Statistical Mapping of Maize Bundle Intensity at the Stem Scale Using Spatial Normalisation of Replicated Images. PLoS ONE, 2014, 9, e90673.	2.5	20
28	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
29	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
30	Structural mechanisms leading to improved water retention in acid milk gels by use of transglutaminase. Food Hydrocolloids, 2013, 30, 419-427.	10.7	60
31	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
32	Cartography of cell morphology in tomato pericarp at the fruit scale. Journal of Microscopy, 2012, 247, 78-93.	1.8	36
33	Efficient N-Dimensional surface estimation using Crofton formula and run-length encoding. The Insight Journal, 2012, , .	0.2	29
34	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
35	Stereological estimation for layered structures based on slabs perpendicular to a surface. Journal of Microscopy, 2008, 232, 44-55.	1.8	3
36	Macro-vision and grey level granulometry for quantification of tomato pericarp structure. Postharvest Biology and Technology, 2008, 47, 199-209.	6.0	49

#	Article	IF	Citations
37	COMPUTATION OF MINKOWSKI MEASURES ON 2D AND 3D BINARY IMAGES. Image Analysis and Stereology, 2007, 26, 83.	0.9	152
38	Robust incremental compensation of the light attenuation with depth in 3D fluorescence microscopy. Journal of Microscopy, 2004, 214, 297-314.	1.8	42
39	ImageM: a user-friendly interface for the processing of multi-dimensional images with Matlab. F1000Research, 0, 10, 333.	1.6	0