Stanley J Miklavcic

List of Publications by Year
in descending order

49	1,449	430874	345221
papers	citations	18 h-index	36 g-index

51	51	51	1914
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Interrogating the relationship between the microstructure of amphiphilic poly(ethylene) Tj ETQq1 1 0.784314 rgBT /Overlock 10 Tf 50 7 Journal of Colloid and Interface Science, 2022, 606, 1140-1152.	9.4	5
2	A Whole Leaf Comparative Study of Stomatal Conductance Models. Frontiers in Plant Science, 2022, 13, 766975.	3.6	2
3	On the Efficacy of Water Transport in Leaves. A Coupled Xylem-Phloem Model of Water and Solute Transport. Frontiers in Plant Science, 2021, 12, 615457.	3.6	11
4	Density functional theory of confined ionic liquids: the influence of power-law attractions on molecule distributions and surface forces. RSC Advances, 2021, 11, 17498-17513.	3.6	3
5	Energy costs of salt tolerance in crop plants. New Phytologist, 2020, 225, 1072-1090.	7.3	284
6	Statistical analysis and modeling of the geometry and topology of plant roots. Journal of Theoretical Biology, 2020, 486, 110108.	1.7	8
7	A Comprehensive Biophysical Model of Ion and Water Transport in Plant Roots. III. Quantifying the Energy Costs of Ion Transport in Salt-Stressed Roots of Arabidopsis. Frontiers in Plant Science, 2020, 11, 865.	3.6	7
8	An Automatic Field Plot Extraction Method From Aerial Orthomosaic Images. Frontiers in Plant Science, 2019, 10, 683.	3.6	18
9	A Comprehensive Biophysical Model of Ion and Water Transport in Plant Roots. II. Clarifying the Roles of SOS1 in the Salt-Stress Response in Arabidopsis. Frontiers in Plant Science, 2019, 10, 1121.	3.6	19
10	Density functional theory of confined ionic liquids: A survey of the effects of ion type, molecular charge distribution, and surface adsorption. Journal of Chemical Physics, 2019, 150, 184502.	3.0	14
11	High-Throughput Field Imaging and Basic Image Analysis in a Wheat Breeding Programme. Frontiers in Plant Science, 2019, 10, 449.	3.6	34
12	Quantifying the force between mercury and mica across an ionic liquid using white light interferometry. Journal of Colloid and Interface Science, 2019, 538, 218-227.	9.4	5
13	Estimation of vegetation indices for high-throughput phenotyping of wheat using aerial imaging. Plant Methods, 2018, 14, 20.	4.3	80
14	Reliable and accurate extraction of Hamaker constants from surface force measurements. Journal of Colloid and Interface Science, 2018, 524, 263-266.	9.4	4
15	The pseudo 2-D relaxation model for obtaining T1â€“T2 relationships from 1-D T1 and T2 measurements of fluid in porous media. Microporous and Mesoporous Materials, 2018, 269, 191-194.	4.4	2
16	Detection and analysis of wheat spikes using Convolutional Neural Networks. Plant Methods, 2018, 14, 100.	4.3	173
17	Analytical Study of Colour Spaces for Plant Pixel Detection. Journal of Imaging, 2018, 4, 42.	3.0	7
18	Pre-processing by data augmentation for improved ellipse fitting. PLoS ONE, 2018, 13, e0196902.	2.5	6

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19	Land-based crop phenotyping by image analysis: consistent canopy characterization from inconsistent field illumination. Plant Methods, 2018, 14, 39.	4.3	13
20	Quantitative Estimation of Wheat Phenotyping Traits Using Ground and Aerial Imagery. Remote Sensing, 2018, 10, 950.	4.0	33
21	Land-based crop phenotyping by image analysis: Accurate estimation of canopy height distributions using stereo images. PLoS ONE, 2018, 13, e0196671.	2.5	26
22	Scaling exponent and dispersity of polymers in solution by diffusion NMR. Journal of Colloid and Interface Science, 2017, 493, 393-397.	9.4	9
23	Phenotyping of plants in competitive but controlled environments: a study of drought response in transgenic wheat. Functional Plant Biology, 2017, 44, 290.	2.1	11
24	A new method for accurate, high-throughput volume estimation from three 2D projective images. International Journal of Food Properties, 2017, 20, 2344-2357.	3.0	16
25	A Comprehensive Biophysical Model of Ion and Water Transport in Plant Roots. I. Clarifying the Roles of Endodermal Barriers in the Salt Stress Response. Frontiers in Plant Science, 2017, 8, 1326.	3.6	37
26	Detecting spikes of wheat plants using neural networks with Laws texture energy. Plant Methods, 2017, 13, 83.	4.3	61
27	Convective and diffusive effects on particle transport in asymmetric periodic capillaries. PLoS ONE, 2017, 12, e0183127.	2.5	5
28	Quantifying the Onset and Progression of Plant Senescence by Color Image Analysis for High Throughput Applications. PLoS ONE, 2016, 11, e0157102.	2.5	26
29	Modeling Root Zone Effects on Preferred Pathways for the Passive Transport of Ions and Water in Plant Roots. Frontiers in Plant Science, 2016, 7, 914.	3.6	30
30	Obtaining T 1 - T 2 distribution functions from 1-dimensional T 1 and T 2 measurements: The pseudo 2-D relaxation model. Journal of Magnetic Resonance, 2016, 269, 186-195.	2.1	14
31	The Influence of Object Shape on the Convergence of Active Contour Models for Image Segmentation. Computer Journal, 2016, 59, 603-615.	2.4	7
32	A Hybrid Approach for Improving Image Segmentation: Application to Phenotyping of Wheat Leaves. PLoS ONE, 2016, 11, e0168496.	2.5	13
33	RootAnalyzer: A Cross-Section Image Analysis Tool for Automated Characterization of Root Cells and Tissues. PLoS ONE, 2015, 10, e0137655.	2.5	34
34	Polyethyleneimine for copper absorption II: kinetics, selectivity and efficiency from seawater. RSC Advances, 2015, 5, 51883-51890.	3.6	54
35	Integrated selfâ€calibration of single axis motion for threeâ€dimensional reconstruction of roots. IET Computer Vision, 2015, 9, 850-856.	2.0	3
36	Toward a biophysical understanding of the salt stress response of individual plant cells. Journal of Theoretical Biology, 2015, 385, 130-142.	1.7	14

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37	RootGraph: a graphic optimization tool for automated image analysis of plant roots. Journal of Experimental Botany, 2015, 66, 6551-6562.	4.8	61
38	A Complete System for 3D Reconstruction of Roots for Phenotypic Analysis. Advances in Experimental Medicine and Biology, 2015, 823, 249-270.	1.6	5
39	Mathematically modelling competitive ion absorption in a polymer matrix. RSC Advances, 2014, 4, 60349-60362.	3.6	4
40	Efficient Compression of Distributed Information in Estimation Fusion. Electronic Notes in Discrete Mathematics, 2014, 46, 297-304.	0.4	2
41	Landmark-free statistical analysis of the shape of plant leaves. Journal of Theoretical Biology, 2014, 363, 41-52.	1.7	55
42	Root phenotyping by root tip detection and classification through statistical learning. Plant and Soil, 2014, 380, 193-209.	3.7	34
43	On the competitive uptake and transport of ions through differentiated root tissues. Journal of Theoretical Biology, 2014, 340, 1-10.	1.7	18
44	Mathematical modelling of the uptake and transport of salt in plant roots. Journal of Theoretical Biology, 2013, 336, 132-143.	1.7	16
45	Statistical shape models of plant leaves. , 2013, , .		2
46	A Riemannian Elastic Metric for Shape-Based Plant Leaf Classification. , 2012, , .		46
47	Theory of light propagation incorporating scattering and absorption in turbid media. Optics Letters, 2005, 30, 792.	3.3	20
48	On the stability of planar fluid interfaces under van der Waals surface forces. Journal of Physics A, 2003, 36, 8829-8850.	1.6	6
49	A Confined Complex Liquid. Oscillatory Forces and Lamellae Formation from an L3 Phase. Langmuir, 1995, 11, 3928-3936.	3.5	36