

# Xavier Sirault

## List of Publications by Year in descending order

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Version: 2024-02-01

33  
papers

2,301  
citations

394421

19  
h-index

580821

25  
g-index

33  
all docs

33  
docs citations

33  
times ranked

3173  
citing authors

#	ARTICLE	IF	CITATIONS
1	New phenotyping methods for screening wheat and barley for beneficial responses to water deficit. <i>Journal of Experimental Botany</i> , 2010, 61, 3499-3507.	4.8	359
2	Proximal Remote Sensing Buggies and Potential Applications for Field-Based Phenotyping. <i>Agronomy</i> , 2014, 4, 349-379.	3.0	316
3	High Throughput Determination of Plant Height, Ground Cover, and Above-Ground Biomass in Wheat with LiDAR. <i>Frontiers in Plant Science</i> , 2018, 9, 237.	3.6	206
4	A novel mesh processing based technique for 3D plant analysis. <i>BMC Plant Biology</i> , 2012, 12, 63.	3.6	189
5	A new screening method for osmotic component of salinity tolerance in cereals using infrared thermography. <i>Functional Plant Biology</i> , 2009, 36, 970.	2.1	173
6	QTLs for grain carbon isotope discrimination in field-grown barley. <i>Theoretical and Applied Genetics</i> , 2002, 106, 118-126.	3.6	122
7	Growth of the C4 dicot <i>Flaveria bidentis</i> : photosynthetic acclimation to low light through shifts in leaf anatomy and biochemistry. <i>Journal of Experimental Botany</i> , 2010, 61, 4109-4122.	4.8	116
8	TraitCapture: genomic and environment modelling of plant phenomic data. <i>Current Opinion in Plant Biology</i> , 2014, 18, 73-79.	7.1	101
9	Leaf Photosynthetic Parameters Related to Biomass Accumulation in a Global Rice Diversity Survey. <i>Plant Physiology</i> , 2017, 175, 248-258.	4.8	85
10	Improving photosynthesis and yield potential in cereal crops by targeted genetic manipulation: Prospects, progress and challenges. <i>Field Crops Research</i> , 2015, 182, 19-29.	5.1	81
11	Phenomic Approaches and Tools for Phytopathologists. <i>Phytopathology</i> , 2017, 107, 6-17.	2.2	73
12	Scaling of Thermal Images at Different Spatial Resolution: The Mixed Pixel Problem. <i>Agronomy</i> , 2014, 4, 380-396.	3.0	68
13	Genetic analysis of coleoptile length and diameter in wheat. <i>Australian Journal of Agricultural Research</i> , 2004, 55, 733.	1.5	66
14	“Rolled-upness” phenotyping leaf rolling in cereals using computer vision and functional data analysis approaches. <i>Plant Methods</i> , 2015, 11, 52.	4.3	53
15	Down-regulation of Glucan, Water-Dikinase activity in wheat endosperm increases vegetative biomass and yield. <i>Plant Biotechnology Journal</i> , 2012, 10, 871-882.	8.3	52
16	Digital imaging approaches for phenotyping whole plant nitrogen and phosphorus response in <i>Brachypodium distachyon</i> . <i>Journal of Integrative Plant Biology</i> , 2014, 56, 781-796.	8.5	49
17	An assessment of near surface CO2 leakage detection techniques under Australian conditions. <i>Energy Procedia</i> , 2014, 63, 3891-3906.	1.8	43
18	Feature matching in stereo images encouraging uniform spatial distribution. <i>Pattern Recognition</i> , 2015, 48, 2530-2542.	8.1	24

#	ARTICLE	IF	CITATIONS
19	3D Scanning System for Automatic High-Resolution Plant Phenotyping. , 2016, , .		24
20	Infrared Thermography in Plant Phenotyping for Salinity Tolerance. , 2012, 913, 173-189.		23
21	Diurnal Solar Energy Conversion and Photoprotection in Rice Canopies. <i>Plant Physiology</i> , 2017, 173, 495-508.	4.8	22
22	Automated 3D Segmentation and Analysis of Cotton Plants. , 2011, , .		16
23	3D Plant Modelling via Hyperspectral Imaging. , 2013, , .		14
24	High-throughput chlorophyll fluorescence screening of <i>Setaria viridis</i> for mutants with altered CO2 compensation points. <i>Functional Plant Biology</i> , 2018, 45, 1017.	2.1	8
25	Stereo matching using cost volume watershed and region merging. <i>Signal Processing: Image Communication</i> , 2014, 29, 1232-1244.	3.2	7
26	Automated Plant and Leaf Separation: Application in 3D Meshes of Wheat Plants. , 2016, , .		3
27	Feature Correspondence with Even Distribution. , 2012, , .		2
28	Tree structural watershed for stereo matching. , 2012, , .		1
29	Down-regulation of glucan, water-dikinase activity in wheat endosperm increases vegetative biomass and yield. <i>Plant Biotechnology Journal</i> , 2013, 11, 390-391.	8.3	1
30	Cross Image Inference Scheme for Stereo Matching. <i>Lecture Notes in Computer Science</i> , 2013, , 217-230.	1.3	1
31	High-Throughput Plant Height Estimation from RGB Images Acquired with Aerial Platforms: A 3D Point Cloud Based Approach. , 2019, , .		1
32	Optimal design for adaptive smoothing splines. <i>Journal of Statistical Planning and Inference</i> , 2020, 206, 263-277.	0.6	1
33	Ten simple rules to ruin a collaborative environment. <i>PLoS Computational Biology</i> , 2022, 18, e1009957.	3.2	1