Andreas Hund

List of Publications by Year
in descending order

55 papers	3,046 citations	201385 27 h-index	174990 52 g-index
65 all docs	65 docs citations	65 times ranked	3331 citing authors

#	Article	IF	Citations
1	High-throughput field phenotyping of soybean: Spotting an ideotype. Remote Sensing of Environment, 2022, 269, 112797.	4.6	20
2	A two-stage approach for the spatio-temporal analysis of high-throughput phenotyping data. Scientific Reports, 2022, 12, 3177.	1.6	10
3	Temperature response of wheat affects final height and the timing of stem elongation under field conditions. Journal of Experimental Botany, 2021, 72, 700-717.	2.4	28
4	Global Wheat Head Detection 2021: An Improved Dataset for Benchmarking Wheat Head Detection Methods. Plant Phenomics, 2021, 2021, 9846158.	2.5	60
5	Can Swiss wheat varieties escape future heat stress?. European Journal of Agronomy, 2021, 131, 126394.	1.9	9
6	Temporal trends in canopy temperature and greenness are potential indicators of late-season drought avoidance and functional stay-green in wheat. Field Crops Research, 2021, 274, 108311.	2.3	19
7	Phenomics data processing: A plot-level model for repeated measurements to extract the timing of key stages and quantities at defined time points. Field Crops Research, 2021, 274, 108314.	2.3	18
8	Outdoor Plant Segmentation With Deep Learning for High-Throughput Field Phenotyping on a Diverse Wheat Dataset. Frontiers in Plant Science, 2021, 12, 774068.	1.7	20
9	The soil organic carbon stabilization potential of old and new wheat cultivars: a ¹³CO₂-labeling study. Biogeosciences, 2020, 17, 2971-2986.	1.3	13
10	Exploring genetic dependence of lipase activity to improve the quality of wholeâ€grain wheat. Journal of the Science of Food and Agriculture, 2020, 100, 3120-3125.	1.7	5
11	Assessment of Multi-Image Unmanned Aerial Vehicle Based High-Throughput Field Phenotyping of Canopy Temperature. Frontiers in Plant Science, 2020, 11, 150.	1.7	45
12	Global Wheat Head Detection (GWHD) Dataset: A Large and Diverse Dataset of High-Resolution RGB-Labelled Images to Develop and Benchmark Wheat Head Detection Methods. Plant Phenomics, 2020, 2020, 3521852.	2.5	128
13	Repeated Multiview Imaging for Estimating Seedling Tiller Counts of Wheat Genotypes Using Drones. Plant Phenomics, 2020, 2020, 3729715.	2.5	26
14	Shovelomics root traits assessed on the EURoot maize panel are highly heritable across environments but show low genotype-by-nitrogen interaction. Euphytica, 2019, 215, 1.	0.6	13
15	In-Field Detection and Quantification of Septoria Tritici Blotch in Diverse Wheat Germplasm Using Spectralâ€“Temporal Features. Frontiers in Plant Science, 2019, 10, 1355.	1.7	26
16	Modern wheat semi-dwarfs root deep on demand: response of rooting depth to drought in a set of Swiss era wheats covering 100Âyears of breeding. Euphytica, 2019, 215, 1.	0.6	38
17	Spectral Vegetation Indices to Track Senescence Dynamics in Diverse Wheat Germplasm. Frontiers in Plant Science, 2019, 10, 1749.	1.7	80
18	Non-invasive field phenotyping of cereal development. Burleigh Dodds Series in Agricultural Science, 2019, , 249-292.	0.1	19

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19	Precision Phenotyping Reveals Novel Loci for Quantitative Resistance to Septoria Tritici Blotch. Plant Phenomics, 2019, 2019, 3285904.	2.5	37
20	Ranking Quantitative Resistance to Septoria tritici Blotch in Elite Wheat Cultivars Using Automated Image Analysis. Phytopathology, 2018, 108, 568-581.	1.1	88
21	PhenoFly Planning Tool: flight planning for high-resolution optical remote sensing with unmanned areal systems. Plant Methods, 2018, 14, 116.	1.9	49
22	Hyperspectral Canopy Sensing of Wheat Septoria Tritici Blotch Disease. Frontiers in Plant Science, 2018, 9, 1195.	1.7	61
23	Soil type determines how root and rhizosphere traits relate to phosphorus acquisition in field-grown maize genotypes. Plant and Soil, 2017, 412, 115-132.	1.8	26
24	Crop water use under Swiss pedoclimatic conditions â€“ Evaluation of lysimeter data covering a seven-year period. Field Crops Research, 2017, 211, 48-65.	2.3	16
25	An image analysis pipeline for automated classification of imaging light conditions and for quantification of wheat canopy cover time series in field phenotyping. Plant Methods, 2017, 13, 15.	1.9	42
26	The ETH field phenotyping platform FIP: a cable-suspended multi-sensor system. Functional Plant Biology, 2017, 44, 154.	1.1	143
27	Monitoring the dynamics of wheat stem elongation: genotypes differ at critical stages. Euphytica, 2017, 213, 1.	0.6	32
28	Application of the <i>Prunus</i> spp. Cyanide Seed Defense System onto Wheat: Reduced Insect Feeding and Field Growth Tests. Journal of Agricultural and Food Chemistry, 2016, 64, 3501-3507.	2.4	9
29	Opportunity costs for maize associated with localised application of sewage sludge derived fertilisers, as indicated by early root and phosphorus uptake responses. Plant and Soil, 2016, 406, 201-217.	1.8	19
30	RADIX: rhizoslide platform allowing high throughput digital image analysis of root system expansion. Plant Methods, 2016, 12, 40.	1.9	22
31	Biochar amendment increases maize root surface areas and branching: a shovelomics study in Zambia. Plant and Soil, 2015, 395, 45-55.	1.8	136
32	Next generation shovelomics: set up a tent and REST. Plant and Soil, 2015, 388, 1-20.	1.8	112
33	Remote, aerial phenotyping of maize traits with a mobile multi-sensor approach. Plant Methods, 2015, 11, 9.	1.9	132
34	Plant phenotyping: from bean weighing to image analysis. Plant Methods, 2015, 11, 14.	1.9	307
35	High-resolution quantification of root dynamics in split-nutrient rhizoslides reveals rapid and strong proliferation of maize roots in response to local high nitrogen. Journal of Experimental Botany, 2015, 66, 5507-5517.	2.4	21
36	Image based phenotyping during winter: a powerful tool to assess wheat genetic variation in growth response to temperature. Functional Plant Biology, 2015, 42, 387.	1.1	46

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37	Rhizoslides: paper-based growth system for non-destructive, high throughput phenotyping of root development by means of image analysis. Plant Methods, 2014, 10, 13.	1.9	95
38	Early vertical distribution of roots and its association with drought tolerance in tropical maize. Plant and Soil, 2014, 377, 295-308.	1.8	22
39	A soil-free root observation system for the study of root-microorganism interactions in maize. Plant and Soil, 2013, 367, 605-614.	1.8	15
40	Can we improve heterosis for root growth of maize by selecting parental inbred lines with different temperature behaviour?. Philosophical Transactions of the Royal Society B: Biological Sciences, 2012, 367, 1580-1588.	1.8	16
41	A consensus map of QTLs controlling the root length of maize. Plant and Soil, 2011, 344, 143-158.	1.8	98
42	Collocations of QTLs for Seedling Traits and Yield Components of Tropical Maize under Water Stress Conditions. Crop Science, 2010, 50, 1385-1392.	0.8	32
43	QTLs for the elongation of axile and lateral roots of maize in response to low water potential. Theoretical and Applied Genetics, 2010, 120, 621-631.	1.8	71
44	QTLs for early vigor of tropical maize. Molecular Breeding, 2010, 25, 91-103.	1.0	25
45	Genetic variation in the gravitropic response of maize roots to low temperatures. Plant Root, 2010, 4, 22-30.	0.3	16
46	Genetic structure and history of Swiss maize (Zea mays L. ssp. mays) landraces. Genetic Resources and Crop Evolution, 2010, 57, 71-84.	0.8	19
47	Rooting depth and water use efficiency of tropical maize inbred lines, differing in drought tolerance. Plant and Soil, 2009, 318, 311-325.	1.8	222
48	Growth of axile and lateral roots of maize: I development of a phenotying platform. Plant and Soil, 2009, 325, 335-349.	1.8	135
49	Mapping of QTLs for lateral and axile root growth of tropical maize. Theoretical and Applied Genetics, 2009, 119, 1413-1424.	1.8	84
50	Genetic diversity of Swiss maize (Zea mays L. ssp. mays) assessed with individuals and bulks on agarose gels. Genetic Resources and Crop Evolution, 2008, 55, 971-983.	0.8	19
51	Cold tolerance of maize seedlings as determined by root morphology and photosynthetic traits. European Journal of Agronomy, 2008, 28, 178-185.	1.9	65
52	Root morphology and photosynthetic performance of maize inbred lines at low temperature. European Journal of Agronomy, 2007, 27, 52-61.	1.9	60
53	Swiss maize landraces - Their diversity and genetic relationships. Acta Agronomica Hungarica: an International Multidisciplinary Journal in Agricultural Science, 2006, 54, 321-328.	0.2	3
54	Cold Tolerance of the Photosynthetic Apparatus: Pleiotropic Relationship between Photosynthetic Performance and Specific Leaf Area of Maize Seedlings. Molecular Breeding, 2005, 16, 321-331.	1.0	31

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55	QTL controlling root and shoot traits of maize seedlings under cold stress. Theoretical and Applied Genetics, 2004, 109, 618-629.	1.8	130