Claude Welcker

List of Publications by Year
in descending order

30 papers	1,746 citations	430843 18 h-index	552766 26 g-index
36 all docs	36 docs citations	36 times ranked	2416 citing authors

#	Article	IF	Citations
1	Highâ€throughput phenotyping reveals differential transpiration behaviour within the banana wild relatives highlighting diversity in drought tolerance. Plant, Cell and Environment, 2022, 45, 1647-1663.	5.7	10
2	Physiological and genetic control of transpiration efficiency in African rice, <i>Oryza glaberrima</i> Steud. Journal of Experimental Botany, 2022, 73, 5279-5293.	4.8	12
3	Physiological adaptive traits are a potential allele reservoir for maize genetic progress under challenging conditions. Nature Communications, 2022, 13, .	12.8	19
4	Filling the gaps in gene banks: Collecting, characterizing, and phenotyping wild banana relatives of Papua New Guinea. Crop Science, 2021, 61, 137-149.	1.8	19
5	A systems genetics approach reveals environment-dependent associations between SNPs, protein coexpression, and drought-related traits in maize. Genome Research, 2020, 30, 1593-1604.	5.5	10
6	Maize adaptation across temperate climates was obtained via expression of two florigen genes. PLoS Genetics, 2020, 16, e1008882.	3.5	23
7	Simulating the effect of flowering time on maize individual leaf area in contrasting environmental scenarios. Journal of Experimental Botany, 2020, 71, 5577-5588.	4.8	6
8	Maize adaptation across temperate climates was obtained via expression of two florigen genes. , 2020, 16, e1008882.		0
9	Maize adaptation across temperate climates was obtained via expression of two florigen genes. , 2020, 16, e1008882.		0
10	Maize adaptation across temperate climates was obtained via expression of two florigen genes. , 2020, 16, e1008882.		0
11	Maize adaptation across temperate climates was obtained via expression of two florigen genes. , 2020, 16, e1008882.		0
12	What is cost-efficient phenotyping? Optimizing costs for different scenarios. Plant Science, 2019, 282, 14-22.	3.6	103
13	To clean or not to clean phenotypic datasets for outlier plants in genetic analyses?. Journal of Experimental Botany, 2019, 70, 3693-3698.	4.8	7
14	Genotyping-by-sequencing and SNP-arrays are complementary for detecting quantitative trait loci by tagging different haplotypes in association studies. BMC Plant Biology, 2019, 19, 318.	3.6	45
15	Genomic prediction of maize yield across European environmental conditions. Nature Genetics, 2019, 51, 952-956.	21.4	157
16	Changes in the vertical distribution of leaf area enhanced light interception efficiency in maize over generations of selection. Plant, Cell and Environment, 2019, 42, 2105-2119.	5.7	56
17	Carbon isotope composition, water use efficiency, and drought sensitivity are controlled by a common genomic segment in maize. Theoretical and Applied Genetics, 2019, 132, 53-63.	3.6	26
18	Phenomics allows identification of genomic regions affecting maize stomatal conductance with conditional effects of water deficit and evaporative demand. Plant, Cell and Environment, 2018, 41, 314-326.	5.7	77

#	Article	IF	Citations
19	Maize yields over Europe may increase in spite of climate change, with an appropriate use of the genetic variability of flowering time. Proceedings of the National Academy of Sciences of the United States of America, 2018, 115, 10642-10647.	7.1	94
20	A robot-assisted imaging pipeline for tracking the growths of maize ear and silks in a high-throughput phenotyping platform. Plant Methods, 2017, 13, 96.	4.3	74
21	Highâ€throughput estimation of incident light, light interception and radiationâ€use efficiency of thousands of plants in a phenotyping platform. New Phytologist, 2016, 212, 269-281.	7.3	182
22	Genome-wide analysis of yield in Europe: allelic effects as functions of drought and heat scenarios. Plant Physiology, 2016, 172, pp.00621.2016.	4.8	140
23	The growth of vegetative and reproductive structures (leaves and silks) respond similarly to hydraulic cues in maize. New Phytologist, 2016, 212, 377-388.	7.3	56
24	Identification of adaptation traits to drought in collections of maize landraces from southern Europe and temperate regions. Euphytica, 2016, 209, 565-584.	1.2	19
25	Genetic and Physiological Controls of Growth under Water Deficit. Plant Physiology, 2014, 164, 1628-1635.	4.8	141
26	A Common Genetic Determinism for Sensitivities to Soil Water Deficit and Evaporative Demand: Meta-Analysis of Quantitative Trait Loci and Introgression Lines of Maize Â Â. Plant Physiology, 2011, 157, 718-729.	4.8	71
27	Modelling the effects of genes and QTLs on the plant sensitivity to environmental conditions. Comparative Biochemistry and Physiology Part A, Molecular & Integrative Physiology, 2009, 153, S220.	1.8	0
28	Simulating the Yield Impacts of Organ-Level Quantitative Trait Loci Associated With Drought Response in Maize: A â€œGene-to-Phenotypeâ€•Modeling Approach. Genetics, 2009, 183, 1507-1523.	2.9	210
29	Leaf growth rate per unit thermal time follows QTL-dependent daily patterns in hundreds of maize lines under naturally fluctuating conditions. Plant, Cell and Environment, 2007, 30, 135-146.	5.7	138
30	Aluminium-induced callose formation in root apices: inheritance and selection trait for adaptation of tropical maize to acid soils. Field Crops Research, 2005, 93, 252-263.	5.1	44