Mingnan Qu

List of Publications by Year
in descending order

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41 papers	6,323 citations	394421 19 h-index	276875 41 g-index
42 all docs	42 docs citations	42 times ranked	6353 citing authors

#	Article	IF	Citations
1	Improving Photosynthetic Efficiency for Greater Yield. Annual Review of Plant Biology, 2010, 61, 235-261.	18.7	1,410
2	Can improvement in photosynthesis increase crop yields?. Plant, Cell and Environment, 2006, 29, 315-330.	5.7	1,236
3	What is the maximum efficiency with which photosynthesis can convert solar energy into biomass?. Current Opinion in Biotechnology, 2008, 19, 153-159.	6.6	897
4	Meeting the Global Food Demand of the Future by Engineering Crop Photosynthesis and Yield Potential. Cell, 2015, 161, 56-66.	28.9	755
5	Raising yield potential of wheat. II. Increasing photosynthetic capacity and efficiency. Journal of Experimental Botany, 2011, 62, 453-467.	4.8	511
6	A meta-analysis of elevated [CO2] effects on soybean (Glycine max) physiology, growth and yield. Global Change Biology, 2002, 8, 695-709.	9.5	426
7	The slow reversibility of photosystem II thermal energy dissipation on transfer from high to low light may cause large losses in carbon gain by crop canopies: a theoretical analysis. Journal of Experimental Botany, 2004, 55, 1167-1175.	4.8	258
8	Leaf Photosynthetic Parameters Related to Biomass Accumulation in a Global Rice Diversity Survey. Plant Physiology, 2017, 175, 248-258.	4.8	85
9	Elements of a dynamic systems model of canopy photosynthesis. Current Opinion in Plant Biology, 2012, 15, 237-244.	7.1	83
10	The impact of modifying photosystem antenna size on canopy photosynthetic efficiencyâ€"Development of a new canopy photosynthesis model scaling from metabolism to canopy level processes. Plant, Cell and Environment, 2017, 40, 2946-2957.	5.7	81
11	Rapid stomatal response to fluctuating light: an under-explored mechanism to improve drought tolerance in rice. Functional Plant Biology, 2016, 43, 727.	2.1	68
12	Changes in the photosynthesis properties and photoprotection capacity in rice (Oryza sativa) grown under red, blue, or white light. Photosynthesis Research, 2019, 139, 107-121.	2.9	54
13	Cyclic electron flow may provide some protection against PSII photoinhibition in rice (Oryza sativa L.) leaves under heat stress. Journal of Plant Physiology, 2017, 211, 138-146.	3.5	39
14	A three-dimensional canopy photosynthesis model in rice with a complete description of the canopy architecture, leaf physiology, and mechanical properties. Journal of Experimental Botany, 2019, 70, 2479-2490.	4.8	36
15	Variations between the photosynthetic properties of elite and landrace Chinese rice cultivars revealed by simultaneous measurements of 820 nm transmission signal and chlorophyll a fluorescence induction. Journal of Plant Physiology, 2015, 177, 128-138.	3.5	35
16	Combined Proteomics and Metabolism Analysis Unravels Prominent Roles of Antioxidant System in the Prevention of Alfalfa (Medicago sativa L.) against Salt Stress. International Journal of Molecular Sciences, 2020, 21, 909.	4.1	34
17	Systematic biology analysis on photosynthetic carbon metabolism of maize leaf following sudden heat shock under elevated CO2. Scientific Reports, 2018, 8, 7849.	3.3	28
18	Alterations in stomatal response to fluctuating light increase biomass and yield of rice under drought conditions. Plant Journal, 2020, 104, 1334-1347.	5.7	26

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19	Proteome dynamics and physiological responses to short-term salt stress in Leymus chinensis leaves. PLoS ONE, 2017, 12, e0183615.	2.5	25
20	Response of Chloroplast NAD(P)H Dehydrogenase-Mediated Cyclic Electron Flow to a Shortage or Lack in Ferredoxin-Quinone Oxidoreductase-Dependent Pathway in Rice Following Short-Term Heat Stress. Frontiers in Plant Science, 2016, 7, 383.	3.6	22
21	Overexpression of maize transcription factor mEmBP-1 increases photosynthesis, biomass, and yield in rice. Journal of Experimental Botany, 2020, 71, 4944-4957.	4.8	22
22	Natural variation in the fast phase of chlorophyll a fluorescence induction curve (OJIP) in a global rice minicore panel. Photosynthesis Research, 2021, 150, 137-158.	2.9	20
23	Systems modelâ€guided rice yield improvements based on genes controlling source, sink, and flow. Journal of Integrative Plant Biology, 2018, 60, 1154-1180.	8.5	19
24	ePlant for quantitative and predictive plant science research in the big data era â€”Lay the foundation for the future model guided crop breeding, engineering and agronomy. Quantitative Biology, 2017, 5, 260-271.	0.5	18
25	Genomeâ€wide association study identifies variation of glucosidase being linked to natural variation of the maximal quantum yield of photosystem II. Physiologia Plantarum, 2019, 166, 105-119.	5.2	17
26	Proteome and transcriptome reveal the involvement of heat shock proteins and antioxidant system in thermotolerance of Clematis florida. Scientific Reports, 2020, 10, 8883.	3.3	15
27	Knocking out NEGATIVE REGULATOR OF PHOTOSYNTHESIS 1 increases rice leaf photosynthesis and biomass production in the field. Journal of Experimental Botany, 2021, 72, 1836-1849.	4.8	12
28	An attempt to interpret a biochemical mechanism of C4 photosynthetic thermo-tolerance under sudden heat shock on detached leaf in elevated CO2 grown maize. PLoS ONE, 2017, 12, e0187437.	2.5	12
29	Dissection of mechanisms for high yield in two elite rice cultivars. Field Crops Research, 2019, 241, 107563.	5.1	10
30	Compositional and structural changes in soil microbial communities in response to straw mulching and plant revegetation in an abandoned artificial pasture in Northeast China. Global Ecology and Conservation, 2021, 31, e01871.	2.1	10
31	Genome-wide investigation of the PLD gene family in alfalfa (Medicago sativa L.): identification, analysis and expression. BMC Genomics, 2022, 23, 243.	2.8	10
32	Roles of heat shock protein and reprogramming of photosynthetic carbon metabolism in thermotolerance under elevated CO2 in maize. Environmental and Experimental Botany, 2019, 168, 103869.	4.2	9
33	Photosynthetic and transcriptomic responses of two C4 grass species with different NaCl tolerance. Journal of Plant Physiology, 2020, 253, 153244.	3.5	7
34	Nitrogen assimilation and gene regulation of two Kentucky bluegrass cultivars differing in response to nitrate supply. Scientia Horticulturae, 2021, 288, 110315.	3.6	7
35	Genome-Wide Association Study Unravels LRK1 as a Dark Respiration Regulator in Rice (Oryza sativa L.). International Journal of Molecular Sciences, 2020, 21, 4930.	4.1	6
36	Wood vinegar for control of broadleaf weeds in dormant turfgrass. Weed Technology, 2021, 35, 901-907.	0.9	6

#	Article	IF	Citations
37	Evaluation on reprogramed biological processes in transgenic maize varieties using transcriptomics and metabolomics. Scientific Reports, 2021, 11, 2050.	3.3	4
38	Diurnal and Seasonal Variations of Photosynthetic Energy Conversion Efficiency of Field Grown Wheat. Frontiers in Plant Science, 2022, 13, 817654.	3.6	3
39	DBN wavelet transform denoising method in soybean straw composition based on near-infrared rapid detection. Journal of Real-Time Image Processing, 2017, 13, 613-626.	3.5	2
40	Analytical dataset of short-term heat stress induced reshuffling of metabolism and transcriptomes in maize grown under elevated CO2. Data in Brief, 2020, 28, 105004.	1.0	2
41	Celebrating the contributions of Govindjee after his retirement: 1999â€“2020. New Zealand Journal of Botany, 2020, 58, 422-460.	1.1	2