Rosa Morcuende

List of Publications by Year
in descending order

51 papers	5,763 citations	201575 27 h-index	197736 49 g-index
53 all docs	53 docs citations	53 times ranked	6539 citing authors

#	Article	IF	Citations
1	Genome-Wide Reprogramming of Primary and Secondary Metabolism, Protein Synthesis, Cellular Growth Processes, and the Regulatory Infrastructure of Arabidopsis in Response to Nitrogen. Plant Physiology, 2004, 136, 2483-2499.	2.3	926
2	Sugars and Circadian Regulation Make Major Contributions to the Global Regulation of Diurnal Gene Expression in Arabidopsis Â. Plant Cell, 2005, 17, 3257-3281.	3.1	608
3	Extension of the Visualization Tool MapMan to Allow Statistical Analysis of Arrays, Display of Coresponding Genes, and Comparison with Known Responses. Plant Physiology, 2005, 138, 1195-1204.	2.3	576
4	Steps towards an integrated view of nitrogen metabolism. Journal of Experimental Botany, 2002, 53, 959-970.	2.4	549
5	Genome-wide reprogramming of metabolism and regulatory networks of Arabidopsis in response to phosphorus. Plant, Cell and Environment, 2007, 30, 85-112.	2.8	533
6	Sugar-induced increases in trehalose 6-phosphate are correlated with redox activation of ADPglucose pyrophosphorylase and higher rates of starch synthesis in Arabidopsis thaliana. Biochemical Journal, 2006, 397, 139-148.	1.7	518
7	Temporal responses of transcripts, enzyme activities and metabolites after adding sucrose to carbon-deprived Arabidopsis seedlings. Plant Journal, 2007, 49, 463-491.	2.8	272
8	Sucrose-feeding leads to increased rates of nitrate assimilation, increased rates of Î±-oxoglutarate synthesis, and increased synthesis of a wide spectrum of amino acids in tobacco leaves. Planta, 1998, 206, 394-409.	1.6	152
9	Tobacco mutants with a decreased number of functional nia genes compensate by modifying the diurnal regulation of transcription, post-translational modification and turnover of nitrate reductase. Planta, 1997, 203, 304-319.	1.6	151
10	Does ear C sink strength contribute to overcoming photosynthetic acclimation of wheat plants exposed to elevated CO2?. Journal of Experimental Botany, 2011, 62, 3957-3969.	2.4	146
11	Effect of sulfur availability on the integrity of amino acid biosynthesis in plants. Amino Acids, 2006, 30, 173-183.	1.2	110
12	Transcriptome and metabolome analysis of plant sulfate starvation and resupply provides novel information on transcriptional regulation of metabolism associated with sulfur, nitrogen and phosphorus nutritional responses in Arabidopsis. Frontiers in Plant Science, 2014, 5, 805.	1.7	96
13	The Combination of Trichoderma harzianum and Chemical Fertilization Leads to the Deregulation of Phytohormone Networking, Preventing the Adaptive Responses of Tomato Plants to Salt Stress. Frontiers in Plant Science, 2017, 8, 294.	1.7	86
14	Gas exchange acclimation to elevated CO2 in upper-sunlit and lower-shaded canopy leaves in relation to nitrogen acquisition and partitioning in wheat grown in field chambers. Environmental and Experimental Botany, 2007, 59, 371-380.	2.0	76
15	Quantitative RTâ€“PCR Platform to Measure Transcript Levels of C and N Metabolism-Related Genes in Durum Wheat: Transcript Profiles in Elevated [CO₂] and High Temperature at Different Levels of N Supply. Plant and Cell Physiology, 2015, 56, 1556-1573.	1.5	76
16	Diurnal changes of Rubisco in response to elevated CO2, temperature and nitrogen in wheat grown under temperature gradient tunnels. Environmental and Experimental Botany, 2005, 53, 13-27.	2.0	73
17	Metabolic and Transcriptional Analysis of Durum Wheat Responses to Elevated CO2at Low and High Nitrate Supply. Plant and Cell Physiology, 2016, 57, 2133-2146.	1.5	67
18	Regulation of nitrate reductase expression in leaves by nitrate and nitrogen metabolism is completely overridden when sugars fall below a critical level. Plant, Cell and Environment, 2000, 23, 863-871.	2.8	62

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19	Acclimation to future atmospheric CO₂ levels increases photochemical efficiency and mitigates photochemistry inhibition by warm temperatures in wheat under field chambers. Physiologia Plantarum, 2009, 137, 86-100.	2.6	59
20	Interactive effects of elevated CO2, temperature and nitrogen on photosynthesis of wheat grown under temperature gradient tunnels. Environmental and Experimental Botany, 2005, 54, 49-59.	2.0	50
21	Acclimatory responses of stomatal conductance and photosynthesis to elevated CO2 and temperature in wheat crops grown at varying levels of N supply in a Mediterranean environment. Plant Science, 2005, 169, 908-916.	1.7	48
22	Nitrate is a negative signal for fructan synthesis, and the fructosyltransferaseâ€inducing trehalose inhibits nitrogen and carbon assimilation in excised barley leaves. New Phytologist, 2004, 161, 749-759.	3.5	42
23	Future CO₂ concentrations, though not warmer temperatures, enhance wheat photosynthesis temperature responses. Physiologia Plantarum, 2008, 132, 102-112.	2.6	41
24	Temporal kinetics of the transcriptional response to carbon depletion and sucrose readdition in <i>Arabidopsis</i> seedlings. Plant, Cell and Environment, 2016, 39, 768-786.	2.8	37
25	Down-regulation of Rubisco activity under combined increases of CO2 and temperature minimized by changes in Rubisco kcat in wheat. Plant Growth Regulation, 2011, 65, 439-447.	1.8	34
26	Elevated CO₂ and temperature differentially affect photosynthesis and resource allocation in flag and penultimate leaves of wheat. Photosynthetica, 2007, 45, 9-17.	0.9	30
27	Involvement of nitrogen and cytokinins in photosynthetic acclimation to elevated CO2 of spring wheat. Journal of Plant Physiology, 2013, 170, 1337-1343.	1.6	29
28	Physiological and yield responses of recombinant chromosome substitution lines of barley to terminal drought in a <scp>M</scp>editerraneanâ€type environment. Annals of Applied Biology, 2012, 160, 157-167.	1.3	28
29	De Novo Transcriptome Analysis of Durum Wheat Flag Leaves Provides New Insights Into the Regulatory Response to Elevated CO2 and High Temperature. Frontiers in Plant Science, 2019, 10, 1605.	1.7	28
30	Nitrate supply and plant development influence nitrogen uptake and allocation under elevated CO2 in durum wheat grown hydroponically. Acta Physiologiae Plantarum, 2015, 37, 1.	1.0	27
31	New insights into the impacts of elevated CO2, nitrogen, and temperature levels on the regulation of C and N metabolism in durum wheat using network analysis. New Biotechnology, 2018, 40, 192-199.	2.4	24
32	Contrasting responses of photosynthesis and carbon metabolism to low temperatures in tall fescue and clovers. Physiologia Plantarum, 2001, 112, 478-486.	2.6	21
33	Short-term feedback inhibition of photosynthesis in wheat leaves supplied with sucrose and glycerol at two temperatures. Photosynthetica, 1997, 33, 179-188.	0.9	19
34	Changes in Leaf Morphology and Composition with Future Increases in CO2 and Temperature Revisited: Wheat in Field Chambers. Journal of Plant Growth Regulation, 2009, 28, 349-357.	2.8	19
35	Long- and short-term responses of leaf carbohydrate levels and photosynthesis to decreased sink demand in soybean. Plant, Cell and Environment, 1996, 19, 976-982.	2.8	15
36	Acclimation to elevated CO 2 is improved by low Rubisco and carbohydrate content, and enhanced Rubisco transcripts in the G132 barley mutant. Environmental and Experimental Botany, 2017, 137, 36-48.	2.0	14

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37	C and N metabolism in barley leaves and peduncles modulates responsiveness to changing CO2. Journal of Experimental Botany, 2019, 70, 599-611.	2.4	14
38	Improved responses to elevated CO 2 in durum wheat at a low nitrate supply associated with the upregulation of photosynthetic genes and the activation of nitrate assimilation. Plant Science, 2017, 260, 119-128.	1.7	13
39	Genotypic Variability on Grain Yield and Grain Nutritional Quality Characteristics of Wheat Grown under Elevated CO2 and High Temperature. Plants, 2021, 10, 1043.	1.6	13
40	Screening for Higher Grain Yield and Biomass among Sixty Bread Wheat Genotypes Grown under Elevated CO2 and High-Temperature Conditions. Plants, 2021, 10, 1596.	1.6	13
41	Functional and transcriptional characterization of a barley mutant with impaired photosynthesis. Plant Science, 2016, 244, 19-30.	1.7	12
42	Differential Flag Leaf and Ear Photosynthetic Performance Under Elevated (CO2) Conditions During Grain Filling Period in Durum Wheat. Frontiers in Plant Science, 2020, 11, 587958.	1.7	11
43	Fructan synthesis is inhibited by phosphate in warmâ€grown, but not in coldâ€treated, excised barley leaves. New Phytologist, 2005, 168, 567-574.	3.5	10
44	Source-Sink Dynamics in Field-Grown Durum Wheat Under Contrasting Nitrogen Supplies: Key Role of Non-Foliar Organs During Grain Filling. Frontiers in Plant Science, 2022, 13, 869680.	1.7	9
45	Photosynthesis-dependent/independent control of stomatal responses to CO2 in mutant barley with surplus electron transport capacity and reduced SLAH3 anion channel transcript. Plant Science, 2015, 239, 15-25.	1.7	8
46	Long- and short-term effects of decreased sink demand on carbohydrate levels and photosynthesis in wheat leaves. Plant, Cell and Environment, 1996, 19, 1203-1209.	2.8	7
47	Theoretical and Experimental Considerations for a Rapid and High Throughput Measurement of Catalase In Vitro. Antioxidants, 2022, 11, 21.	2.2	4
48	Surfing the Hyperbola Equations of the Steady-State Farquharâ€“von Caemmererâ€“Berry C3 Leaf Photosynthesis Model: What Can a Theoretical Analysis of Their Oblique Asymptotes and Transition Points Tell Us?. Bulletin of Mathematical Biology, 2020, 82, 3.	0.9	2
49	Impact of Water Deficit on Primary Metabolism at the Whole Plant Level in Bread Wheat Grown under Elevated CO2 and High Temperature at Different Developmental Stages. , 0, , .		1
50	Investigating novel potential regulators and signalling components in phosphate stress responses of Arabidopsis thaliana. Comparative Biochemistry and Physiology Part A, Molecular & Integrative Physiology, 2008, 150, S193.	0.8	0
51	Modification of Photosynthesis Temperature Response by Long-Term Growth in Elevated CO2 and Temperature in Wheat Field Crops. , 2008, , 1383-1386.		0