Rosa M Rivero

List of Publications by Year
in descending order

78 papers	9,016 citations	87888 38 h-index	66911 78 g-index
84 all docs	84 docs citations	84 times ranked	10179 citing authors

#	Article	IF	Citations
1	Reactive oxygen species, abiotic stress and stress combination. Plant Journal, 2017, 90, 856-867.	5.7	1,759
2	Abiotic and biotic stress combinations. New Phytologist, 2014, 203, 32-43.	7.3	1,460
3	Delayed leaf senescence induces extreme drought tolerance in a flowering plant. Proceedings of the National Academy of Sciences of the United States of America, 2007, 104, 19631-19636.	7.1	768
4	Resistance to cold and heat stress: accumulation of phenolic compounds in tomato and watermelon plants. Plant Science, 2001, 160, 315-321.	3.6	560
5	The combined effect of salinity and heat reveals a specific physiological, biochemical and molecular response in tomato plants. Plant, Cell and Environment, 2014, 37, 1059-1073.	5.7	309
6	ABA Is Required for Plant Acclimation to a Combination of Salt and Heat Stress. PLoS ONE, 2016, 11, e0147625.	2.5	267
7	Tolerance to Stress Combination in Tomato Plants: New Insights in the Protective Role of Melatonin. Molecules, 2018, 23, 535.	3.8	246
8	Cytokinin-Dependent Photorespiration and the Protection of Photosynthesis during Water Deficit Â Â. Plant Physiology, 2009, 150, 1530-1540.	4.8	228
9	Accumulation of Flavonols over Hydroxycinnamic Acids Favors Oxidative Damage Protection under Abiotic Stress. Frontiers in Plant Science, 2016, 7, 838.	3.6	202
10	Developing climateâ€resilient crops: improving plant tolerance to stress combination. Plant Journal, 2022, 109, 373-389.	5.7	198
11	Tolerance of citrus plants to the combination of high temperatures and drought is associated to the increase in transpiration modulated by a reduction in abscisic acid levels. BMC Plant Biology, 2016, 16, 105.	3.6	183
12	CIPK23 regulates HAK5-mediated high-affinity K+ uptake in Arabidopsis roots. Plant Physiology, 2015, 169, pp.01401.2015.	4.8	174
13	Evaluation of some nutritional and biochemical indicators in selecting salt-resistant tomato cultivars. Environmental and Experimental Botany, 2005, 54, 193-201.	4.2	156
14	Enhanced Cytokinin Synthesis in Tobacco Plants Expressing PSARK::IPT Prevents the Degradation of Photosynthetic Protein Complexes During Drought. Plant and Cell Physiology, 2010, 51, 1929-1941.	3.1	155
15	Red blotch disease alters grape berry development and metabolism by interfering with the transcriptional and hormonal regulation of ripening. Journal of Experimental Botany, 2017, 68, 1225-1238.	4.8	92
16	Proline metabolism and NAD kinase activity in greenbean plants subjected to cold-shock. Phytochemistry, 2002, 59, 473-478.	2.9	88
17	Developmental and metabolic plasticity of white-skinned grape berries in response to Botrytis cinerea during noble rot. Plant Physiology, 2015, 169, pp.00852.2015.	4.8	84
18	Does grafting provide tomato plants an advantage against H2 O2 production under conditions of thermal shock?. Physiologia Plantarum, 2003, 117, 44-50.	5.2	75

#	Article	IF	Citations
19	Uneven HAK/KUP/KT Protein Diversity Among Angiosperms: Species Distribution and Perspectives. Frontiers in Plant Science, 2016, 7, 127.	3.6	75
20	Ethylene regulation of sugar metabolism in climacteric and non-climacteric plums. Postharvest Biology and Technology, 2018, 139, 20-30.	6.0	74
21	ROS and NO Regulation by Melatonin Under Abiotic Stress in Plants. Antioxidants, 2020, 9, 1078.	5.1	73
22	Proline metabolism in response to highest nitrogen dosages in green bean plants (Phaseolus vulgaris) Tj ETQq0 0 0 rgBT /Overlock 10 Tf	3.5	72
23	The Role of Fungicides in the Physiology of Higher Plants: Implications for Defense Responses. Botanical Review, The, 2003, 69, 162-172.	3.9	72
24	The F130S point mutation in the Arabidopsis high-affinity K+ transporter AtHAK5 increases K+ over Na+ and Cs+ selectivity and confers Na+ and Cs+ tolerance to yeast under heterologous expression. Frontiers in Plant Science, 2014, 5, 430.	3.6	68
25	Can grafting in tomato plants strengthen resistance to thermal stress?. Journal of the Science of Food and Agriculture, 2003, 83, 1315-1319.	3.5	65
26	Changes in biomass, enzymatic activity and protein concentration in roots and leaves of green bean plants (Phaseolus vulgaris L. cv. Strike) under high NH4NO3 application rates. Scientia Horticulturae, 2004, 99, 237-248.	3.6	65
27	Response of phenolic metabolism to the application of carbendazim plus boron in tobacco. Physiologia Plantarum, 1999, 106, 151-157.	5.2	64
28	Oxidative metabolism in tomato plants subjected to heat stress. Journal of Horticultural Science and Biotechnology, 2004, 79, 560-564.	1.9	61
29	A low K⁺ signal is required for functional highâ€affinity K⁺ uptake through <scp>HAK5</scp> transporters. Physiologia Plantarum, 2014, 152, 558-570.	5.2	60
30	Nicotine-free and salt-tolerant tobacco plants obtained by grafting to salinity-resistant rootstocks of tomato. Physiologia Plantarum, 2005, 124, 465-475.	5.2	59
31	Role of Ca2+ in the metabolism of phenolic compounds in tobacco leaves (Nicotiana tabacum L.). Plant Growth Regulation, 2003, 41, 173-177.	3.4	50
32	Amelioration of the Oxidative Stress Generated by Simple or Combined Abiotic Stress through the K+ and Ca2+ Supplementation in Tomato Plants. Antioxidants, 2019, 8, 81.	5.1	49
33	Boron Increases Synthesis of Glutathione in Sunflower Plants Subjected to Aluminum Stress. Plant and Soil, 2006, 279, 25-30.	3.7	47
34	Importance of N Source on Heat Stress Tolerance Due to the Accumulation of Proline and Quaternary Ammonium Compounds in Tomato Plants. Plant Biology, 2004, 6, 702-707.	3.8	45
35	Preliminary studies on the involvement of biosynthesis of cysteine and glutathione concentration in the resistance to B toxicity in sunflower plants. Plant Science, 2003, 165, 811-817.	3.6	44
36	Use of a smart irrigation system to study the effects of irrigation management on the agronomic and physiological responses of tomato plants grown under different temperatures regimes. Agricultural Water Management, 2017, 183, 158-168.	5.6	44

#	Article	IF	Citations
37	BORON EFFECT ON MINERAL NUTRIENTS OF TOBACCO. Journal of Plant Nutrition, 2002, 25, 509-522.	1.9	42
38	Sugar metabolism reprogramming in a non-climacteric bud mutant of a climacteric plum fruit during development on the tree. Journal of Experimental Botany, 2017, 68, 5813-5828.	4.8	42
39	Role of CaCl2 in nitrate assimilation in leaves and roots of tobacco plants (Nicotiana tabacum L.). Plant Science, 1999, 141, 107-115.	3.6	39
40	Effect of calcium on mineral nutrient uptake and growth of tobacco. Journal of the Science of Food and Agriculture, 2001, 81, 1334-1338.	3.5	39
41	Sulphur Phytoaccumulation in Plant Species Characteristic of Gypsiferous Soils. International Journal of Phytoremediation, 2003, 5, 203-210.	3.1	38
42	Modulation of K⁺ translocation by AKT1 and AtHAK5 in Arabidopsis plants. Plant, Cell and Environment, 2019, 42, 2357-2371.	5.7	38
43	Critical responses to nutrient deprivation: A comprehensive review on the role of ROS and RNS. Environmental and Experimental Botany, 2019, 161, 74-85.	4.2	38
44	Comparative effect of Al, Se, and Mo toxicity on NO3â^ assimilation in sunflower (Helianthus annuus) Tj ETQq0 0 0 rgBT /Overlock 10 Tf	7.8	37
45	Artificial light impacts the physical and nutritional quality of lettuce plants. Horticulture Environment and Biotechnology, 2020, 61, 69-82.	2.1	37
46	Glutathione homeostasis as an important and novel factor controlling blossom-end rot development in calcium-deficient tomato fruits. Journal of Plant Physiology, 2012, 169, 1719-1727.	3.5	36
47	Synchronization of proline, ascorbate and oxidative stress pathways under the combination of salinity and heat in tomato plants. Environmental and Experimental Botany, 2021, 183, 104351.	4.2	35
48	High Ca2+ reverts the repression of high-affinity K+ uptake produced by Na+ in Solanum lycopersycum L. (var. microtom) plants. Journal of Plant Physiology, 2015, 180, 72-79.	3.5	30
49	Potassium fertilization enhances pepper fruit quality. Journal of Plant Nutrition, 2017, 40, 145-155.	1.9	28
50	Direct Action of the Biocide Carbendazim on Phenolic Metabolism in Tobacco Plants. Journal of Agricultural and Food Chemistry, 2001, 49, 131-137.	5.2	27
51	Iron Metabolism in Tomato and Watermelon Plants: Influence of Grafting. Journal of Plant Nutrition, 2005, 27, 2221-2234.	1.9	27
52	Response of oxidative metabolism in watermelon plants subjected to cold stress. Functional Plant Biology, 2002, 29, 643.	2.1	27
53	Grafting to improve nitrogen-use efficiency traits in tobacco plants. Journal of the Science of Food and Agriculture, 2006, 86, 1014-1021.	3.5	26
54	ROS and NO Phytomelatonin-Induced Signaling Mechanisms under Metal Toxicity in Plants: A Review. Antioxidants, 2021, 10, 775.	5.1	26

#	Article	IF	Citations
55	Phenolic and Oxidative Metabolism as Bioindicators of Nitrogen Deficiency in French Bean Plants (Phaseolus vulgaris L. cv. Strike). Plant Biology, 2000, 2, 272-277.	3.8	23
56	Role of CaCl2 in Ammonium Assimilation in Roots of Tobacco Plants (Nicotiana tabacum L.). Journal of Plant Physiology, 2000, 156, 672-677.	3.5	23
57	Is the Application of Carbendazim Harmful to Healthy Plants? Evidence of Weak Phytotoxicity in Tobacco. Journal of Agricultural and Food Chemistry, 2002, 50, 279-283.	5.2	22
58	Title is missing!. Plant Growth Regulation, 2002, 36, 261-265.	3.4	22
59	Grafting between tobacco plants to enhance salinity tolerance. Journal of Plant Physiology, 2006, 163, 1229-1237.	3.5	21
60	Using Tomato Recombinant Lines to Improve Plant Tolerance to Stress Combination Through a More Efficient Nitrogen Metabolism. Frontiers in Plant Science, 2019, 10, 1702.	3.6	21
61	Hormone balance in a climacteric plum fruit and its non-climacteric bud mutant during ripening. Plant Science, 2019, 280, 51-65.	3.6	20
62	Root highâ€affinity K⁺ and Cs⁺ uptake and plant fertility in tomato plants are dependent on the activity of the highâ€affinity K⁺ transporter <scp>SlHAK5</scp>. Plant, Cell and Environment, 2020, 43, 1707-1721.	5.7	19
63	Influence of temperature on biomass, iron metabolism and some related bioindicators in tomato and watermelon plants. Journal of Plant Physiology, 2003, 160, 1065-1071.	3.5	17
64	Alternate bearing in fruit trees: fruit presence induces polar auxin transport in citrus and olive stem and represses IAA release from the bud. Journal of Experimental Botany, 2021, 72, 2450-2462.	4.8	17
65	Bioactive Compounds of Tomato Fruit in Response to Salinity, Heat and Their Combination. Agriculture (Switzerland), 2021, 11, 534.	3.1	14
66	Interaction between Melatonin and NO: Action Mechanisms, Main Targets, and Putative Roles of the Emerging Molecule NOmela. International Journal of Molecular Sciences, 2022, 23, 6646.	4.1	12
67	Preliminary studies on the influence of boron on the foliar biomass and quality of tobacco leaves subjected to fertilisation. Journal of the Science of Food and Agriculture, 2001, 81, 739-744.	3.5	8
68	Regulation of Nitrogen Assimilation by Sulfur in Bean. Journal of Plant Nutrition, 2005, 28, 1163-1174.	1.9	8
69	Pharmacological and gene regulation properties point to the SlHAK5 K⁺ transporter as a system for highâ€affinity Cs⁺ uptake in tomato plants. Physiologia Plantarum, 2018, 162, 455-466.	5.2	8
70	Yield and biosynthesis of nitrogenous compounds in fruits of green bean(Phaseolus vulgaris L cv) Tj ETQq0 0 0 rgBT /Overlock 10 Tf 50 1 84, 575-580.	3.5	7
71	Title is missing!. Plant Growth Regulation, 2002, 36, 231-236.	3.4	6
72	Iron Metabolism in Tomato and Watermelon Plants: Influence of Nitrogen Source. Journal of Plant Nutrition, 2003, 26, 2413-2424.	1.9	6

#	Article	IF	Citations
73	Response of oxidative metabolism to the application of carbendazim plus boron in tobacco. Functional Plant Biology, 2001, 28, 801.	2.1	6
74	The Forner Alcaide nÂº 5 citrus genotype shows a different physiological response to the excess of boron in the irrigation water in relation to its two genotype progenitors. Scientia Horticulturae, 2019, 245, 19-28.	3.6	4
75	Deciphering fruit sugar transport and metabolism from tolerant and sensitive tomato plants subjected to simulated field conditions. Physiologia Plantarum, 2021, 173, 1715-1728.	5.2	3
76	Applications in sustainable production. Communications in Soil Science and Plant Analysis, 2000, 31, 2309-2320.	1.4	1
77	Editorial. Physiologia Plantarum, 2019, 165, 125-127.	5.2	1
78	Iron Metabolism in Tomato and Watermelon Plants: Influence of Grafting. Journal of Plant Nutrition, 2004, 27, 2221-2234.	1.9	0